UNIT 1 BRANCH ACCOUNTS – I

Structure

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1.0 OBJECTIVES

After studying this unit you should be able to:

- describe the need for branch accounting
- explain the different types of branches from accounting point of view
- describe three systems of maintaining branch accounts for a dependent branch
- prepare branch account under the debtors system both at cost price and at invoice price
- prepare branch account under the final accounts system
- prepare the necessary accounfs under the stock and debtors system.

1.1 INTRODUCTION

A business may be split up into a number of divisions. The divisions are known as departments if located under the same roof and branches if located at different places of the same town, country or world. For example, Cottage Emporium has various divisions like garments, furniture, gift items, jewellery, etc. They are located in the same building and so are called departments. Snowhite has its showrooms in Connaught Place, Nehru Place, Karol Bagh, South Extension and Kemlanagar. These are all branches of Snowhitc. Similarly, Bata has its branches all over the country and Leventies all over the world. Each branch is treated as a separate profit centre and hence the profit or loss is to be worked out separately for each branch, Moreover, the firm has to keep strict control over various activities of each branch and ensure its smooth functioning. The accountants, therefore, have developed some specialised accounting methods for the recording of transactions at branch level and for incorporating the net effect of all branch transactions in a firm's books,

From accounting point of view, the branches are divided into three categories : (i) dependent branches. (ii) independent branches, and (iii) foreign branches. In this unit you will learn how the accounts of dependent bradches are maintained and how their profit or loss is workcd out.

1.2 NEED FOR BRANCH ACCOUNTING

As stated earlier. each branch is treated as a separate profit centre. Hence it should record various transactions in such a manner that its profit or, loss can be worked out and incorporated in the firm's overall results at the end of the accounting year. Moreover, the branches conduct all activities under the direction and control of the head office which may need a variety of information from time to time about the functioning of each branch. This becomes possible only if the branches keep proper

books of account. Thus, the main reasons of keeping branch accounts can be summarised as follows :

i) to find out the profit or loss of each branch for the accounting period:

ii) to ascertain the financial position of each branch at the end of the accounting year;

iii) to incorporate the net effect of branch transactions and their assets and liabilities in a firm's final accounts;

iv) to estimate requirements of cash and stock for each branch;

v) to evaluate the progress and performance of each branch;

vi) to calculate the commission for payment to the managers, if based on profit of branch;

vii) to assess the prospects for expansion of business in each branch; and

viii) to meet audit requirements.

1.3 TYPES OF BRANCHES

From accounting point of view the branches can be divided into the following categories:

1) Branches not keeping full system of accounting;
2) Branches keeping full system of accounting;
3) Foreign branches,

Let us have an idea about their main characteristics.

Branches not Keeping Full System of Accounting: The branches not keeping full system of accounting are also called dependent branches. The main features of such branches are:

i) They sell only those goods which are received from the head office and are not usually allowed to make purchases in the open market except with the permission of the head office.

ii) Goods are supplied by the head office to such branches either at cost price or at invoice price.

iii) All major expenses of the branch are paid by the head office. The branch manager is allowed to incur only petty expenses like cartage, postage, etc. out of the petty cash provided to him for which he is required to maintain a simple petty cash book.

iv) The amount received from cash sales and debtors is either remitted to the head office daily or deposited in the account of head office in some local bank,

v) The branch manager is normally expected to sell the goods for cash, but he may be authorised to sell goods on credit in certain cases.

vi) Such branches do not keep complete account books. They simply maintain rewrd of sales and prepare debtors accounts, if necessary. They are also required to maintain a stock register and furnish weekly or monthly statements giving complete information about stock position and movement of goods to the head office. This enables the head office to keep proper control over stock at branches.

Branches Keeping Full System of Accounting: Branches keeping full system of accounting are called independent branches. They are allowed to purchase goods from the market and also supply to the head office, if necessary. They can incur expenses from the cash realised and operate the bank account in their own names. Thus, they operate as independent units for all practical purposes. Their only link with the head office is that they are owned by the head office and whatever profit they earn or loss they incur ultimately belongs to the head office.

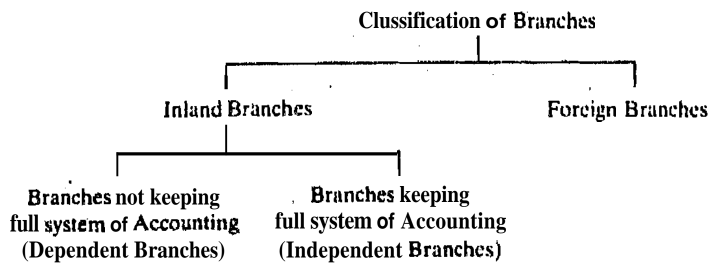
Such branches keep a complete set of books on the double entry system and prepare their own Trial Balance, Trading and Profit & Loss Account and Balance Sheet. Such branches open Head Office Account in their books and record all transactions between the branch and the head office in this account:

Foreign Branches: When a branch is located in a foreign country, it is called a foreign branch. Such branches will keep their books of account in foreign currency. The

distinctive feature of foreign branches is that financial information received from them will be in foreign currency which has to be converted into the currency of the country of the head office before it can be incorporated in the head office books. For example, if an Indian company has a branch in Nairobi, the branch Trial Balance will be in Kenyan shillings. The Trial Balance must be converted into rupees before it can be incorporated in head office books. For all practical purposes, however. foreign branches are treated as independent branches.

Look at Figure 1.1 for complete classification of branches.

Figure 1.1



1.4 ACCOUNTING FOR DEPENDENT BRANCHES

You know that the dependent branches do not keep a complete set of books. Most of their transactions are recorded at the head office level. The accounting system adopted by head office for a branch depends up on the size of a branch and the degree of control to be exercised by the head office. The following are the various methods by which the head office usually keeps branch accounts in its books:

i) Debtors System: This system is adopted generally for those branches which are fairly small in size. Under this system, the head office simply opens a Branch Account for each branch in which it records all transactions relating to the branch. The Branch Account is prepared in such a manner that it also helps in ascertaining the branch profit or loss.

ii) **Final Accounts** System: Under this system, the head office prepares a Trading and 'Profit and Loss Account 'in order to find out profit or loss of each branch and a Branch Account to find out the amount due to, or due from, that branch, In this case, the Branch Account simply acts as a personal account.

iii) Stock and **Debtors** System: Under this system, the head office does not open any 'Branch Account. For each branch, it prepares a Branch Stock Account, a Branch' Expenses Account, a Branch Adjustment Account and Goods sent to Branch Account in order to find out the profit or loss of each branch.

1.5 DEBTORS SYSTEM

As stated earlier, under debtors system, the head office simply opens a Branch Account for each branch in which it records all transactions relating to the branch. The Branch Account also helps in ascertaining the profit or loss of the branch.

Goods may be invoiced to a branch at cost or at selling price (also called invoice price). Accordingly, there are two methods of preparing the Branch Account: (i) Cost Price Method, and (ii) Invoice Price Method. Let us now study the preparation of Branch **Account** under both of **these** methods.

1.5.1 Cast Price Method

When goods are invoiced at **cost,** the **following** journal entries are passed in the books of the head office to record various transactions relating to the branch.

1) For goods sent to branch

Branch A/c Dr.

To Goods Sent to Branch A/c

(Being goods sent to branch)

2) For return of goods to heed office
   Goods Sent to Branch A/c Dr
   To Branch A/c
   (Being goods returned by the branch)

3) For amount sent to branch for expenses
   Branch A/c Dr.
   To Bank A/c
   (Being cheque sent to branch for expenses)

4) For amount received from branch
   Bank A/c Dr.
   To Branch A/c
   (Being cash or cheque received from branch)

5) For closing goods sent to branch account
   Goods Sent to Branch A/c Dr.
   To Purchases/Trading A/c
   (Being balance transferred to Trading Account)

6) For closing balances of assets at the branch
   Brunch Assets A/c Dr.
   (Individually)
   To Branch A/c
   (Being closing balances of assets brought into account)

7) For closing balances of liabilities at the branch
   Branch A/c Dr.
   To Branch Liabilities A/c
   (Individually)
   (Being closing balances of liabilities brought into account)

8) For transferring profit or loss to the General Profit and Loss Account

   i) **If profit**
   Branch A/c Dr.
   To General Profit and Loss A/c
   (Being branch profit transferred to General P & L Nc)

   ii) **If loss**
   General Profit and Loss A/c Dr.
   To Branch A/c
   (Being branch loss transferred to General P & L A/c)

The closing balances of branch assets and liabilities ace shown in the Balance Sheet of the head office. At the beginning of the next year, the entire numbers 6 and 7 are reversed so as to show opening balances in the Branch Account,

The Branch Account will appear as given in Figure 1.2.

Figure 1.2

Branch Account

Dt.

	Rs.		Rs.
To Opening Balances Stock Debtors Petty Cash Furniture Prepaid expenses		By Opening Balances Creditors Outstanding expenxs By Bank Cash Sales Collections from Debtors (for remittances)	

	Rs.		Rs.
To Goods sent to Branch A/c		By Goods Sent to Branch A/c (goods returned by the branch to head office)	
To Bank A/c (for expenses or any payment made by the H.O. on behalf of the Branch)		By Closing Balances Petty Cash Stock Debtors Furniture (at depreciated value) Prepaid expenses	
To Closing Balances Outstanding expenses Creditors		By Loss, if any (transferred to General Profit & Lass A/c)	
To Profit (transferred to General Profit & Loss A/c)			

Look at **Illustrations 1** and 2 and study how Branch Account is prepared with the help of the given information.

Illustration 1

From the following particulars relating to Delhi Branch for the year ending December 31, **1988** prepare Branch Account in the books of head office.

	Rs.			Rs.
Stock at Branch on 1-1-1988	15,000	Cheques sent to Branch for		
Debtors at Branch on 1-1-1988	30,000	Salaries	9,000	
Petty Cash at Branch on 1-1-1988	300	Rent and Taxes	1,500	
Goods sent to Branch	2.52.000	Petty Cash	1,100	11,600
Cash sales	60,000	Goods returned by the branch		2,000
Received from Debtors	2,10,000	Stock at Branch on 31-12-1988		25,000
Credit Sales	2,28,000	Petty cash at Brunch on 31-12-1988		200
		Debtors at Branch on 31-12-1988		48,000

Solution

Herd Office Ledger

Delhi Branch Account

Dr.					Cr.
		Rs.			Rs.
To Balance b/d			By Cash:		
Branch Stock		15,000	Cash Sales	60,000	
Branch Debtors		30,000	Received from Debtors	2,10,000	2,70,000
Branch Petty Cash		300			
To Goods sent to Branch A/c		2,52,000	By Goods sent to Branch A/c		2,000
To Bank A/c			By Balance dd		
Salaries	9,000		Branch Stock		25,000
Rent & Taxes	1.500		Branch Debtors		48,000
Petty Cash	1.100	11,600	Branch Petty Cash		200
To Profit (transferred to General P & L A/c)		36,300			
		3,45,200			3,45,200

Illustration 2

Sankat Mochan Ltd., Varanasi, opened a branch at Madras on January 1,1988. The following particulars are available in respect of the branch for the year 1988.

	Rs.		Rs.
Goods sent to branch	75,000	Cash remittance to branch towards Petty Cash	6,000
Cash sales at branch	50,000	Petty Cash at branch on 31-12-1988	500
Credit sales at branch	60,000	Debtors at branch on 31-12-1988	5,000
Salaries of branch staff paid by head office	15,000	Stock at branch on 31-12-1988	27,000
Office expenses of branch paid by head office	12,000		

Prepare Branch Account to show the profit/loss from the branch for the year 1988.

Solution

Books of Sankat Mochan Ltd.

Madras Branch Account

Dr. Cr.

		Rs.			Rs.
To Goods sent to Branch A/c		75,000	By Bank A/c Cash Sales	50,000	
To Bank A/c			Received from Debtors	55,000	1,05,000
Salaries	15,000				
Office expenses	12,000	27,000	By Balance c/d :		
To Bank A/c (for petty expenses)		6,000	Branch Petty Cash		500
			Branch Debtors		5,000
			Branch Stock		27,000
To Profit (transferred to General P & L A/c)		29,500			
		1,37,500			1,37,500

Note: The amount of cash received from debtors is not given. It has been found by preparing the Memorandum Branch Debtors Account as follows:

Memorandum Branch Debtors Account

Dr. Cr.

	Rs.		Rs.
To Credit Sales	60,000	By Cash Received (balancing figure)	55,000
		By Balance c/d	5,000
	60,000		60,000

Some Peculiar Items

Petty cash expenses: No entry is made in respect of petty cash expenses incurred by the branch out of its petty cash. As per practice. the Branch Account is debited with the opening balance of petty cash and the amount of petty cash sent by head office, and it is credited with the closing balance of petty cash, This amounts to a net debit to Branch Account which is equal to the amount of petty expenses incurred by branch. For example, the opening balance of petty cash with a branch was Rs. 200, the cash sent by head office for petty expenses was Rs. 300, and the petty expenses incurred by branch were Rs. 400. When we debit the Branch Account with Rs. 200 (opening: petty cash balance) and Rs. 300 (amount sent by head office) and credit it with Rs. 100 (closing petty cash balance). the Branch Account stands debited by a net amount of Rs. 400 (Rs. 200 + Rs. 300 − Rs. 100) which is equal to the amount of petty cash expenses (Rs. 400) incurred by the branch.

Credit **sales,** sales **returns, bad debts,** discount **allowed to debtors, etc.** : All these items relate to branch debtors and will not be shown in the Branch Account. The reasoning is similar to that of petty cash expenses. When the Branch Account is debited with the opening balance of branch debtors and credited with cash received from debtors and the closing balance of branch debtors, the amount of credit sales etc. automatically stand accounted for.

Shortage or surplus of stock: It is possible that, at the time of checking the stock of a branch, certain amount of shortage or surplus is detected. These are not to be shown in the Branch Account because the closing stock credited to the Branch Account is the actual amount of stock and thus the shortage or surplus is automatically covered.

Depreciation of fixed assets: This is also not shown in the Branch Account because, as per practice, the closing balance of the fixed asset after deducting the amount of depreciation is shown on the credit side of the Branch Account.

Thus you should note that while preparing the Branch Account for dependent branches, the **following** items **will be ignored:**

1) Petty Cash Expenses
2) Credit Sales
3) Sales Returns
4) Bad Debts
5) Discount Allowed to Debtors
6) Shortage or Surplus of Stock
7) Depreciation

Look at Illustration 3 and see how Branch Account is prepared without specifically showing the above items, if given.

Illustration 3

Pratap Tractors Ltd., Allahabad, has a branch at Hissar. From the following particulars relating to the branch for the year ending December 31, 1988, prepare the Branch Account in the head office books :

	Rs.		Rs.
Stock at Branch on 1-1-1988	10,000	Discount Allowed to Debtors	100
Branch Debtors on 1-1-1988	4,000	Cash sent to Branch	
		Rent	2,000
		Salaries	2,400
Petty Cash on 1-1-1988	500	Petty Cash	1,000
Furniture on 1-1-1988	2,000	Insurance (up to 31-3-1989)	600
Prepaid Insurance on 1-1-1988	150	Goods Returned by Branch	1,000
Salaries Outstanding on 1-1-1988	100	Goods Returned by Debtors	2,000
Goods sent to Branch	80,000	Stock at Branch on 31-12-1988	5,000
Cash Sales	1,30,000	Petty Expenses paid by Branch	850
Credit Sales	40,000		
Cash received from Debtors	35,000		
Cash paid by Debtors (direct to head office)	2,000		

Provide depreciation on furniture @ 10% p.a.

Solution

Hissar Branch Account

	Rs.		Rs.
To Balance b/d		By Balance b/d	
Branch Stock	10,000	Branch Outstanding	
Branch Debtors	4,000	Salaries	1,00,000
Branch Petty Cash	500		

		Rs.			Rs.
Branch Furniture		2,000	By Cash		
Branch prepaid insurance		150	Cash Sales	30,000	
To Goods sent to			Cash Received from Debtors	37,000	1,67,000
Brunch	80,000		By Balance c/d		
Less : Return from Brunch	1,000	79,000	Branch stock		5,000
To Bank			Branch Petty Cash		650
Rent	2,000		Branch Debtors		4,900
Salaries	2,400		Branch Furniture		1,800
Petty Cash	1,000		Branch Prepaid Insurance		150
Insurance	600	6,000			
To Profit (transferred to Gencrrl P & L A/c)		77,950			
		1,79,600			1,79,600

Notes : 1) Cash received from debtors include Rs. 2,000 which the debtors directly paid to the head office.

2) Branch petty cash balance at the end is not given. It is ascertained as follows :

Petty Cash at the beginning	500
Add amount sent hy head office	1,000
	1,500
Less petty cash expenses	850
	650

3) Furniture at the end has been shown after deducting Rs. 200 for depreciation.

4) Prepaid insurance on 31-12-1988 is one-fourth of Rs. 600.

5) The closing balance of branch debtors is not given. It has been worked. out by preparing that Memorandum Branch Debtors Account as follows :

Memorandum Branch Debtors Account

	Rs.		Rs.
To Balance b/d	4,000	By Cash Received from Debtors	37,000
To Sales (Credit)	40,000	By Sales Returns	2,000
		By Discount Allowed	100
		By Balance c/d (balancing figure)	4,900
	44,000		44,000

1.5.2 Invoice Price Method

As in the case of consignment (you have studied about it in the eiective course ECO-02), the goods may be invoiced to branches at a price higher than the cost (termed as invoice price). This is done primarily to have an effective control over stock with branches and keep the margin of profit secret from the branch manager. In such a situation, all entries relating to goods are made in the Branch Account at invoice price and necessary adjustments for loading (difference between I.P. and C.P.) are recorded at the end by passing the following additional journal entries:

1) For adjustment of loading in opening stock at branch

Stock Reserve A/c Dr.

To Branch A/c

2) For adjustment of loading in goods sent to branch less returns
   Branch A/c Dr.
   To Goods Sent to Branch A/c

3) For adjustment of loading in closing stock at branch
   Branch A/c Dr.
   To Stock Reserve A/c

Look at Illustration 4 and see how Branch Account is prepared when goods are invoiced at a price higher than cost.

Illustration 4

The Mukund Gas Co., Varanasi have a sales branch at Ghaziabad and invoiced goods to the branch at cost price plus 33 1/3 per cent. It is arranged that all cash received by the branch is to be paid daily to the Head Office Account with the Banaras State Bank Ltd. and the necessary advice sent to the Head Office. From the following particulars, prepare Branch Account and Goods sent to Branch Account in the Head Office ledger showing the actual profit or loss of the branch for the year ending December 31, 1988.

	Rs.		Rs.
Stock on 1-1-1988 (at invoice price)	12,000	Rent, Rates and Taxes	3,200
Goods Sent to Branch (at invoice price)	96,000	Salaries and Wages	4,800
Debtors on 1-1-1988	1,500	Debtors on 31-12-1988	1,600
Cash Sent to Head Office	77.100	Goods Returned to Head Office (at invoice price)	16,000
Sales	77,000	Shortage of stock (at invoice price)	200

Solution

Ghaziabad Branch Account

Dr.	Rs.		Cr. Rs.
To Balance b/d: Branch Stock	12,000	By Cash Received	77,100
Branch Debtors	1,500	By Goods Returned by Branch A/c	16,000
To Goods sent to Branch A/c	96,000	By Stock Reserve A/c (loading in op. stock)	3,000
To Bank: Rent, Rates & Taxes 3,200; Salaries & Wages 4,800	8,000	By Goods sent to Branch A/c (loading in goods sent less returns)	20,000
To Stock Reserve A/c (loading in cl. stock)	3,700	By Balance c/d: Branch Stock	14,800
To Profit (transferred to General P & L A/c)	11,300	Branch Debtors	1,600
	1,32,500		1,32,500

Goods Sent to Branch Account

	Rs.		Rs.
To Ghaziabad Branch A/c	16,000	By Ghaziabad Branch A/c	96,000
To Ghaziabad Branch A/c (loading on Rs. 80,000)	20,000		
To Trading A/c (transfer)	60,000		
	96,000		96,000

Notes : 1) The branch stock at the end has not been given. It can be worked out by preparing Memorandum Branch Stock Account as follows.

2) Loading is 25% of invoice price

Memorandum Branch Stock Account

	Rs.		Rs.
To Balance hld	12,000	By Goods returned to head office	16,000
To Goods received from head office	96,000	By Sales	77,000
To Goods returned by Customers	–	By Shortage of Stock	200
		By Balance cld	14.800
	1,08,000		1,08,000

It should be noted that all figures in Memorandum Branch Stock Account have been recorded at the invoice price.

Check Your Progress A

1) What do you mean by dependent branch?

....

....

....

2) Fill in the blanks:

   i) The branch expenses paid by the head office are .... to the Branch Account.

   ii) The balance in Goods sent to Branch Account is transferred to .... Account.

   iii) If the cost price is Rs. 100 and the invoice price is cost plus 20% on invoice price, the invoice price is Rs. ....

   iv) Loading is the .... between cost price and invoice price.

   v) If opening or closing stock is not given, the same can be worked out by preparing .... Account at .... price.

3) List the items which are nbt to be shown in Branch Account prepared under the Debtors System.

....

....

....

1.6 FINAL ACCOUNTS SYSTEM

The profit or loss of a dependent branch can also be worked out by preparing a Memorandum Branch Trading and Profit & Loss Account. This account is prepared on the basis of cost of goods sent to the branch (not the invoice price). Apart from the Branch Trading and Profit & Loss Account, the Head Office also maintains the Branch Account. But, under this system, the Branch Account is in the nature of a personal account which shows only the mutual transactions between the head office and the branch, The balance of Branch Account, therefore, represents the net assets of the branch.

Look at Illustration 5 and study how profit or loss is ascertained and how Branch Account is maintained under the final accounts system.

Illustration 5

A-one Ltd., Bhopal has a branch at Madras to which the goods are sent at cost plus 25%. The Madras branch keeps its own Sales Ledger and remits all cash received to the head office every day. All expenses are paid by the head office. The transactions for Madras Branch during the year ending December 31, 1988 were as follows:

	Rs.		Rs.
Stock (1-1-1988)	**11,000**	**Return Inwards**	,500
Debtors (1-1-1988)	**100**	**Cheques sent to Branch**	

	Rs.		Rs.
Petty Cash	100	Rent	600
		Wages	200
Cash Sales	2,650	Salary and other expenses	900
Credit Sales	23,950	Stock (31-12-1988)	13,000
Goods sent to Branch	20,000	Debtors (31-12-1988)	2,000
Collection on Ledger A/c	21,000	Petty Cash (31-12-1988)	
Goods returned to H.O.	300	(including miscellaneous income Rs. 25 not remitted.)	125
Bad Debts	300		
Allowances to Customers	250		

Prepare the Memorandum Branch Trading and Profit & Loss Account and Madras Branch Account for the year ending December 31, 1988.

Solution

Memorandum Branch Trading and Profit & Loss Account for the year ending 31-12-1988

Dr.	Rs.			Cr. Rs.
To Opening Stock (11,000 – 2,200)	8,800	By Sales		
		Cash	2,650	
		Credit	23,950	
To Goods sent to Branch (20,000 – 4,000)	16,000		26,600	
To Wages	200	Less Returns	500	26,100
To Gross Profit c/d	11,740	By Goods sent to H.O. (300 – 60)		240
		By Closing Stock (13,000 – 2,600)		10,400
	36,740			36,740
To Bad Debts	300	By Gross Profit b/d		11,740
To Allowances	250	By Misc. Income		25
To Rent	600			
To Salaries and other expenses	900			
To Profit transferred to General Profit & Loss A/c	9,715			
	11,765			11,765

Madras Branch Account

	Rs.		Rs.
To Balance b/d		By Bank A/c	
Stock	8,800	Cash Received from	
Debtors	100	Debtors	21,000
Petty Cash	100	Cash Sales	2,650
To Goods sent to Branch A/c	16,000	By Goods sent to Branch (returns to H.O.)	240
To Bank A/c		By Balance c/d	
Rent	600	Stock	10,400
Wages	200	Debtors	2,000
Salaries and other expenses	900	Petty Cash	125
To Profit as per Branch Trading and P & L A/c	9,715		
	36,415		36,415

1.7 STOCK AND DEBTORS SYSTEM

Under Stock and Debtors System, the head office does not open a Branch Account in its books. It maintains a few control accounts for recording the various branch transactions. These accounts usually are : (i) Branch Stock Account, (ii) Branch Debtors Account, (iii) Branch Expenses Account, (iv) Branch Cash Account, (v) Goods sent to Branch Account, and (vi) Branch Fixed Assets Account. At the end of the accounting year, it prepares the Branch Adjustment Account and the Branch Profit & Loss Account. This system is used only when goods are invoiced at selling price which the branch is not allowed to vary.

Let us now study the working of each account opened by the head office when such a system is followed.

Branch Stock Account: This is the most important account which helps the head office in controlling the branch stock. It shows all branch transactions relating to goods. The goods sent to branchesand the sales returns are shown on its debit side, and the sales (both cash and credit) and the goods returned to head office cn the credit side. All these items are recorded at the invoice price. Hence, if the figure of any of these items is given at cost, the same should be converted into invoice price before recording it in the Branch Stock Account. The balance of this account would show the unsold goods (stock) lying with the branch. If it is found that the actual stock with the branch is less than the balance shown by the Branch Stock Account, it means that there is a 'shortage' in the stock with the branch. Similarly, if the actual stock with the branch is more than the balance shown by the Branch Stock Account, it would reflect 'surplus'. Both situations warrant investigation. But, so far as their recording goes, the shortage will be shown on the credit side of the Branch Stock Account and if there is surplus, the same will be recorded on its debit side. Then, the balance of the Branch Stock Account will be the exact amount of actual stock with the branch. In other words, while preparing the Branch Stock Account, you will show the actual stock with branch as the balance in this account, and then if the totals of both sides do not tally, you will show the difference as shortage or surplus as the case may be.

Branch Debtors Account: This account shows all transactions relating to branch debtors. The credit sales are shown on its debit side, and cash received from debtors, sales returns, bad debts, discount allowed, etc. on the credit side. The balance of this account represents the closing debtors of the branch.

Dranch Expenses Account: This account shows all expenses incurred by the branch. In addition, the items like bad debts, discount allowed, depreciation on branch fixed assets, etc. are also debited to this account. This account is closed by transfer to the Branch Adjustment Account.

Branch Cash Account: This account shows all cash transactions of the branch where the branch is not required to remit all collection of cash immediately to the head office but use it for branch expenses and remit the balance to the head office from time to time. This account helps the head office to keep control over branch cash. Normally, the dependent branch is not allowed the freedom to retain cash collections. Hence, this account need not be maintained.

Branch Fixed Assets Account: The head office maintains separate account for each type of branch asset such as furniture, equipment, building, etc. These accounts are prepared in the usual manner. The depreciation on branch fixed assets is, however, debited to Branch Expenses Account and credited to the respective account.

Goods Sent to Branch Account: This account is prepared in the same manner as in case of branches to which the goods are sent at the invoice price (Sub-section 1.5.2).

Branch Adjustment Account: This account is like a Trading Account of the branch. It is prepared to ascertain the gross profit or gross loss made at the branch by recording the loading (difference between invoice price and cost price) on various items. The loading on branch closing stock and shortage is shown on its debit side while the loading on branch opening stock, goods sent to branch (less returns) and surplus on the credit side. The balance of this account reflects the gross profit or gross loss which is transferred to Branch Profit & Loss Account.

Branch Profit & Loss Account: This account is prepared to ascertain the net profit or net loss made at the branch. As stated earlier, the gross profit or gross loss ascertained by the Branch Adjustment Account is transferred to this account. It is debited with branch expenses as per the Branch Expenses Account and the loss on account of shortage being the cost of such shortage. In case the Branch Stock Account reveals some surplus, the amount equal to the cost of such surplus will be shown on the credit side of the Branch Profit & Loss Account. The balance of the Branch Profit & Loss Account represents the net profit or net loss made at the branch which is transferred to the General Profit & Loss Account.

The following journal entries are passed in the head office books for opening the, above accounts relating to the various branch transactions:

1) When goods are sent to the branch (at invoice price)
   Branch Stock A/c Dr.
   To Goods Sent to Branch A/c

2) When goods are returned by the branch to the H.O. (at invoice price)
   Goods Sent to Branch A/c Dr.
   To Branch Stock A/c

3) When sales are made by the branch
   i) For Cash Sales
   Cash A/c Dr.
   To Branch Stock A/c
   ii) For Credit Sales
   Branch Debtors A/c Dr.
   To Branch Stock A/c

4) When cash is received from debtors
   Cash A/c Dr.
   To Branch Debtors A/c

5) For sales returns
   Branch Stock A/c Dr.
   To Branch Debtors A/c

6) For discount allowed, bad debts, etc.
   Branch Expenses A/c Dr.
   To Branch Debtors A/c

7) For shortage of stock
   Branch Adjustment A/c Dr.
   (with amount of loading)
   Branch P & L A/c Dr.
   (with cost of shortage)
   To Branch Stock A/c
   For surplus at branch, the reverse entry will be passed.

8) For Branch expenses paid in Cash
   Branch Expenses A/c Dr.
   To Cash A/c

9) For closing branch expenses account
   Branch P & L A/c Dr.
   To Branch Expenses A/c

10) For adjustment of loading on the opening stock
    Stock Reserve A/c Dr.
    To Branch Adjustment A/c

11) For adjustment of loading on the closing stock
    Branch Adjustment A/c Dr.
    To Stock Reserve A/c

12) For adjustment of loading on net goods sent to branch
    Goods Sent to Branch A/c Dr.
    To Branch Adjustment A/c

13) For transfer of gross profit
    Branch Adjustment A/c Dr.
    To Branch P & L A/c

14) **For** transfer of net profit to **General** Profit & **Loss Account**
Branch Adjustment A/c Dr.
To General P & L A/c
The entry will **be** reversed if there is net **loss.**

15) **For** closing the Goods Sent to Branch Account
Goods Sent to Branch A/c Dr.
To Trading A/c

Look at Illustration 6 and see how the accounts for various branch transactions are prepared under Stock and Debtors System.

Illustration 6

Indiana Traders, Jaipur opened a btanch at Jodhpur on 1-7-1987. The goods were sent by the head office to the branch invoiced at selling price of the branch which was 125% of the cost price of the head office.

The following are the particulars relating to the transactions of Jodhpur Branch :

	Rs.			Rs.
Goods sent to branch (at cost to head office)	2,80,000	Cash sent to branch for :		
Sales — Cash	1,24,000	Wages	3.000	
Sales — Credit	1,75,000	Freight	11,000	
Cash collected from debtors	1,56,000	Other expenses including godown rent	6,000	20,000
Discount allowed	4,000			
Spoiled cloth in bales written off at invoice price.	500	Stock on June 30,1988 (at invoice price)		55,500

Ascertain the profit or loss for the Jodhpur Branch for the year ended June 30,1988 by preparing accounts under the Stock and Debtors System.

Solution

Branch Stock Account

Dr. Cr.

	Rs.		Rs.
To Goods Sent to Branch A/c	3.50,000	By Cash A/c (cash sales)	1,24,000
To Branch Debtors A/c (sales returns being balancing figure)	5,000	By Branch Debtors A/c (credit sales)	1,75,000
		By Branch Adjustment A/c (spoilage-loading)	100
		By Branch P & L A/c (spoilage-cost)	400
		By Balance c/d	55,500
	3,55,000		3,55,000

Note: Total of the credit side of Branch Stock A/c exceeds the debit side by Rs. 5,000. It is assumed to be on account of returns by customers.

Goods Sent to Branch Account

	Rs.		Rs.
To Branch Adjustment A/c (loading)	70,000	By Branch Stock A/c	3,50,000
To Trading A/c	2,80,000		
	3,50,000		3,50,000

Branch Debtors Account

	Rs.		Rs.
To Branch Stock A/c	1,75,000	By Cash A/c	1,56,000

	Rs.		Rs.
		By Branch Stock A/c (returns)	5,000
		By Branch Expenses A/c (discount allowed)	4,000
		By Balance c/d	10,000
	1,75,000		1,75,000

Branch Expenses Account

	Rs.		Rs.
To Cash A/c		By Branch P & L A/c	24,000
Wages	3,000		
Freight	11,000		
Other Expenses	6,000		
To Branch Debtors A/c (discount)	4,000		
	24,000		24,000

Branch Adjustment Account

	Rs.		Rs.
To Branch Stock A/c (loading on spoilages)	100	By Goods Sent to Branch A/c (loading)	70,000
To Stock Reserve A/c (loading on closing stock)	11,100		
To Branch Profit & Loss A/c	58,800		
	70,000		70,000

Branch Profit & Loss Account

	Rs.		Rs.
To Branch Expenses A/c	24,000	By Branch Adjustment A/c	58,800
To Branch Stock A/c (spoilage-cost)	400		
To Net Profit transferred to General P & L A/c	34,400		
	58,800		58,800

It should be noted that if there is any theft or spoilage of goods at the branch, or some goods are lost in transit, these are to be treated in accounts in the same way as the shortage of goods. If, however, some amount is received from the insurance company for such abnormal losses of stock, the same will be credited to the Branch Profit and Loss Account.

Check Your Progress B

1) How is the Branch Account prepared under the Debtors System different from the Branch Account prepared under the Final Accounts System.

....

....

....

2) Fill in the blanks:

   i) The closing balance of Branch Account under the Final Accounts System represents .... at the branch.

   ii) Branch Expenses Account under the Stock and Debtors System is closed by transfer to .... Account.

   iii) Under Stock and Debtors System, all figures in Branch Stock Account are recorded at .... price.

   iv) Under Stock and Debtors System, ... Account is credited when the branch returns goods to the head office.

   v) Under the Stock and Debtors System, Bad Debts are credited to Branch Debtors Account and debited to .... Account.

   vi) If the balance shown by Branch Stock Account is different from actual stock with the branch, the difference reflects ....

1.8 LET US SUM UP

From accounting point of view, each branch is treated as a separate profit centre. Hence, accounting for branch transaction is designed in such a way that profit or loss made at each branch can be correctly worked out and proper control can be exercised over their financial activities. For this purpose, the branches are divided into three categories: (i) branches not keeping full system of accounting (dependent branches), (ii) branches keeping full system of accounting (independent branches), and (iii) foreign branches.

Where branches do not keep full system of accounting, the head office has to maintain proper record of branch transactions. There are three methods that can be followed for this purpose: (i) Debtors System, (ii) Final Accounts System, and (iii) Stock and Debtors System.

Debtors System is usually adopted for small branches which merely act as sales depots. Under this system, the head office simply opens a Branch Account for each branch in which it records all related transactions. The Branch Account is maintained like a Consignment Account which also helps in ascertaining the profit or loss made by the branch.

Under the Final Accounts System of maintaining branch accounts, the head office prepares a Memorandum Trading and Profit & Loss Account for each branch from the data provided by the branch and ascertains its profit or loss for the accounting period. Then it also maintains a Branch Account for recording mutual transactions between the head office and the branch which finally reveals the amount due to, or due from, the branch. Its balance, in fact, will be equal to the net assets with the branch.

Stock and Debtors System is followed where the goods are invoiced to the branch at selling price. Under this system, no Branch Account is opened. The head office maintains (i) Branch Stock Account, (ii) Branch Expenses Account, (iii) Goods Sent to Branch Account, and (iv) Branch Fixed Assets Account. At the end of the accounting period, it prepares Branch Adjustment Account and Branch Profit and Loss Account for ascertaining the branch gross profit/gross loss and the net profit/net loss respectively. This system also enables the head office to exercise effective control on branch stock.

1.9 KEY WORDS

Branch Adjustment Account : An Account prepared under Stock and Debtors System for ascertaining the gross profit or gross loss made by a branch.

Debtors System : A system of accounting for transactions of a branch by opening Branch Account which also helps to ascertain branch profit or loss.

Dependent Branch : A small branch which does not keep full system of accounting.

Final Accounts System : A system of accounting for transactions of a branch under which branch profit or loss is ascertained by preparing Memorandum Branch Trading and Profit & Loss A/c.

General Profit & Loss Account : Profit and Loss Account of the Head Office which shows the profit or loss of the business unit as a whole.

Independent Branch : Branch keeping full system of accounting.

Loading : Difference between the cost price and the price at which goods are invoiced to the branch.

Stock and Debtors System : A System of accounting for transactions of a branch without opening a Branch Account. Under the system, branch profit or loss is ascertained through Branch Adjustment Account.

1.10 ANSWERS TO CHECK YOUR PROGRESS

A 2) i) debited ii) Trading iii) 125 iv) difference
v) Memorandum Branch Stock, invoice price

B 2) i) net assets ii) Branch Adjustment iii) invoice
iv) Branch Stock v) Branch Expenses vi) Shortage or surplus

1.11 TERMINAL QUESTIONS/EXERCISES

Questions

1) What are the objectives of keeping branch accounts?
2) Name the three systems of maintaining the accounts of a dependent branch and describe how profit is ascertained under each system.
3) Explain how Branch Stock Account helps in keeping effective control over the branch stock.

Exercises

1) Kabir & Co. of Moradabad have their branch at Kanpur. The following are the transactions relating to the branch for the year ending December 31, 1988:

		Rs.
Opening Stock on January 1, 1988		20,000
Goods supplied to Branch		50,000
Cash sent to Branch for :		
Rent	200	
Other Expenses	100	
		300
Cash received from Branch during the year		60,000
Closing Stock on December 31, 1988		15,000
Closing balance of Petty Cash on December 31, 1988		10

From the above information, pass the necessary journal entries and prepare Kanpur Branch Account and other necessary accounts in the books of the Head Office.

(**Answer**: Branch Net Profit Rs. 4,710)

2) A Meerut Company has a retail branch in Kota which is supplied with all goods from Meerut. The branch keeps its own Sales Ledger, receives cash against the ledger accounts and remits the whole of the cash received daily to the head office. All wages and branch expenses are drawn by cheque weekly from the Head Office upon the imprest system. From the under mentioned particulars supplied by the Branch Manager, show how the Branch Account would appear in the Head Office books as on December 31, 1988.

	Rs.		Rs.
Six month's credit sales	2,387	Stock December 31, 1988	1,121
Return inwards	20	Debtors July 1, 1988	1,227
Cash received on Ledger accounts	2,384	Goods received from Head Office	2,178
Cash Sales	1,214	Rent, Taxes etc. paid	375
Stock July 1, 1988	720	Sundry Expenses	396
Bad Debts	100		

(Answer: Net Profit Rs. 933; Missing Figure; Closing Debtors Rs. 1,110)

3) Royal Store of Kanpur opened a selling branch at Madras on July 1, 1988. Goods are sent to branch from the head office at cost plus 25%. The branch is advised to deposit cash every day in the bank in head office account. From the following particulars, prepare Branch Account in the books of head office for the period ending December 31, 1988. Petty Cash at branch is maintained on imprest system.

		Rs.		Rs.
Cash sent to branch for meeting petty expenses		1,500	Cash sales by the branch	80,000
Furniture purchased for the branch		12,000	Credit sales during 6 months	30,000
Goods sent to branch at invoice price		1,60,000	Cash received from the debtors	22,000
Expenses paid by the Head Office :			Discount allowed to debtors	400
Rent	2,200		Goods returned by debtors (at invoice price)	800
Advertisement	800		Bad debts written off	100
Salaries	4,600		Petty expenses paid by the branch	1,000
Insurance (up to June 30, 1989)	400		Stock at invoice price on December 31 (excluding stock received from debtors)	40,000

Provide depreciation on furniture at 10% p.a.

(Answer: Profit Rs. 3,940; Debtors at the end Rs. 6,700)

4) X Ltd. of Bombay has a branch in Delhi. The head office sends goods to the branch at cost plus 50%. From the following data, prepare the necessary accounts in the books of head office under Stock and Debtors System.

	Rs.		Rs.
Goods sent from Head Office (at invoice price)	50,000	Credit Sales	8,000
Returns to Head Office	1,000	Opening Stock	10,000
Cash Sales	35,500	Closing Stock	11,000

(Answer: Profit Rs. 11,500; Shortage of Goods Rs. 4,500)

5) Shyam Brothers of Delhi has a branch at Hyderabad. In order to maintain strict control over stocks, it invoices goods to the branch at selling price including profit of 25% on selling price. From the following particulars, prepare Branch Stock Account, Branch Debtors Account, Goods Sent to Branch Account, Branch Adjustment Account, and Branch Profit and Loss Account.

	Rs.
Stock January 1, 1989	30,000
Debtors on January 1, 1989	22,800
Goods invoiced to Branch at invoice price	1,34,000
Sales at the branch	
Cash	62,000
Credit	74,800
Cash received from Debtors	80,000
Bad Debts written off	500
Discount allowed to customers	600
Expenses at the branch	13,400
Stock on December 31, 1989	26,800

(Answer: Gross Profit Rs. 34,200; Net Profit Rs. 19,400)

Note: These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University. These are for your practice only.

UNIT 2 BRANCH ACCOUNTS – II

Structure

2.0 Objectives
2.1 Introduction
2.2 Accounting System of an Independent Branch
2.3 Some Peculiar Items
2.3.1 Goods in Transit
2.3.2 Cash in Transit
2.3.3 Head Office Expenses Chargeable to Branch
2.3.4 Depreciation on Branch Fixed Assets, Accounts Maintained by Head Office
2.3.5 Inter-branch Transactions
2.4 Incorporation of Branch Trial Balance in the Head Office Books
2.4.1 Detailed Incorporation
2.4.2 Abridged Incorporation
2.5 Closing Entries in Branch Books
2.6 A Comprehensive Illustration
2.7 Let Us Sum Up
2.8 Key Words
2.9 Answers to Check Your Progress
2.10 Terminal Questions/Exercises

2.0 OBJECTIVES

After studying this unit you should be able to:

- describe the features of the accounting system of an independent branch.
- make adjustment entries in the books of both head office and branch for certain peculiar items relating to independent branches
- pass necessary journal entries for the incorporation of branch balances in the books of the head office
- make closing entries in the books of the branch
- prepare consolidated balance sheet of the business.

2.1 INTRODUCTION

In Unit 1 you learnt about the systems of accounting for a dependent branch. Dependent branch is usually a small branch which merely functions as a sales depot. It does not keep full system of accounting. The main accounting records for such branches are maintained at the head office level. But, when a branch functions as an independent unit and enjoys certain amount of operational autonomy, it keeps full system of accounts. Such branches are termed as independent branches and maintain complete set of books on double entry system. They prepare their own Trial Balance, Profit & Loss Account and Balance Sheet. At the end of the accounting year, their summarised results and the assets and liabilities are incorporated in the books of the head office. In this unit you will learn how does the head office incorporate all branch balances in its books and what sort of records are maintained for mutual transactions between the branch and the head office.

2.2 ACCOUNTING SYSTEM OF AN INDEPENDENT BRANCH

You know an independent branch enjoys certain amount of operational autonomy. Besides receiving goods from the head office, it may also purchase goods from the outside parties. It maintains its own bank account and remits money from time to time to head office as per the instructions of the head office. It is treated as a separate accounting entity. The main features of the accounting system of such branches are as follows:

1) The branch maintains complete set of books on double entry system.
2) The branch opens a Head Office Account in its books. It is a personal account wherein all transactions between the branch and the head office are recorded at the branch level. This account is debited with cash sent to the head office and the goods returned or supplied to the head office, and is credited by goods received from the head office and the head office expenses charged to the branch for centralised services.
3) The Head Office also maintains a Branch Account in its books for all transactions, it makes with a particular branch. It is also a personal account which shows the same entries as the Head Office Account in branch books, but on the reverse sides.
4) At the end of the accounting period, the branch prepares its trial balance and the final accounts, and send their copies to the head office.
5) As soon as the head office receives the trial balance from a branch, it compares the balance in Head Office Account as shown in the branch Trial Balance with the balance in the Branch Account as it appears in the head office books. The difference, if any, is investigated and, after ascertaining the causes thereof, the necessary adjustment entries are passed.
6) After reconciling the Head Office Account balance with the Branch Account balance, the head office passes the necessary entries for incorporating various branch balances in its books.

2.3 SOME PECULIAR ITEMS

In respect of independent branches, there are certain items which require special accounting treatment. These items are:

i) Goods in transit
ii) Cash in transit
iii) Head Office expenses chargeable to branch
iv) Depreciation on branch fixed assets, the accounts of which are maintained at the heed office level
v) Inter-branch transactions.

Let us discuss these items one by one.

2.3.1 Goods in Transit

The head office and the branch send goods to each other quite frequently. When goods are sent by the head office to the branch, the head office debits the Branch Account in its books immediately. But the branch credits the Head Office Account only when it receives the goods. Similarly when the branch sends or returns some goods to the head office, it (the branch) debits the Head Office Account in its books immediately but the head office credits the Branch Account only when it receives the same. It is quite possible that goods sent in the later part of the accounting year may not have been received by the closing date of the accounting year by the head office or the branch, as the case may be. Such goods are called 'goods in transit' for which no entry will appear in the books at the receiving end at the time of the closing the accounts, Hence, the balance in the Head Office Account in branch books will not tally with the balance in the Branch Account in the head office books. This will require an adjustment entry which may be passed either in the head office book or in the branch books, but not in **both sets of books.**

If the head office decides to pass the adjustment entry, it will be as follows:

Goods in Transit A/c Dr.
    To Branch A/c

If, however, the adjustment is made in branch books, the entry will be:

Goods in Transit A/c Dr.
    To Head Office A/c .

It should be noted that the adjustment entry for goods in transit shall be passed only in one set of books, either at the head office level or the branch level. **Usually, such entry is made in the books of the bead office.**

2.3.2 Cash in Transit

Like goods. cash is also regularly remitted by the head office and the branch to each other. For this the entries are made in both sets of books in the same manner, as they are made for the goods. In this case also it is possible that some remittances are in transit at the time of closing the books for the accounting year. This would again lead to difference in Branch Account balance in the head office books and Head Office Account balance in branch books. Hence, an adjustment entry will have to be passed to reconcile the same. This may be done either by the head office or by the branch, but not by both.

In case the head office decides to pass the adjustment entry. it will be as follows:

Cash in Transit A/c Dr.
To Branch A/c

If, however, the adjustment is made in the branch books, the entry will be:

Cash in Transit A/c Dr.
To Head Office A/c

It should be noted that for cash in transit also, the entry shall be passed in one set of books, either at the head office level or at the branch level. This entry is also made usually at the head office level. The reason for passing such adjustment entries in head office books lies in the fact that all in-transit items are noticed by the head office at the time of receiving the branch Trial Balance and, at this stage, it is not considered desirable to alter the balances in the branch books.

Look at Illustration 1 and see how are the amounts of goods in transit and cash in transit ascertained and the adjustment entries passed to reconcile the difference between the Branch Account balance and the Head Office Account balance.

Illustration 1

Following are the extracts from the Trial Balances of a head office and a branch. You are required to pass the necessary journal entries for reconciling the balances of the Head Office Account and the Branch Account.

Trial Balance

Particulars	Head Office		Branch Office	
	Dr.	Cr.	Dr.	Cr.
	Rs.	Rs.	Rs.	Rs.
Current Accounts	1,00,000			90,000
Goods sent/received by Branch		1,50,000	1,45,000	

Solution

The current accounts represent the Branch Account in the head office books and the Head Office Account in the branch books. As per the above Trial Balance, there is a difference of Rs. 10,000 between the two current account balances. It is observed that there is a difference of Rs. 5,000 in the goods sent/received by branch. This can be attributed to goods in transit. The remaining difference of Rs. 5,000 may be taken to be on account of the cash in transit. The required adjustment entry may be passed in the books of head office as follows:

Cash in Transit A/c	Dr.	5,000	
Goods in Transit A/c	Dr.	5,000	
To Branch A/c			10,000
(Being cash in transit and goods in transit adjusted)			

If, however, this entry is passed in the books of the branch, it will be as follows:

Cash in Transit A/c	Dr.	5,000	
Goods in Transit A/c	Dr.	5,000	
To Head Office A/c			10,000
(Being cash in transit and goods in transit adjusted)			

2.3.3 Head Office Expenses Chargeable to Branch

The Head Office may like to allocate a part of its expenses to branches for the centralised services at the head office level. As a matter of fact, quite a good amount of time of the head office staff may be spent in doing the work of the branches. Hence, it may,decide to charge a part of its expenditure on salaries to the branches: The same thing may be true of certain other items of expenses. If the head office so decides to charge some expenses to the branch, the journal entry passed in the books of the head office is as follows:

Branch A/c Dr.
To Expenses (Salaries A/c)
(Being head office expenses chargeable to branch)

The branch will also pass a corresponding entry in its books as follows:

Head Office Expenses A/c Dr.
To Head Office
(Being head office expenses chargeable to branch)

Like all other expenses, accounts, the Head Office Expenses Account will be closed by transferring its balance to the Profit & Loss Account at the end of the accounting year.

2.3.4 Depreciation on Branch Fixed Assets, Accounts Maintained by Head Office

Sometimes, the accounts for the fixed assets of independent branches are maintained at the head office level. In such a situation, all entries in respect of branch fixed assets are made in the head office books. For example, when a fixed asset is purchased for the branch, the head office debits the Branch Fixed Assets Account and credits the Cash Account. No entry for this transaction is passed by the branch unless the payment is made by the branch for this purchase. Even if the payment for the purchase of such fixed assets is made by the branch it will not debit the Fixed Assets Account. In fact such payment is treated like a remittance to the Head Office and so it is debited to the Head Office Account. But when it comes to depreciation on such fixed assets, the branch has to pass the necessary entry in its books because the assets were used by the branch and not by the head office. Normally an entry for the depreciation on fixed assets is passed by debiting the Depreciation Account and crediting the Fixed Asset Account. But in thissituation, the branch cannot credit the Fixed Asset Account because the accounts for its fixed assets are maintained at the head office level. Hence, the entry passed for depreciation on such fixed assets is different from the normal entry for depreciation. It is as follows:

Depreciation A/c Dr.
To Head Office A/c
(Being depreciation on fixed assets)

Since the account for the branch fixed assets is maintained in head office books, the head office must reduce the balance in Branch Fixed Assets Account by the amount of depreciation thereon. But, it cannot debit the Depreciation Account because the loss relates to the branch. Hence. it makes the following journal entry for depreciation on branch fixed assets when their accounts are maintained by the head office:

Branch A/c Dr.
To Branch Fixed Assets A/c
(Being depreciation on branch fixed assets)

It should be noted that the above entries are passed only for such branch fixed assets accounts of which are maintained by the head office. Any branch fixed assets for which the branch itself maintains the accounts, the branch will pass the normal entry for depreciation. The head office need not pass any entry in its books for the amount of depreciation on such fixed assets.

2.3.5 Inter-branch Transactions

When an organisation has more than one branch, it is possible that some transactions take place between one branch and the other. This usually happens under instructions

from the head office. For example, a branch may be asked to transfer its surplus stock to some other branch which may need the same (it may be facing shortage). In such a situation, the usual practice for the sending branch is to regard it as a transaction of returning the goods to the head office. Similarly, the receiving branch shall regard it as a transaction of receiving the goods from the head office. Hence, entries are passed on the same basis in the books of the branches and the head office. These are as follows:

In the books of the head **office**

Receiving Branch A/c . Dr.
To Sending Branch A/c
(Being goods transferred from .... branch to .... branch)

In the **books** of the sending **branch**

Head Office A/c Dr.
To Goods Sent to H.O. A/c
(Being goods sent to .... branch under instructions from H.O.)

In the **books** of the receiving **branch**

Goods from H.O. A/c **Dr.**
To Head Office A/c
(Being goods received from .... branch under instruction from H.O.)

Look at Illustration 2 and see how the above-mentioned peculiar items are recorded in the books of the head office and the branches.

Illustration 2

Give the journal entries that would be passed in the books of the head office to record the following transactions:

i) Goods amounting to Rs. 1,000 transferred from Madras branch to Bombay branch under instructions from the head office.

ii) Depreciation on branch fixed assets accounts maintained by the head office: (Bombay Rs. 4,000 and Madras Rs. 6,000).

iii) A remittance of Rs. 6,000 made by Bombay branch to head office on December 27, 1988 and received by head office on January 7, 1989.

iv) Goods worth Rs. 10,000 sent by the head office to Madras branch on December 25, 1988 and received by the latter on January 15, 1989.

v) A sum of Rs. 10,000 is to be charged to the Madras branch for administrative services rendered by the head office.

Solution

Head Office Books

Journal

			Rs.	Rs.
i)	Bombay Branch A/c To Madras Branch A/c (Being goods transferred from Madras branch to Bombay branch)	Dr.	1,000	1,000
ii)	Bombay Branch A/c To Branch Fixed Assets A/c (Being depreciation)	Dr.	4,000	4,000
iii)	Madras Branch A/c To Branch Fixed Assets A/c (Being depreciation)	Dr.	6,000	6,000
iv)	Cash in Transit A/c To Bombay Branch A/c (Being Cash in transit adjusted)	Dr.	6,000	6,000

v)	Goods in Transit A/c To Madras Branch A/c (Being goods in transit adjusted)	Dr.	10,000	10,000
vi)	Madras Branch A/c To Gen. P & L A/c (Being Administrative expenses charged to Madras branch)	Dr.	10,000	10,000

Check Your Progress A

1) What do you mean by Cash in Transit?

....

....

....

2) Why does head office charge a part of its expenses to branches?

....

....

....

3) Put tick (√) mark against the correct answer:

   i) An independent branch
      a) receives the goods from the head office.
      b) purchases the goods from outside parties.
      c) receives the goods from both (a) and (b) sources.

   ii) The Head Office Account in the books of branch is debited with
      a) cash sent to the head office and goods returned to the head office.
      b) cash and goods received from head office, and head office expenses allocated to branch by head office.
      c) none of the above,

   iii) The adjustment entry for goods in transit is passed in the books of
      a) either the branch or the head office.
      b) branch as well as the head office.
      c) none of them.

   iv) For depreciation on fixed assets, whose accounts are maintained by the head office, the head office
      a) debits Fixed Assets A/c and credits Branch A/c.
      b) debits Branch A/c and credits its Fixed Assets A/c.
      c) none of the above.

   v) In case of inter-branch transactions, each branch
      a) opens separate accounts for other branches.
      b) passes no entry.
      c) may treat such transactions as the transactions with the head office.

   vi) The Head Office Account maintained by the branch is of the nature of
      a) Real Account.
      b) Personal Account.
      c) Nominal Account.

2.4 INCORPORATION OF BRANCH TRIAL BALANCE IN THE HEAD OFFICE BOOKS

Just because an independent branch keeps full system of accounting and prepares its own final accounts does not mean that its year-end results will not form part of the final accounts of the head office. In fact, as in case of dependent branches, the profit or loss made by an independent branch shall also be included in the General Profit and Loss Account which shows the profit or loss of the company as a whole. Similarly, its assets and liabilities shall also be shown as part of the assets and liabilities of the company. This is done by preparing the combined (consolidated) Balance Sheet of

the head office and its branches. Thus, it becomes necessary for the head office to incorporate the branch balances in the head office books by means of suitable journal entries at the end of the accounting period.

The incorporation of branch balances involves two steps;

i) incorporation of branch profit or loss, and
ii) incorporation of branch assets and liabilities.

For incorporation of the branch profit or loss, the head office may either pass various entries to include all revenue items and prepare a proper Branch Trading and Profit & Loss Account or simply pass one entry for profit or loss made by the branch after working it out with the help of a Memorandum Branch Trading and Profit & Loss Account. The first method is called 'detailed incorporation' and the second method is called 'abridged incorporation' (or simply short cut method). Whatever the method for incorporating branch profit or loss, the entries for incorporating branch assets and liabilities remain the same.

2.4.1 Detailed Incorporation

As stated earlier, under this method, the head office prepares a pruper Branch Trading and Profit & Loss Account and makes entries for all revenue items before incorporating the branch assets arid liabilities in its books. The entries passed under this method are as foilows:

1) For items on the debit side of the Trading Account
   Branch Trading A/c Dr.
   To Branch A/c
   (This entry is passed for the total amount of items like opening stock, net purchases, wages, goods received from H.O., carriage inwards,, ctc.)

2) For items on the credit side of the Trading Account
   Branch A/c Dr.
   To Branch Trading A/c
   (This entry is passed for the total amount of items like net sales, closing stock, etc.)

3) For branch gross profit
   Branch Trading A/c Dr.
   To Branch Profit & Loss A/c
   (In case of gross loss, the entry will be reserved)

4) For items on the debit side of the Profit and Loss Account
   Branch Profit & Loss A/c Dr.
   To Branch A/c
   (This entry is passed for the total amount of items like salaries, rent, bad debts, repairs, depreciation, etc.).

5) For items on the credit side of the Profit & Loss Account
   Branch A/c Dr.
   To Branch Profit & Loss A/c
   (This entry is passed for total amount of items like interest received, discount received, commission received, etc.)

6) For branch net profit
   Branch Profit & Loss A/c Dr.
   To General Profit & Loss A/c
   (If there is net loss, the entry will be reversed)

7) For branch assets
   Branch Assets A/cs Dr.
   To Branch A/c
   (Each asset should be debited individually)

8) For Branch liabilities
   Branch A/c Dr.
   To Branch Liabilities A/cs
   (Each liability credited individually. This should not include H.O. A/c balance)

As a result of the last two entries (7 and 8), the Branch Account in the head office books will stand closed because the net assets (assets minus liabilities) of the branch are equal to the balance in the Branch Account after branch net profit or net loss has been incorporated in head office books. In order to open the Branch Account in the next year's books of the head office and show the amount due from the branch, the entries for branch assets end branch liabilities (7 and 8 above) shall be reversed at the beginning of the next year..

kook at Illustration 3 and see how branch balances are 'incorporated in the head office books when deta'iled incorporation method is followed.

Illustration 3

On December 31, 1988, the Trial Balance of the Kanpur branch stood as follows:

	Dr. Rs.	Cr. Rs.
Stack on January 1,1988	12,000	
Furniture	4,800	
Debtors	11,200	
Goods **received** from **H.O.**	32,000	
Salaries, rent and expenses	4,400	
Cash in hand	3,600	
Head Office Account		22,000
Sales		45,600
Sundry Creditors		400
	68,000	68,000

Stock on December 31, 1988 was Rs. 9,200.

Pass the necessary journal entries to incorporate Kanpur branch balances in the head. office books, and prepare the Kanpur Branch Account in the books of the head office.

Solution

Head Office Books

JOURNAL

1988			Rs.	Rs.
Dec. 31	**Kanpur Branch Trading A/c**	Dr.	44,000	
	To Kanpur Branch A/c			44,000
	(Being incorporation of opening stock and goods received from H.O.)			
" 31	**Kanpur** Branch A/c	Dr.	54,800	
	To Kanpur Branch Trading **A/c**			54,800
	(Being incorporation of branch sales' and **closing** stock)			
" 31	Kanpur Branch Trading A/c	Dr.	10,800	
	To Kanpur Branch P & L **A/c**			10,800
	(Being gross profit transferred to Branch P & L **A/c**)			
" 31	Kanpur Branch P & L **A/c**	Dr.	4,400	
				4,400
	(Being incorporation of branch expenses)			
" 31	**Kanpur Branch P & L A/c**	Dr.	6,400	
	To **General Profit & Loss A/c**			6,400
	eing incorporation of branches net profit)			

"31	Branch Closing Stock A/c	Dr.	9,200	
	Branch Furniture A/c	Dr.	4,800	
	Branch Debtors A/c	Dr.	11,200	
	Branch Cash A/c	Dr.	3,600	
	To Kanpur Branch A/c			28,800
	(Being incorporation of branch assets)			
"31	Kanpur Brunch A/c	Dr.	400	
	To Branch Creditors A/c			400
	(Being incorporation of branch liabilities)			

Kanpur Branch Account

Dr. Cr.

	Rs.		Rs.
To Balance b/d	22,000	By Branch Trading A/c	44,000
To Branch Trading A/c	54,800	By Branch P & L A/c	4,400
To Creditors	400	By Closing Stock	9,200
		By Furniture	4,800
		By Debtors	11,200
		By Cish	3,600
	77,200		77,200

2.4.2 Abridged Incorporation

Incorporation of branch balances in the head office books can **also** be effected with the help of a short cut method known as the '**abridged** incorporation'. Under this method, we prepare a Memorandum Branch Trading end Profit & Loss Account and pass a journal entry only for the net profit or net loss. Thus, the six entries passed under the detailed incorporation method are replaced by just one entry which is as **follows** :

Branch Account Dr.

To General Profit & **Loss A/c**

(**Being** branch net profit incorporated)

In case of net **loss,** the **above entry shall** be **reversed.**

Look at Illustration 4 and see **how branch-balances are** incorporated in the Head Office **books** with the help of the short cut method.

Illustration 4

From the particulars given **in** Illustration 3, prepare **Memorandum** Branch Trading and Profit & Loss Account, **pass** the necessary **journal** entries to incorporate the Kanpur **branch balances,** and **prepare Kanpur** Branch **Account in the books of the** head office.

Solution

Books of Head Office

Memorandum Kanpur **Branch Trading and Profit & Loss Account**
for the **year ended** December 31, 1988

Dr.			Cr.
	Rs.		Rs.
To Opening **Stock**	12,000	**By Sales**	45,600
To Goods Received from H.O.	32,000	**By Closing Stock**	9,200
To Gross Profit c/d	10,800		
	54,800		54,800
To Salaries, Rent and **Expenses**	4,400	By Gross Profit b/d	10,800
To Net Profit	6,400		
	10,800		10,800

Journal

1988			Rs.	Rs.
Dec. 31	Kanpur Branch A/c	Dr.	6,400	
	To General Profit & Loss A/c			6,400
	(Being branch net profit incorporated)			
" 31	Kanpur Branch Closing Stock A/c	Dr.	9,200	
	Kanpur Branch Furniture A/c	Dr.	4,800	
	Kanpur Branch Debtors A/c	Dr.	11,200	
	Kanpur Branch Cash A/c	Dr.	3,600	
	To Kanpur Branch A/c			28,800
	(Being branch assets incorporated)			
" 31	Kanpur Branch A/c	Dr.	400	
	To Kanpur Branch Creditors A/c			400
	(Being branch liabilities incorporated)			

Kanpur Branch Account

Dr.			Cr.
	Rs.		Rs.
To Balance b/d	22,000	By Closing Stock	9,200
To General Profit & Loss A/c	6,400	By Furniture	4.800
To Creditors	400	By Debtors	11,200
		By Cash	3W
	28,800		28,800

2.5 CLOSING ENTRIES IN BRANCH BOOKS

At the end of the accounting period, the branch books **have** also to be closed, For this purpose. the **branch can** pass the usual closing entries for transferring all revenue items to its Trading and Profit & Loss Account and ascertaining its net profit or net **loss.** The amount of net profit or net loss should be transferred to the Head Office Account by **passing** the following journal entry,

In case of net profit
Profit and Loss A/c Dr.
To Head Office A/c

In case of net loss
Head Office A/c Dr.
To Profit and Loss A/c

After the above entry for transferring net profit or net loss to the Head Office Account has been passed, the balance in the Head Office Account will be equal to the branch net assets (assets minus liabilities). The branch can then prepare its Balance Sheet by showing the Head Office Account balance on the liabilities side as this account would normally show a credit balance. If, however, the Head Office Account shows a debit balance, the same will appear on the assets side of the Balance Sheet.

The accounts pertaining to assets and liabilities can also be closed, if required, by transferring their balances to the Head Office Account. For this purpose, the following two journal entries will be passed in the branch books.

1) For transfers of assets
Head Office A/c Dr.
To Assets A/cs
(The assets should be credited individually)

2) For transfer of liabilities
Liabilities A/cs Dr.
To Head Office A/c
(The liabilities should be credited individually)

As a result of the above entries, the Head Office Account shall also be closed as it will not show any balance.

Look at Illustration 5 and see how does a branch close its books.

Illustration 5

A Delhi trader has independent branch at Patna. Its Trial Balance for the year ending December 31, 1989 is given below. Pass journal entries to close the books of Patna branch and prepare its Head Office Account.

Trial Balance

Dr.	Rs.	Cr.	Rs.
Purchases	25,600	Creditors	5,400
Stock on 1-1-89	16,400	Sales	69,900
Wages	13,100	Head Office	28,000
Factory Expenses	6,800	Discount	300
Salaries	8,000	Purchase Returns	600
Rent	3,400		
Sundry Expenses	4,000		
Goods Received H.O.	14,400		
Debtors	11,000		
Cash	1,500		
	1,04,200		1,04,200

Additional **information**

1) The accounts of the branch fixed assets were maintained in the head office which show machinery of Rs. 50,000 and furniture of Rs. 2,000.
2) Depreciation is to be charged @ 10% on Machinery and 15% on Furniture.
3) Rs. 300 are due for salaries.
4) A remittance of Rs. 8,000 made by branch on December 29, 1989, was received by head office on January 3, 1990.
5) Closing stock at branch was Rs. 28,700.

Solution

Books of Patna Branch

Journal

1989			Rs.	Rs.
Dec. 31	Depreciation A/c	Dr.	5,300	
	To Head Office A/c			5,300
	(Being depreciation on fixed assets, accounts maintained by head office)			
" 31	Cash in Transit A/c	Dr.	8,000	
	To Head Office A/c			8,000
	(Being outstanding salaries)			
" 31	Salaries A/c	Dr.	300	
	To Salaries Outstanding A/c			300
	(Being outstanding salaries)			
" 31	Profit & Loss A/c	Dr.	2,200	
	To Head Office A/c			2,200
	(Being net profit transferred)			
" 31	Head Office A/c	Dr.	49,200	
	To Debtors			11,000
	To Cash A/c			1,500
	To Cash in Transit A/c			8,000
	To Closing Stock A/c			28.700
	(Being assets account balance transferred)			
" 31	Creditors	Dr.	5,400	
	Salaries Outstanding A/c	Dr.	300	
	To Head Office A/c			5,700
	(Being liabilities account balances transferred)			

Head Office Account

Dr. Cr.

	Rs.		Rs.
To Balance c/d	43,500	By Balance b/d	28,000
		By Depreciation A/c	5,300
		By Cash in Transit A/c	8,000
		By Profit & Loss A/c	2,200
	43,500		43,500
To Debtors	11,000	By Balance b/d	43,500
To Cash A/c	1,500	By Creditors	5,400
To Cash in Transit A/c	8,000	By Salaries outstanding A/c	300
To Closing Stock A/c	28,700		
	49,200		49,200

Working Notes

Trading and Profit & Loss Account

Dr. Cr.

		Rs.		Rs.
To Opening Stock		16,400	By Sales	69,900
To Purchases	25,600		By Closing Stock	28,700
Less Returns	600			
		25,000		

To Goods from H.O.		14,400		
To Wages		13,100		
To Factory Expenses		6,800		
To Gross Profit c/d		22,900		
		98,600		98,600
To Salaries	8,000			
Add O/s	300		By Gross Profit b/d	22,900
		8,300		
To Rent		3,400	By Discount	300
To Depreciation		5,300		
To Sundry Expenses		4,000		
To Net Profit		2,200		
		23,200		23,200

Notes: 1) The closing entries for transfer of revenue items have been omitted.

2) The balance in Head Office Account after adjustment entries and transfer of net profit is Rs. 43,500. This is equal to the net assets at Patna as given below:

		Rs.	Rs.
Assets	: Debtors	11,000	
	Cash	1,500	
	Cash in Transit	8,000	
	Closing Stock	28,700	49,200
Liabilities:	Creditors	5,400	
	Salaries O/s	300	5,700
		Net Assets	Rs. 43,500

3) After the assets and liabilities are transferred to Head Office Account, it stands closed.

Check Your Progress B

1) Why is the incorporation of branch balances necessary in the books of the head office?

....

....

....

2) Name the two methods of incorporating branch balances in the books of the head office?

....

....

3) Fill in the blanks:

i) The short cut method of incorporating the branch balances is called ....

ii) The branch net profit can be incorporated in the head office books by debiting the .... Account and crediting the .... Account.

iii) The net assets of the branch are equal to the .... of the Branch Account after the entry of branch net profit or net loss has been passed in head office books.

iv) The balance in the Head Office Account in branch books represents the branch .... after the net profit or net loss has been transferred to this account.

2.6 A COMPREHENSIVE ILLUSTRATION

As stated earlier, any organisation having branches has to present the final accounts of the organisation as a whole and not separately for the head office and for the branches. Hence, it prepares General Profit and Loss Account which includes the profit or loss made by the branches and draws a consolidated Balance Sheet to show the assets and liabilities of both the head office and the branch office. Illustration 5 will help you to understand the preparation of a consolidated Balance Sheet.

Illustration 6

Following are the Trial Balances of the head office and its branch as on December 31, 1988.

	Head Office		Branch	
	Dr.	Cr.	Dr.	Cr.
	Rs.	Rs.	Rs.	Rs.
Capital		1,50,000		
Fixed Assets	86,000		26,000	
Stock	34,700		20,700	
Debtors and Creditors	17,820	13,900	14,800	23,000
Cash	10,740		1,500	
Profit & Loss		14,720		13,100
Branch Office	29,360			
Head Office A/c				26,900
	1,78,620	1,78,620	63,000	63,000

Prepare the Balance Sheet of the business as on December 31, 1988 and pass the necessary journal entries in both sets of books to record the adjustments dealing with the following.

a) On December 28, the branch had sent a cheque for Rs. 1,600 to the head office but not yet received by them.

b) Goods valued at Rs. 560 had been forwarded by the head office to the branch and invoiced on December 30, but were not yet received by the branch.

c) It was agreed that the branch should be charged with Rs. 400 for administration services rendered by the head office during the year.

d) Rs. 1.250 for depreciation on branch assets, the accounts of which are maintained by the head office, is to be provided for.

e) The balance of profit shown by the branch is to be transferred to the head office books.

Solution

Head Office Journal

			Dr.	Cr.
1989			Rs.	Rs.
1	Cash in Transit A/c To Branch A/c (Being cash sent by branch but not received by H.O. till December 31)	Dr.	1,600	1,600
2	Goods in Transit A/c To Branch A/c (Being goods invoiced on December 31. not yet received by the branch)	Dr.	460	460
3	Branch A/c To Gen. Profit & Loss A/c (Being administrative expenses charged by H.O. to the Branch)	Dr.	400	400

			Dr.	Cr.
4	Branch A/c To Branch Fixed Assets A/c (Being depreciation on branch fixed assets accounts provided by H.O.)	Dr.	1,250	1,250
5	Branch A/c To General P & L A/c (Being profit of branch transferred to General P & L A/c)	Dr.	11,450	11,450

Branch Journal

			Dr.	Cr.
1989			Rs.	Rs.
1	Profit & Loss A/c To Head Office A/c (Being administrative expenses charged by H.O.)	Dr.	400	400
2	Depreciation A/c To Head Office A/c (Being depreciation on Branch fixed assets accounts for which are maintained by H.O.)	Dr.	1,250	1,250
3	Profit & Loss A/c To Head Office A/c (Being transfer of profit credited to Head Office A/c)	Dr.	11,450	11,450

Balance Sheet as on December 31, 1988

Liabilities		Rs.	Assets		Rs.
Capital		1,50,000	Fixed Assets		
Creditors			H.O.	86,000	
H.O.	13,900		Branch 26,000 Less Dep. 1,250	24,750	1,10,750
Branch	23,000	36,900	Stock		
Profit & Loss A/c			H.O.	34,700	
H.O.	15,120		Branch	20,700	
Branch	11,450	26,570	Goods in Transit	460	55,860
			Debtors		
			H.O.	17,820	
			Branch	14,800	32,620
			Cash		
			H.O.	10,740	
			Branch	1,500	
			Cash in Transit	1,600	
			Cash for Exp.	400	14,240
		2,13,470			2,13,470

Working Notes

1) The profits at branch and head office have been ascertained by preparing Profit and Loss A/c of the head office as well as that of branch.

Branch Profit and Loss Account

Dr. Cr.

	Rs.		Rs.
To Head Office Exp.	400	By Profit (as given)	13,100
To Depreciation	1,250		

To Profit taken to General P&L A/c	11,450		
	13,100		13,100

General (H.O.) Profit and Loss Account

	Rs.		Rs.
To Profit c/d	15,120	By Profit (as given)	14,720
		To Branch A/c	400
	15,120		15,120
To Net Profit (taken to Balance Sheet)	26,570	By Profit b/d	15,120
		By Branch A/c (profit made by branch)	11,450
	26,570		26,570

2) The Head Office A/c in the books of branch and Branch A/c in the books of head office will appear as follows:

Branch Books

Head Office Account

Dr. Cr.

	Rs.		Rs.
To Balance c/d	40,000	By Balance b/d	26,900
		By H.O. Exp. A/c	400
		By Depreciation	1,250
		By P & L A/c	11,450
	40,000		40,000

Head Office Books

Branch Account

Dr. Cr.

	Rs.		Rs.
To Balance b/d	29,360	By Goods in Transit	460
To Branch Assets A/c	1.250	By Cash in Transit	1,600
To General P & L A/c	11,450	By Balance c/d	40,000
	42,060		42.060

3) The balance in the Branch Account in head office books and the balance in Head Office Account in branch books show the same amount. i.e., Rs. 40,000. But, the Branch Account balance is a debit balance while the Head Office Account balance is a credit balance. Having merged branch accounts with the head office accounts. these two balance cancel each other and so they do not appear in the consolidated Balance Sheet.

2.7 LET US SUM UP

Independent Branches are those branches which keep full system of accounting and enjoy certain amount of autonomy in functioning. They maintain complete records

on double entry system and prepare their own trial balances. The head office simply maintains a personal account for each branch which shows all transactions that take place between the branch and the head office. Similarly, each branch maintains a Head Office Account to show the corresponding entries.

There are certain transactions which require special treatment both in head office and branch books. These are: (i) goods in transit (ii) cash on transit (iii) head bffice expenses chargeable to branch (iv) depreciation on branch fixed assets the accounts of which are maintained at the head office level, and (v) inter-branch transactions.

At the end of the accounting year, the branch sends its trial balance to the head office. This enables the head office to incorporate all branch balances in its books so as to include them in the final accounts of the organisation. The incorporation entries can be passed for all items given in branch Trial Balance (called detailed incorporation), or simply for branch profit/loss (based on Memorandum Branch Profit and Loss Account) and for branch assets and liabilities (called abridged incorporation or short cut method). After the incorporation entries have been passed, the Branch Account stands closed. At the beginning of the next year, the opening entries are' passed for branch assets and liabilities which restores the balance in the Branch Account. The branchcloses its books by transferring its profit or loss to Head Office Account which then shows a credit balance equal to the net assets with the branch.

2.8 KEY WORDS

Abridged Incorporation: A short cut method of incorporating the branch balances in head office books.

Cash-in-transit: Cash remitted by branch to head office but not received by head office by the end of the accounting year, or vice versa.

Consolidated Balance Sheet: Combined Balance Sheet showing both head office and branch assets and liabilities.

Goods-in-transit: Goods sent by head office to branch but not received by branch by the end of the accounting year, or vice versa.

Inter-branch transactions: The transactions between two or more branches under the same head office.

2.9 ANSWERS TO CHECK YOUR PROGRESS

A 3) i) c
ii) a
iii) a
iv) b
v) c
vi) b

B 3) i) Abridged Incorporation
ii) Branch Account. General Profit & Loss Account
iii) balance
iv) net assets

2.10 TERMINAL QUESTIONS/EXERCISES

Questions

1) How are branch balances incorporated in head office books at the end of the accounting year?

2) Write short notes including accounting treatment on the following:
   a) Cash in Transit
   b) Goods in Transit

c) Head Office Expenses Chargeable to Branch

d) Inter-branch Transactions.

3) How do you deal with purchase and depreciation of branch fixed whose assets accounts are maintained at the head office level?

Exercises

1) Show what entries would be passed by the Head Office to record the following transactions in their books.

a) Goods amounting to Rs. 1,000 transferred from Varanasi branch to Allahabad branch under intimation from H.O.

b) Depreciation amounting to Rs. 2,000 on branch fixed assets when such assets' accounts are opened in the head office books.

c) A remittance of Rs. 3,000 made by the Calcutta branch to Head Office on December 25, 1988 and received by Head Office on January 4, 1989.

d) Goods of Rs. 10,000 sent by the Head Office on December 27, 1988 and received by Calcutta branch on January 10, 1989.

e) The Allahabad branch collected Rs. 4,000 from Allahabad customers of head office.

f) The Varanasi branch paid Rs. 25,000 for machinery purchased by the head office at Varanasi.

2) Show the journal entries that will be passed by Surat branch to record the following transactions in its books.

a) Goods amounting to Rs. 6,000 transferred from Surat branch to Lucknow branch under instructions from Calcutta head office assuming that head office. keeps a control on inter-branch transactions.

b) Depreciation on Lucknow Branch Machinery Rs. 4,000 and Surat Branch Machinery Rs. 3,000. When the Branch Machinery Account is maintained in head office books.

c) A remittance of Rs.10,000 made by Surat branch to head office on December 28, 1988 but received by the head office on January 4, 1989.

d) Goods worth Rs. 15,000 sent by Head Office to Surat branch on December 26, 1988 but received by the latter on January 2, 1989.

3) On December 31, 1988, the Trial Balance of Varanasi branch stood as follows:

Particulars	Debit Rs.	Credit Rs.
Stock on January 1, 1988	12,000	
Furniture	4,800	
Debtors	11,200	
Goods Received from Delhi H.O.	32,000	
Salaries, rent and expenses	4,400	
Cash in hand	3,600	
Delhi Office Account		22,000
Sales		45,600
Sundry Creditors		400
Total Rs.	68,000	68,000

Stock on December 31, 1988 was Rs. 9,200. Prepare (1) Trading and Profit & Loss Account, Balance Sheet and Head Office Account in Varanasi branch books (2) Prepare journal entries necessary to incorporate the Varanasi Branch Trial Balance and show the Varanasi Branch Account in the head office books.

(**Answer:** Branch Profit Rs. 6,400; Balance Sheet Total Rs. 28,800; Head Office A/c Balance Ks. 28,400 and Total of Varanasi Branch A/c Rs. 77,200.)

·) The Kanpur branch of **Wahi Bros.** sent the following Trial Balance to Read office as on December 31, 1988:

	Rs.		Rs.
Sundry Debtors	12,000	Sundry Creditor	8,600
Cash in hand	6,250	Goods returned to H.O.	2,250
Furniture	1,900	Sales	1,12,500
Stock on 1-1-88	2,250	Head Office A/c	10,250
Goods from H.O.	34,000		
Purchases	66,450		
Wages & Salaries	5,500		
Trade Expenses	5,250		
	1,33,600		1,33,600

The stock on December 31, 1988 was Rs. 5,200. Pass the necessary journal entries to incorporate the above figures and show Branch A/c in head office books, and Trading and Profit & Loss A/c and Balance Sheet in the branch books.

(Answer: Branch profit Rs. 6,500; Balance Sheet Total Rs. 25,350; Total of Branch A/c Rs. 1,38,800.)

5) Following is the Trial Balance of Kanpur Branch of Varanasi head office. Prepare Trading and Profit & Loss A/c and Balahce Sheet in the books of branch. Also show Head Office A/c in the books of branch:

	Rs.		Rs.
Furniture & Fixtures	1,500	Cash in Bank	3,000
Purchases	20,000	Carriage etc.	150
Goods from H.O.	40,000	Bad Debts	100
Sales	80,000	Allowances to Customers	200
Sundry Debtor	10,000	Bills Receivable	4,000
Sundry Creditors	12,000	Stock on 1-1-88	10,000
Head Office A/c Salaries	6,400	Returns inwards	1,000
General Exp.	600	Returns to H.O.	400
Rent & Taxes	600		

Closing Stock on December 31, 1988 Rs. 9,000

(Answer: Branch Net Profit Rs. 10,350; Balance Sheet Total Rs. 27,500; H.O. A/c Balance including net profit Rs. 15,500.)

6) From the following balances, prepare the Branch Current Account in the books of head office and Head Office Current A/c in the books of branch.

	Head Office		Branch	
	Dr. Rs.	Cr. Rs.	Dr. Rs.	Cr. Rs.
Branch Current A/c	5,000	–	–	–
Goods sent to Branch	–	7,800	–	–
Goods received from H.O.	–	–	7,000	–
Head Office Current A/c	–	–	–	1,400

(Answer: Goods in Transit Rs. 800; Cash in Transit Rs. 2,800.)

7) A limited company with its head office in Delhi has a branch at Kota which obtains goods from the head office as well as from outside suppliers. The branch keeps a separate set of books. On June 30, 1989 the trial balances of the head office and its branch were as follows:

	Head Office		Branch	
	Dr. Rs.	Cr. Rs.	Dr. Rs.	Cr. Rs.
Share Capital	–	30,000	–	–

P & L Account balance on 1-7-88	-	4,000	-	-
Fixed Assets	16,000	-	8,000	-
Opening Stock	14,000	-	1,900	-
Debtors and Creditors	17,000	10,000	1,500	2,050
Cash	3,000	-	1,000	-
Purchases and Sales	1,20,000	1,40,000	6,750	20,500
Sundry Expenses	15,000	-	2,250	-
Goodsfrom H.O. to Branch	-	12,000	11,500	-
Current Accounts on 30-6-89	11,000	-	-	10,350
	1,96,000	1,96,000	32,900	32,900

The difference between the balances of head office and the Branch Current Accounts is due to goods and cash being in transit at the close of the year. Fixed assets are to be depreciated at 10 per cent. Stocks on June 30,1989 were : Head Office Rs. 10,000 and Branch Rs. 2,100.

Prepare consolidated Balance Sheet of the company. Also show journal entries for the adjustments and the incorporation of Branch Trial Balance.

(**Answer:** Balance Sheet Total Rs. 56,850.)

Hints: Goods in Transit Rs. 500; Cash in Transit Rs. 150; Branch Net Loss Rs. 600; H.O. Net Profit (excluding branch net loss) Rs. 11,400.

Note : These questions will help you to understand the unit better. Try to answer them, but do not send your answers to the University. These are for your practice only.

UNIT 3 DEPARTMENTAL ACCOUNTS

Structure

3.0 Objectives
3.1 Introduction
3.2 Meaning and Purpose of Departmental Accounts
3.3 Importance of Departmental Accounts
3.4 Recording of Transactions
3.5 Allocation of Expenses
3.6 Inter-Departmental Transfers
3.7 Let Us Sum Up
3.8 Key Words
3.9 Answers to Check Your Progress
3.10 Terminal Questions/Exercises

3.0 OBJECTIVES

After studying this unit, you should be able to :

- describe the nature and purpose of accounting for departmental transactions,
- outline the importance and advantages of deparhnental accounts,
- explain the process of recording departmental transactions and prepare departmental trading and profit & loss account,
- allocate the expenses between different departments by selecting some rational basis,
- explain the accounting treatment of inter-departmental transfers on the basis of cost price as well as transfer price,
- work out the amount of unrealised profit in respect of unsold/unused goods and explain its accounting treatment.

3.1 INTRODUCTION

You have learnt that a business unit may be operating through a network of branches like those of Bata which has branches all over the country or Snowhite which has branches all over the city of Delhi. You also know that, in such a situation, each branch is treated as a separate profit centre and the profit or loss is worked out for each branch separately. Similarly, in many cases, the activities of the business unit may be divided into a number of divisions or departments that are usually located under the same roof and each dealing In different types of goods. For example, a Super Market or a Departmental Store may have separate sales counters/sections for ready-made garments, cosmetics, electrical appliances, medicines, gift items, etc. For purposes of meaningful supervision of the affairs of each section or department and the assessment of their individual performance it is advisable to maintain accounts in such a manner that we can prepare a trading and profit & loss account for each section or department separately and work out its profit or loss. In this unit, you will learn how are the departmental accounts maintained and how are the common expenses allocated to each section or department in order to arrive at its profit or loss separately.

3.2 MEANING AND PURPOSE OF DEPARTMENTAL ACCOUNTS

Departmental accounts refer to the maintenance of accounts of a business in a manner that makes it possible to ascertain the operational results of each activity, section or department by preparing separate trading and profit & loss account for each ane of them. In fact, departmental accounts are nothing more than as many trading and profit & loss accounts as there are the departments.

As indicated in Section 3.1, the main purpose of preparing departmental accounts is to ascertain the financial performance of each section or department. This is considered necessary

1) to identify the departments which are inefficient and which need better attention;
2) to control wastage or misuse of resources in different departments;
3) to compare the performance of different departments, and also of their own with those of the previous years;
4) to evaluate the contribution of the departmental employees, compensate them suitably by way of commission on departmental profit and motivate them for still better results;
5) to formulate suitable policies with regard to future business planning for expansion; and
6) to consolidate all operations on more profitable lines which may involve closing down of unprofitable sections and improving the activities of departments which generate' satisfactory profits.

Thus, in case of organisations that are engaged in various lines of business, the preparation of departmental accounts is almost a financial necessity and a managerial responsibility.

3.3 IMPORTANCE OF DEPARTMENTAL ACCOUNTS

The Profit and Loss Account for the organisation as a whole does not reveal effectively the true operational results of different departments within the organisation. In any manufacturing unit, while some departments may be running in profit, others may suffer a loss. The net result, however, may still be a position of profit and this profit becomes an indicator of successful performance of the entire business. But, in reality, the actual profit of the business could be higher than the one shown by the books of account provided we were able to check the working of weaker departments.

A system of departmental accounts, therefore, has the following advantages :

1) It facilitates better control of operations.
2) It fixes responsibility of the departmental managers.
3) It improves the overall efficiency of the business.
4) It shows the profit or loss position of the business in a more direct and specific manner.
5) It helps formulation of policies suitable to further expansion.
6) It rewards departmental managers on the basis of their achievement and results.
7) It offers an opportunity to compare departmental results,

3.4 RECORDING OF TRANSACTIONS

You have learnt that departmental accounts aim at preparing Trading and Profit & Loss Account of every department separately. This needs specific data in respect of sale, purchase and stock for each department. For this purpose, the subsidiary books like Purchases Book, Sales Book, Purchase Returns Book, Sales Returns Book, Cash, Book etc., should provide separate columns for each section/department of the business and then for them to be accumulated under separate heads in the ledger. For example, if a business has three departments X, Y and Z, the Purchases Book, Sales Book, etc., should have separate columns for X. Y and Z departments.

A specimen of Purchases Book in a columnar form showing separate details for each department is given in Figure 3.1.

Figure 3.1

PURCHASES BOOK

Date	Particulars	L.F.	Total Rs.	Dept. X Rs.	Dept. Y Rs.	Dept. Z Rs.

The same format could be used for other subsidiary books too. The Cash Book may also have separate columns to record cnsh sales and cash purchases for' ench department in their respective columns. **Alternatively, a separate** sat of hooks **may** be **maintained** for **different departments.**

Check Your Progress **A**

1) Departmental accounts assist the business in :
   a) reducing trading losses
   b) improving business profits
   c) increasing emoluments of employees
   d) minimising cost.of production
   e) facing market competition
   f) estimating the possible future trends in turnover
   g) knowing the profit or loss of different branches
   h) planning for product diversificntion
   i) designing new lines of output

   State which of the above phrnses is FALSE.

2) Mahima Trading runs three sales counters :
   i) Cosmetics
   ii) Ready-made Garments, and
   iii) Magazines

   The Net Profit of the business for the yew ending 31st March, 1998 is Rs. 5,80,000. The amount of capital invested in the business is Rs. 50,00,000.

   a) Do you consider the financial results of the business so as to provide satisfactory financial results.
   b) Can you suggest any modification in the accounting system followed by the business so as to provide sntisfnctory financial results.

   ....
   ....
   ....
   ....

3.5 ALLOCATION OF EXPENSES

Whether we maintain separate books ot account for different departments or provide additional columns in subsidiary books, the main problem in ascertaining the profit or loss for ench department relates to the allocation of business expenses to various departments. There we some expenses which we specifically incurred for a particular

department such as salary payable to departmental staff or electricity charges if separate meters have been installed for each department. These can be directly attributed to the departments concerned and present no problem. Similarly, we do not face much problem in ascertaining the amounts relating to opening stock, purchases, expenses incurred on purchases, purchase returns, sales, sales returns, and closing stock for each department as the subsidiary books could provide the necessary details. The real problem, however, relates to the apportionment of business expenses that are incurred for the business as a whole e.g., advertisement expenses, salary of managers, labour welfare expenses that are incurred for the business as a whole e.g., advertisement expenses, salary of managers, Iabour welfare expenses, indirect wages, depreciation, etc. These are called cotnmon (combined) expenses and have to be apportioned among various departments on some rational basis. Now the question arises as to what exactly is the rational basis for apportioning such expenses.

Based on the nature of each expense and what obtains in practice, it could be any one of the following bases.

a) Amount of wages incurred by each department;

b) Number of workers in each department;

c) Floor area occupied by each department;

d) Production hours of each department;

e) Sales made by each department;

f) Capital value of assets held by each department; and

f) Technical estimate.

Let us take a few common expenses and note the possible bases of their allocation as follows :

	Expenditure	Basis Applied for Allocation
1	Selling Commission	Sales
2	Bad Debts	Sales
3	Carriage Outwards	Sales
4	Rent and Rates	Floor area covered
5	Building Insurance	Floor area covered
6	Building Repairs	Floor area covered
7	Lighting	Number of lighting points or Floor ,area covered
8	Depreciation	Value of assets or wages
9	Power	Horse Power of Machinery Installed
10	Insurance	Average Stock, Value of Asset
11	Workmen's Compensation	Wages
12	Labour Welfare Expenses	Number of Employees
13	Advertising	Sales or Space Allocated to each Department

There are however some expenses that cannot be allocated or apportioned to different departments on any suitable basis such as audit fees, director's fees, interest on loan, etc. These need not be taken into account for ascertaining the profit or loss of different departments but may be charged to combined General Profit & Loss Account.

Thus, for purposes of departmental accounts, three broad principles of allocating the expenses emerge. These are as follows :

1) Expenses which are directly attributable to a particular department should be charged to that department.

2) Expenses which are common should be apportioned among different departments on,some suitable basis.

3) Expenses which are difficult to apportion among different departments on some suitable basis may be charged to General Profit & Loss Account of the business.

Look at Illustrations 1 and 2 and see how different expenses have been allocated to different departments while preparing the Departmental Trading and Profit & Loss Account.

Illustration 1

Saini Brothers are lending paper merchants and booksellers. Their wholesale business is in paper and their retail showroom conducts business in stationery, books and magazines. The following balances are extracted from their books as at the end of their financial year, 31st March 1998 :

	Rs.
Capital	3,00,000
Stock : (1-4-1997)	
Paper	2,00,000
Stationery	50,000
Books	1,00,000
Magazines	25,000
Purchases	
Paper	8,00,000
Stationery	3,00,000
Books	3,50,000
Magazines	3,00,000
Sales :	
Paper	10,00,000
Stationery	3,60,000
Books	4,20,000
Magazines	4,20,000
Rent	60,000
Lighting	24,000
Showroom maintenance	18,000
Showroom fittings	1,80,000
Sundry Debtors (for paper) ,	1,00,000
Sundry Creditors	1,50,000
Salaries :	
Showroom staff	36,000
Wholesale business staff	12,000
Showroom cashier	12,000
General Office Salaries	11,000
General Office Expenses	11,000
Cash and Bank Balances	8,000

You are requested by the firm to prepare their Departmental Trading and Profit and Loss Account for the financial year under reference with the help of the following additional information :

1) Closing stock at the end of the year in the various departments were :

Paper	: Rs. 1,80,000	Stationery	: Rs. 40,000
Books	: Rs. 1,20,000	Magazines	: Rs. 30,000

2) Rent and lighting are for premises taken on lease, General office accommodation is negligible. Wholesale department uses 1,500 sq. feet. The balance of 1,500 sq. feet is occupied by the Show-room with equal division among stationery, books and magazines.

3) Show-room fittings are to be depreciated by 10% p.a.

Solution

Departmental Trading and Profit & Loss Account for the year ending 31-3-1998.

	Paper	Stationery	Books	Magazines		Paper	Stationery	Books	Magazine
Opening Stock	2,00,000	50,000	1,00,000	25,000	Sales	10,00,000	3,60,000	4,20,000	4,20,000
Purchases	8,00,000	3,00,000	3,50,000	3,00,000	Closing Stock	1,80,000	40,000	1,20,000	30,000
Gross Profit c/d	1,80,000	50,000	90,000	1,25,000					
	11,80,000	4,00,000	5,40,000	4,50,000		11,80,000	4,00,000	5,40,000	4,50,000
Rent	30,000	10,000	10,000	10,000	Gross Profit b/d	1,80,000	50,000	90,000	1,25,000
Lighting	12,000	4,000	4,000	4,000					
Show-room Maintenance	–	6,000	6,000	6,000					
Salaries	12,000	14,400	16,800	16,800					
Gen. Office Salaries	5,000	1,800	2,100	2,100					
Gen. office Expenses	20,000	7,200	8,400	8,400					
Depreciation	–	6,000	6,000	6,000					
Net Profit	1,01,000	600	36,700	71,700					
	1,80,000	50,000	90,000	1,25,000		1,80,000	50,000	90,000	1,25,000

Notes :

1) Show-room maintenance and depreciation or showroom fittings have been equally divided among the three retail departments.
2) Salaries of show-room staff and show-room cashier have been divided among the three retail departments on the basis of sales.
3) General office salaries and General Office Expense have been apportioned among all the four departments on the basis of sales.

Illustration 2

The Trading and Profit & Loss Account of Chandni Electricals for six months ended 31st March, 1998 is as follows :

	Rs.		Rs.
To Purchases :		By Sales :	
TV Sets (A)	14,07,000	TV Sets (A)	15,00,000
Radio Sets (B)	9,06,000	Radio Sets (B)	10,00,000
Spare Parts (C)	6,44,000	Servicing (C)	2,50,000
To Salaries & Wages	4,80,000	By Closing Stock :	
To Rent	1,08,000	TV Sets (A)	6,01,000
To Sundry Expenses	1,10,000	Radio Sets (B)	2,03,000
To Net Profit	3,45,000	Spare Parts (C)	4,46,000
	40,00,000		40,00,000

On the basis of the following additional information, prepare Departmental Accounts for each of the three departments A, B and C:

1) TV Sets and Radio Sets are sold at the Showroom.
2) Servicing and Repairs are carried out at the Workshop.
3) Salaries and Wages comprise :
   Showroom ¾
   Workshop ¼
4) It was decided to allocate the Show-room Salaries and Wages in the ratio of 1:2 between the departments **A** and B.
5) The Workshop Rent is Rs. 5,000 per month. The Showroom Rent is to be divided equally between departments A and B.
6) Sundry Expenses are to be allocated on the basis of turnover of each department.

Solution

Departmental Trading and Profit and Loss Account for six months ending 31st March, 1998

Dr. Cr.

	A Rs.	B Rs.	C Rs.		A Rs.	B Rs.	C Rs.
To Purchases	14,07,000	9,06,000	6,44,000	By Sales	15,00,000	10,00,000	2,50,000
To Salaries & Wages	1,20,000	2,40,000	1,20,000	By Closing Stock	6,01,000	2,03,000	4,46,000
To Rent	39,000	39,000	30.000	By Net Loss	-	22,000	1,08,000
To Sundry Expenses	60,000	40,000	10,000				
To Net Profit	4,75,000	–	–				
Rs.	21,01,000	12,25,000	8,04,000	Rs.	21,01,000	12,25,000	8,04,000

3.6 INTER-DEPARTMENTAL TRANSFERS

'Sometimes the departments within an organisation operate as a chain of activities. As a result, the product of one department may be used as a raw material in another department. For example, a firm may have two departments, cloth and ready-made garments. The garments are made out of the cloth supplied by cloth department. Such supply of cloth is called inter-departmental transfer. The accounting entry in such cases involves debiting the department which receives goods or services, and crediting the department which supplies them.

The inter-departmental transfer of goods or services may be done either (a) at Cost Price, or (b) at Selling Price.

When goods or services are supplied from one department to another at cost price, the corresponding entries to record the transfer will be made at cost price. This does not involve any adjustment at any stage. However, when goods or services are supplied to another department at selling price, the transfer has to be recorded at a selling price called transfer price. This obviously includes cost as well as profit, In such a situation, if the department to whom goods or services are transferred at selling price has an unsold on unused stock at the end of the accounting period, this involves an element of unrealised profit. This needs an adjustment which will be ma& by creating a stock reserve with the help of the following journal entry :

General Profit & Loss A/c Dr.
To Stock Reserve

It may be noted that the unrealised profit is equal to the amount of difference between the selling price and the cost price of the unsold/unused stock.

Check **Your Progress B**

1) State whether each of the following statements is TRUE or FALSE : .

i) Non-departmental expenses are charged to the General Profit and Loss Account.

ii) Repairs to Machinery are allocated,to different departments on the basis of the number of machines in each department.

iii) The cost of electric power should be apportioned over different departments according to horse power installed multiplied by machine hours.

iv) The amount of Stock Reserve on goods transferred from Department X to Department Y on a price 25% above cost means that the value of closing stock will be reduced by 20%

2) Put a tick mark (√) against the correct answer :

i) When the rate of Gross Profit of three Departments A, B and C is the same,, the cost price of these departments will be in the ratio of their respective :

a) Sales Value

b) Stock Value

ii) Allocation of premium paid on insurance of a building among the departments should be based on :

a) Annual Sales

b) Floor Area Occupied

iii) Depreciation on Plant and Machinery should be divided over the different departments :

a) Equally

b) On the basis of Production Capacity of each department

c) On the basis of value of machines in each department.

iv) Debts which cannot be realised, should be written off from :

a) the General Profit and Loss Account

b) a charge to the different departments on the basis of their sales

v) Management expenses should be charged to :

a) Departmental Profit and Loss Account equally

b) General Profit and Loss Accou'nt

vi) Stock Reserve for unrealised profit on inter-department. transfer should be charged to :

a) General Profit and Loss Account

b) Departmental Profit and Loss Account equally

Look at Illustrations 3 to 6 and see how inter-departmental transfer is showr in Departmental Trading and Profit & Loss Account, and how unrealised profit on unsold unused stock with transferee department is dealt with if transfer is made at the selling price. It needs to be noted that an adjustment for unrealised profit will also be necessary for the opening stock of the transferred goods, if any.

Illustration 3

From the following Trial Balance of Chema and Smriti, prepare Departmental Trading and Profit and Loss Account for the year ending 31st March, 1998 and the Balance Sheet as at that date :

	Rupees in '000
Stock (1st April, 1997)	
Department X	3,400
Department Y	2,900
Purchases	
Department X	7,180
Department Y	6,040
Sates	
Department X	13,160
Department Y	10,250
Wages	
Department X	1,640
Department Y	540

Rent, Rates & Taxes	1,878
Sundry Expenses	720
Salaries	600
Lighting & Heating	420
Discount Allowed	444
Discount Received	130
Advertising	736
Carriage Inwards	468
Furniture & Fittings	600
Machinery	4,200
Sundry Debtors	1,212
Sundry Creditors	3,720
Cnpital	9,532
Drawings	900
Cash nt Hank	2,014

The following additional information is available :

1) .Inter-transfer of goods from X to Y Department Rs. 84,000.

2) Rent, Rates and Taxes, Sundry Expenses, Lighting ancl Heating, Salaries and Carriage are to bc apportioned 2/3 to X Department and 1/3 to Y Department.

3) Advertising is to be apportioned equally.

4) Discount allowed and received are to be apportioned on the basis of Departmental Sales and Purchases (excluding transfers).

5) Depreciation at 10% per annum on Furniture and Fittings and on Machinery is to be charged 314 to X and 114 to Y.

6) Services rendered by Y Department to X Department are included in its wages Rs. 1,00,000.

7) Stock on 31st March, 1998 in X Department was worth Its. 33,48,000 and in Y Department Rs. 24,111,000.

Solution

Departmental Trading and Profit & Loss Account
for the ycur ending 31st March, 1998

(Rupees '000)

Dr. Cr.

	X Rs.	Y Rs.		X Rs.	Y Rs.
To Opening Stock	3,400	2,900	By Sales	12,160	10,250
To Purchases	7,080	6,040	By Transfer of Goods	84	100
To Wages	1,640	540	By Closing Stock	3,348	2,410
To Transfer of Goods	100	84			
To Carriage Inwards	312	156			
To Gross Profit c/d	3,060	3,040			
	15,592	12,760		15,592	12,760
To Salary	400	200	By Gross Profit b/d	3,060	3,040
To Rent, Rates & Taxes	1,252	626	By Discount		
To Sundry Expenses	480	240	Received	70	60
To Lighting & Heating	280	140	By Net Loss	252	–
To Advertising	368	368			
To Depreciation :					
On Machinery	315	105			
On Furniture .	45	15			
To Discount Allowed	242	202			
To Net Profit	–	1,204			
	3,382	3,100		3,382	3,100

BALANCE SHEET
As on 31st March, 1998

(Rupees '000)

Assets	X Rs.	Y Rs.	Liabilities	X Rs.	Y Rs.
Capital	9,532		Machinery	4,200	
Add: Profit	952		Less: Dep.	420	
	10,484				3,780
Less : Drawings	900	9,584	Furniture & Fittings	600	
Sundry Creditors		3,720	Less : Dep.	60	540
			Stock-in-Trade		5,758
			Sundry Debtors		1,212
			Cash at Bank		2,014
		13,304			13,304

Illustration 4

Department A transferred to Department B 4,000 units of material X at Rs. 10 per unit, The actual cost of materials of Department A is Rs. 8 per unit:

Find out the Stock Reserve on 1,000 units of material X which could not be consumed by Department B during the year.

Solution

Percentage of profit charged by Department A on supplies made to Department B =

$$\frac{\text{Difference between Selling Price and Cost Price}}{\text{Selling Price}} \times 100$$

$$= \frac{2}{10} \times 100$$

$$= 20\%$$

Value of Stock Reserve or Unrealised Profit on Unconsumed Materials

$$= 1{,}000 \times \frac{20}{100}$$

= Rs. 2,000

Illustration 5

The following figures relate to the business of Pushpa Associates for the year ended 31st December, 1997 :

	Department X Rs.	Department Y Rs.
Stock (1st January, 1997)	80,000	–
Purchases from outside	4,00,000	40,000
Wages	20,000	2,000
Transfer of Goods from Dept. X	–	1,00,000
Stock at Cost (31st December, 1997)	60,000	20,000
Sales	4,00,000	1,42,000

Y's entire stock represents goods from Department X which transfers them at 25% above the cost, Administrative and Selling Expenses amount to Rs. 30,000 which are to be allocated between Departments X and Y in the ratio of 4:1 respectively.

Prepare Departmental Trading and Profit and Loss Account and a Combined Income Account of the business for the year ended 31st December, 1997.

Solution

Departmental Trading and Profit & Loss Account
for the year ending December 31st 1997

Dr	X Rs.	Y Rs.		X Rs.	Y Rs. Cr
To Opening Stock	80,000	-	By Transfer of Goods to Y	1,00,000	
To Purchases	4,00,000	40,000	By Sales	4,00,000	1,42,000
To Wages	20,000	2,000	By Closing Stock	60,000	20,000
To Goods from X	-	1,00,000			
To Gross Profit c/d	60,000	20,000			
	5,60,000	1,62,000		5,60,000	1,62,000
To Adm. & Selling Expenses	24,000	6,000	By Gross Profit b/d	60,000	20,000
To Net Profit	36,000	14,000			
Rs.	60,000	20,000	Rs.	60,000	20,000

General Profit and Loss Account
for the year ending December 31, 1997

	Rs.		Rs.
To Stack Reserve (see note)	4,000	By Net Profit as per Dept. Trnding and P & L A/c	
To Net Profit (to Capital A/c)	46,000	X Dept.	36,000
		Y Dept.	14,000
	50,000		50,000

Note :The stock Reserve relates to the unrenlised profit on unsold stock of Rs. 20,000 with Department Y out of the goods supplied by X. The amount has been calculated as under :

$$20,000 \times \frac{25}{125} = \text{Rs. } 4,000$$

Illustration 6

A *firm* had two departments, cloth and ready-made garments. The garments were made by the firm itself out of cloth suppliecl by the cloth department nt its selling price, From the following figures prepare Departmental Trading and Profit & Loss Account for the year 1997.

	Cloth Department	Ready-made Garments
	Rs.	Rs.
Opening Stock on 1.1.1997	6,00,000	1,00,000
Purchases	40,00,000	30,000
Sales	44,00,000	9,00,000
Transfer to Ready-made Garments Department	6,00,000	-
Expenses - Manufacturing	-	1,20,000
- Selling	40,000	12,000
Stock on 31.12.1997	4,00,000	1,20,000

The stocks in the ready-mnde garments department may be considered as consisting of 75% cloth and 25% other expenses. The cloth department earned gross profit at the rate of 15% in 1996. General expenses of the business as a whole came to Rs, 2,20,000.

Solution

Departmental Trading **and** Profit *& Loss Account*
for *the year ending December 31, 1997*

	Cloth Rs.	Ready-made Garments Rs.	Total Rs.		Cloth Rs.	Ready-made Garments Rs.	Total Rs.
To Opening Stock	6,00,000	1,00,000	7,00,000	By Sales	44,00,000	9,00,000	53,00,000
To Purchases	40,00,000	30,000	40,30,000	By Transfer to Ready-made Garments Dept.	6,00,000		6,00,000
To Transfer from Cloth Dept.		6,00,000	6,00,000	By Closing Stock	4,00,000	1,20,000	5,20,000
To Mfg. Exp.		1,20,000	1,20,000				
To Gross Profit cld	8,00,000	1,70,000	9,70,000				
	54,00,000	10,20,000	64,20,000		54,00,000	10,20,000	64,20,000
To Selling Exp.	40,000	12,000	52,000	By Gross Profit b/d	8,00,000	1,70,000	9,70,000
To Net Profit c/d	7,60,000	1,58,000	9,18,000				
	8,00,000	1,70,000	9,70,000		8,00,000	1,70,000	9,70,000
To Gen. Exp.			2,20,000	By Net Profit bld			9,18,000
To Stock Reserve (cl. stock)			14400	By Stock Reserve (op. stock)			11,250
To Net Profit			6,94,850				
		9,29,250				9,29,250	

Note : Stock Reserve has been calculated as follows :

Rate of Gross Profit on Sales in Cloth Debt.

$$\frac{8,00,000}{50,00,000} \times 100 = 16\%$$

Element of cloth in closing stock of Garments

75% of Rs. 1,20,000 = Rs. 90,000.

Unrealised Profit = $\frac{16}{100}$ x 90,000 = Rs. 14,400

Unrealised Profit in opening stock of Garments

$$\frac{15}{100} \times \frac{75}{100} \times 1,00,000 = \text{Rs. } 11,250$$

3.7 LET US SUM UP

When a number of departmental units comprise a single business operation, it is always useful to follow departmental accounting system so as to find out the profit or loss of each department separately. This assists the process of effectiveness in control and improvement in profitability.

In order to record the transactions under departmental accounts, the major tasks are as follows :

a) to maintain subsidiary books in a columnar form;

b) to prepare departmental trading and profit & loss account for ascertaining the profit or loss for each department separately;

c) to effect allocation of various expenses of the business among the different departments on some rational basis;

d) to make appropriate adjustments for goods and services transferred from one department to another; and

e) to keep suitable provision for unrealised profit on departmental stock at the time of obtaining periodical results if the inter-departmental transfer has been done at a profit.

Departmental accounts, thus, help in a more efficient management of business through separate departmental figures relating to its various areas of operation during an accounting period.

3.8 KEY WORDS

Allocation : Apportionment of expenses between different departments of the business on some rational basis.

Transfer Price : The price at which inter-departmental transfer is recorded which may be the cost or the cost plus a margin of profit.

Stock Reserve : reserve created for adjustment of unrealised profit on stock.

Inter-Departmental Transfers : One department of a business supplying its goods or services to another department of the business.

Unrealised Profit : Profit included in the value of goods remaining unused or unsold out of those supplied by another department at cost plus profit.

3.9 ANSWERS TO CHECK YOUR PROGRESS

A 1) only (g) is FALSE

B 1) (i) True (ii) False (iii) True (iv) True

2) (i) a (ii) b (iii) c (iv) b (v) b (vi) a

3.10 TERMINAL QUESTIONS/EXERCISES

Questions

1) What do you mean by Departmental Accounts ? Why are they considered necessary ?
2) What are the advantages of Departmental Accounts ? Explain briefly.
3) Explain the bases of allocation of common expenses among various departments.
4) How are inter-departmental transfers of goods treated in Departmental Accounts ?
5) What is unrealised profit ? Show how it is worked out and accounted for.

Exercises

1) From the following figures relating to Mandakini Traders which has three operating departments prepare Departmental Trading Account.

Units

	Pen	Paper	Book
Purchases	1000	2000	2400
Stock (Opening)	120	80	152
Sales	1020	1920	2496

The total cost of purchases was Rs, 1,00,000. The selling price for the three departments were as follows :

Pen @ Rs. 20 each

Paper @ Rs, 22.50 each

Book @ Rs. 25 each

The purchase and sale prices are constant for the last two years.

Hint : Assuming all the units purchased were sold at their respective departmental selling prices, the total gross profit would work out to Rs. 25,000. Based on this, the gross profit rate would be 20% and the cost per unit for Pen, Paper and Book Rs. 16, Rs. 18 and R. 20 respectively.

(Answer : Gross Profit : Pen Rs. 4,080; Paper Rs. 8,640; and Book Rs. 12,480).

2) Glamour Stores has three departments — Plastic, Glass and Steel. From the following figures, prepare Departmental Trading arid Profit & Loss Account showing Gross Profit and Net Profit for the three departments for the quarter ended March 31, 1998 :

	Plastic Rs.	Glass Rs.	Steel Rs.
Stock (1st January, 1998)	30,000	35,000	15,000
Purchases (upto March, 1998)	35,000	37,500	23,500
Sales (upto March, 1998)	60,000	50,000	30,000
Direct Expenses (upto March, 98)	10,000	7,250	3,550

It was difficult to take stock on March 31, 1998. The normal rates of Gross Profit for the three departments are 40%, 30% and 20% on turnover respectively. Indirect expenses are charged in proportion to departmental turnover. The total indirect expenses for the period were Rs. 7,000.

(Answer : (Gross Profit — Plastic Rs. 24,000; Glass Rs. 15,000 and Steel Rs. 6,000. Net Profit — Plastic Rs. 21,000, Glass Rs. 12,500 and Steel Rs. 4,500)

3) Prepare the Departmental Trading and Profit & Loss Account of Kamalaya Stores on the basis of the following information :

	Department A Rs.	Department B Rs.	Department C Rs.
Opening Stock	41,000	34,000	94,000
Closing Stock	33,000	44,000	82,000
Purchases	2,10,000	75,000	1,39,000
Purchases Returns	14,000	6,000	2,000
Sales	4,00,000	1,54,000	3,62,000
Sales Returns	Nil	3,300	11,000
Wages	73,000	30,000	25,000

Goods were transferred from one department to another at cost price as under :

(i) A to B Rs. 400 and A to C Rs. 7,000; (ii) B to A Rs. 5,000 and (iii) C to A Rs. 4,000 and C to B Rs. 6,000.

Apportion equally Stationery Rs. 900; Postage Rs. 600, General Charges Rs. 39,000, Insurance Rs. 1,800 and Depreciation Rs. 6,000.

The expenditure on rent and rates amounting to Rs. 45,000 is to be divided on the basis of space occupied i.e., A 4 B 2 and C 3.

Allocate the following expenditure as you think best and append notes, stilting the basis selected for each of them; Establishment R. 63,000; Bad Debts Rs. 15,000; Advertising Rs. 9,000 and Income-tax Rs. 12,000.

(Answer : (Profit A Rs. 1,21,400; B Rs. 60,300; C Rs. 1,80,000. Net Profit : A Rs. 55,169; B Rs. 29,622; C Rs. 1,19,709. Establishment, Bad Debts and Advertising Expenses have been apportioned in proportio to net sales; and Income-tax has been allocated according to net profits i.e., A 58,406; B 31,360; C 1,26,734).

4) Five Star Dresses run two departments — Cloth Department and Shirts Department. Shirts are made by the firm out of clotll supplied by the Cloth Department at its usual selling price.

From the following figures, prepare Departmental Trading and Profit & Loss Account for the year 1997 :

	Cloth Department Rs.	Shirts Department Rs.
Opening Stock	2,40,000	48,000
Purchases	18,00,000	24,000
Sales	20,00,000	6,00,000
Transfer to Shirts Dept.	4,00,000	
Manufacturing Expenses		68,000
Selling Expenses	40,000	4,000
Closing Stock	3,00,000	60,000

The stock in the Shirts Department may be considered as consisting of 80% cloth and the rest as expenses. The Cloth Department made a Gross Profit of 25% in 1996. Cieneral Expenses of the business as a whole came to Rs. 1,80,000.

(**Answer** : Cloth Department Gross Profit Rs. 6,60,000; Net Profit Rs. 4,72,400.
Shirts Department Gross Profit Rs. 1,20,000; Net Profit Rs. 80,000).

5) From the following figures relating to Kavita Enterprises, prepare Departmental Trading Account and General Profit and Loss Account for the year ended 31st March, 1998 and a Balance Sheet as on that date after adjusting the unrealised departmental profits, if any :

	Dr. Rs.	Cr. Rs.
Capital		3,00,000
Land & Buildings	1,25,000	
Furniture	25,000	
Opening Stock :		
Department A	30,000	
Department B	40,000	
Purchases :		
Department A	10,00,000	
Department B	15,00,000	
Sales :		
Department A		20,00,000
Department B		32,00,000
General Expenses	14,00,000	
Sundry Debtors	2,00,000	
Sundry Creditors		1,00,000
Drawings	2,80,000	
Cash at Bank	10,00,000	
	Rs. 56,00,000	Rs. 56,00,000

Additional **Information**

1) **Closing Stock** : Department A lis. 1,30,000 including goods from Department B Rs. 40,000 at cost to Department A. Department B Rs. 2,60,000 including goods from Department A Rs. 90,000 at cost lo Department B.

2) Sales of Department **A** include transfer of goods to Department B of the value of Rs. 2,00,000 and Sales of Department B include transfer of goods lo

Department A of the value of Rs. 3,00,000 both at market price of transferor . departments. These are already included in purchases of respective departments.

3) Opening Stocks of Department A and Department B include goods of the value of Rs. 10,000 and Rs. 15,000 taken from Deparunent B and Department A respectively at cost to transferor departments.

4) Depreciate Land and Buildings by 5% and Furniture by 10% per annum.

(Answer : Gross Profit : A Rs. 11,00,000; B Rs. 19,20,000. Stock Reserve : A Its. 49,500; B Rs. 24,000. Net Profit : Ks. 15,37,750. Balance Sheet Total Rs. 16,57,750).

5) From the following particulars of Niharika Associates which has three Departments A, B and C, prepare Departmental Trading and Profit & Loss Account :

	Department A Rs.	Department B Rs.	Department C Rs.
Opening Stock	3,000	4,000	6,001)
Consumption of Direct Materials	8,000	12,000	
Wages	5,000	10,000	
Closing Stock	4,000	14,000	8,000
Sales			34,000

Stocks of each department are valued at cost to the departments concerned. Stocks of Department A are transferred to B at a margin of 50% above departmental cost. Stocks of Department B are transferred to Department C at a margin of 10% above departmental cost.

Other expenses were :

Salary	2,000
Printing	1,000
Rent	6,000
Interest Paid	4,000
Depreciation	3,000

Allocate expenses in the ratio of departmental gross profits. Opening figures for reserve of unrealised profits on departmental stocks were :

Department B	Rs. 1,000
Department C	Its. 2,000

(Answer : Net Loss : Department A Rs, 2,000, Department B Rs. 1,000 and Department C Rs. 1,000. Total Net Loss after adjustments for Stock Reserve Rs. 4,918).

Note :These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University for assessment. These are for your practice only.

SOME USEFUL BOOKS

Maheshwari, S.N., 1998 : *Introduction to Accounting* Vikas Publishing House, New Delhi. (Chapters 4 & 5, Section II).

Gupta R.L. and M. Radhaswamy, 1998. *Advanced Accounting Sultan* Chand & *Sons,* New Delhi (Chapters 19 & 20).

Shukla, M.C., Grewal, T.S. & S.C. Gupta, 1998 : *Advanced Accounts* S. Chand & Co. Ltd., New Delhi, Chapter 11.

Monga J.R., Ahuja G.C. & Ashok Sehgal, 1998 : *Advanced Accounting* National Publishing House, New Delhi.

UNIT 4 HIRE PURCHASE ACCOUNTS I

Structure

4.0 Objectives
4.1 Introduction
4.2 Nature of Hire Purchase Agreement
4.3 Legal Position
  4.3.1 Definition
  4.3.2 Characteristics of Hire Purchase Agreement
  4.3.3 Rights of Hirers
4.4 Ascertaining the Interest/Cash Price
  4.4.1 Ascertainment of Interest
  4.4.2 Ascertainment of Total Cash Price
4.5 Accounting Records in the Books of the Purchaser
  4.5.1 When the Asset is Recorded at Full Cash Price
  4.5.2 When the Asset is Recorded at Cash Price Actually Paid
4.6 Accounting Records in the Books of Vendor
4.7 Let Us Sum Up
4.8 Key Words
4.9 Answers to Check Your Progress
4.10 Terminal Questions and Exercises

4.0 OBJECTIVES

After studying this unit you should be able to :

- explain what a hire purchase agreement is,
- describe the legal position of a hire purchase agreement,
- calculate interest and cash price in relation to a hire purchase agreement,
- pass the basic accounting entries in the books of both purchaser and vendor.

4.1 INTRODUCTION

When the goods are sold the purchaser may either make the full payment at one time or may defer the payment. When the payment is deferred, the amount niay be paid in monthly, quarterly or yearly instalments. When the price of an article is paid by instalments, the total amount paid is higher than the actual cash price of the article. The excess price is the charge for interest and the risk involved. This arrangement of making the payment in instalments is beneficial to both the seller and the buyer. The seller is able to sell more goods and the buyer can buy expensive items with his limited resources. There are two systems of deferred payments, namely, (i) Hire Purchase System, and (ii) Instalment Payment System. In this unit we will learn in detail about the Hire Purchase System.

4.2 NATURE OF HIRE PURCHASE AGREEMENT

A hire purchase agreement is one under which the buyer takes delivery of goods, promising to pay the price in'certain number of instalments and until full payment is made, to treat the payment as hire charges for using the said goods. In fact, a hire purchase agreement stipulates that (i) the delivery of goods will be given by the owner of goods to the hire purchaser, (ii) payment will be made in instalments, (iii) each instalment will be treated as hire charge so that if default in respect of payment of even the last instalment is made, the seller will be entitled to take away the goods without compensating, the hire purchaser in any form, and (iv) if all instalments are paid and the other conditions are fulfilled, the ownership of the goods will pass to the buyer.

Therefore in case of hire purchase, the seller i.e., the hire vendor gives only the possession:of the goods and retains the ownership with him until the last instalment is paid. In other words, the hire purchaser is only the user of the goods and not the

owner. In case he fails to pay any of the instalments the vendor will take his goods back. Apart from that the vendor will not pay back the amount received from the purchaser. Such an amount will be treated as hire charge for the goods. Therefore till the last instalment is paid the hire purchaser has got an option, whether to purchase that particular article or not.

As mentioned earlier, the payment made by the hire purchaser under this system is always more than what he pay if he decldedto go in for cash purchase. The reason is that, apart from the cash price, the hire purchase price includes

i) interest for payment being made over a period of time,
ii) the payment foi the risk taken by the seller,
iii) expenditure on the registration, insurance and delivery of goods, etc.

4.3 LEGAL POSITION

4.3.1 Definition

According to Section 2(c) of the Hire Purchase Act, 1972 the hire purchase agreement is an agreement under which the goods are let on hire and the hirer has an option to purchase them in accordance with the terms of the agreement and includes an agreement under which

i) possession of goods is delivered by the owner thereof to a person on condition that such person pays the agreed amount in periodical instalments,

ii) the property in the goods is to pass to such person on the payment of the last of such instalments,' and

iii) such person has a right to terminate the agreement at any time before the property so passes.

4.3.2 Characteristics of Hire Purchase Agreement

Following are the characteristics of the hire purchase agreement.

i) It must be in writing and must be signed by all the parties thereto (Section 3).

ii) According to Section 4 of Hire Purchases Act, 1972, the agreement must state
   a) the hire purchase price of the goods to which the agreement relates;
   b) the cash price of the goods, that is to say, the price at which the goods may be purchased by the hirer for cash;
   c) the date on which the agreement shall be deemed to have commenced;
   d) the number of instalments by which the hire purchase price is to be paid, the amount of each of those instalments and the date (the mode of determining the date upon which it is payable) and the person to whom and the place where it is payable;' and
   e) the goods to which the agreement relates, in a manner sufficient to identify them.

Apart from the above mentioned conditions, a full description of the amount to be paid in cash or by cheque, if any, should be given in the agreement.

4.3.3 Rights of Hirers

As per the Hire Purchase Agreement the hirer has got the right to return the goods. to the vendor. Apart from this, the Hire Purchase Act gives the following rights to the hirer.

1) The owner (or the vendor) cannot terminate the hire purchase agreement for default in payment of hire or due to an unauthorised act or breach of expressed conditions unless a notice in this regard in writing is given to the hirer. The notice period is (i) one week where the hire is payable at weekly or less than that, interval, and (ii) two weeks in other cases.

2) In the following cases, the right to repossess the goods will not exist unless it is sanctioned by the court.
   i) Where the hire-purchases price is less than Rs. 15,000 and one half of the hire 'purchase price has been paid.
   ii) Where the hire purchase price is higher, three-quarters of the hire purchases price has been paid. However, the right of repossession will lapse in case of

motor vehicles where the hire purchase price is less than Rs. 5,000 and one-half of the amount has been paid. In other cases (where H.P. price is Rs. 5,000 or more), it happens if three-quarters of the hire purchase price has been paid. The Central Government has the power of raising the limit to nine-tenths where the hire purchase price is Rs. 15,000 or more.

3) The hirer has the right of receiving from the owner, on payment of Re. 1 for expenses, a statement showing the amount paid by or on behalf of the hirer, the amount which has become due under the agreement which remains unpaid together with the dates concerned and the amount which has not yet become payable under the agreement and the dates and the modes concerned.

4) If the amount paid by the hirer till the date of the repossession of the goods and the value of the goods on the date of the repossession taken together exceeds the hire purchase price, the excess is payable to the hirer. For ascertaining the value of the goods, the owner or the vendor has the right of deducting reasonable expenses for repossessing the goods, for storing the goods or repairing them, for selling them, and for payment of arrears of taxes.

Check Ybur Progress A

1) Fill in the blanks

i) A contract for sale of goods may be either a sale or an .... to sell.

ii) A hire purchase sale is an agreement to ....

iii) The ownership of goods, under a hire purchase agreement is to .... upon fulfilment of certain ....

iv) Under a hire purchase agreement payments are made in ....

v) Each instalment payment is treated as ....

vi) If the purchaser fails to pay even the last instalment, the seller will be entitled to .... the goods.

vii) From the legal point of view a hire purchase agreement should be made in ....

viii) A hirer has the right to .... the agreement before payment of the last instalment by paying the seller the agreed amount.

ix) A hirer may assign his ...., ..., and interest under a hire purchase agreement.

2) State whether the following statements are True or False.

i) A hire purchase agreement is an 'outright' sale transaction.

ii) If the hirer fails to pay the last instalment, the amounts paid earlier are considered as hire charges.

iii) A hire purchase agreement is an 'executed contract' and an instalment sale is an 'executory contract'.

iv) If the hirer opts for full payments before the due dates, a rebate should be available to him.

v) A seller cannot repossess the goods if the purchaser fails to pay the last instalment only.'

vi) The Hire Purchase Act, 1972 is in operation now.

4.4 ASCERTAINING THE INTEREST/CASH PRICE

As mentioned earlier, when the goods are sold on hire purchase, the price so charged by the vendor is always higher than the cash price. The excess price i.e., the difference between the hire purchase price and the cash price, includes the interest charges and the compensation for risk. However for accounting purposes the difference between the two prices is treated as the payment for interest. Thus, the hire purchase price includes :

i) the cash price, which is a capital expenditure for purchase of an asset, and

ii) the interest, which is an item of revenue nature. Since the cash price is of capital nature and the interest payment is of revenue nature, both will be treated in a

different manner in the books of account. It is, therefore, necessary to separate the hire purchase price into cash price and interest. However, it may be noted that **the Cash Down Payment made immediately after signing the agreement will not include the element of interest.** Another point to be kept in mind is that the interest element in each instalment is not same. It keeps on reducing with every instalment. This is so because the interest is charged on the balance of the principal amount due and not on the full amount. For proper allocation therefore we must know the cash price, the hire purchase price and the amount of interest.

4.4.1 Ascertainment of Interest

While calculating interest we may be faced with the following two situations.

a) When rate of interest, total cash price and instalrnents are given

b) When total cash price and instalments are given but the rate of interest is not given.

In both the above mentioned cases, the interest has to be calculated. Let us now take them one by one.

a) When Rate of Interest, Total Cash Price and Instalments are given.

In this situation, before calculating the element of interest included in each instalment, it will be helpful to ascertain the total amount of interest involved. This will be ascertained by subtracting the Total Cash Price from the hire purchase price. Then the following steps should be followed for calculating the amount of interest on each instalment..

I) Calculate the outstanding cash price at the time of first instalment by subtracting down payment from the total cash price.

ii) Calculate interest on the-first instalment. This is to be calculated on the outstanding cash price at the time of first instalment by applying the given rate of interest, In this connection, you should keep in view the mode of instalment i.e., whether the instalrnent is annual, half-yearly or quarterly. Usually, in case of purchases for heavy equipment the instalment is annual,

iii) Calculate the amount of cash price included in the first instalment by subtracting the amount of interest as calculated in step (ii) from the amount of the first instalment.

iv) Calculate the outstanding cash price at the time of second instalment by subtracting the amount of cash price of the first instalment from the outstanding cash price at the time of first instalment i.e., (i) — (iii).

v) Calculate, interest on the second instalment by applying the rate of interest to the outstanding cash price at the time of second instalment.

The amouht of the subsequent instalments can. be worked out in the same manner i.e., by first calculating the outstanding cash price at the time of the instalment due and then applying the rate of interest to this amount. However, the amount of interest on the last instalment is worked out differently. This can be done by simply subtracting the outstanding cash price at the time of last instalment from the amount of the last instalment, Alternatively, you can work it out by subtracting the sum of interests of all previous instalments from the total amount of interest included in the hire purchase price. The amount of interest so calculated can also be verified by applying the rate of interest to the outstanding cash price at the time of last instalrnent. Of course, there may be a small difference due to the fact that the hire purchase price is not fixed by inclusion of the exact amount of interest. It is usually fixed as a round figure. If however the difference happens to be a large amount, you should check all calculations of interest and outstanding bash price at the time of each instalment.

Illustration 1 will help you to calculate the interest with the help of the above mentioned procedure.

Illustration 1

A Ltd. purchased a machine on hire purchase from Z Ltd. on January 1,1989, paying Rs. 8,000 immediately and agreeing to pay three annual instalments of Rs. 8,000 each on December 31, every year. The cash price of the machine is Rs. 29,800 and the vendors charge interest @ 5% per annum. Calculate the amount of interest paid by the buyer to the seller every year.

Solution :

The total interest is = Hire Purchase Price − Cash Price

Hire Purchase Price = Cash Down Payment + Instalments

= 8,000 + 3(8,000)

= 8,000 + 24,000

= Rs. 32,000

Cash Price = Rs. 29,800

So Total Interest = 32,000 − 29,800 = Rs. 2,200.

Now, we can calculate the interest on each instalment as follows.

i) **Outstanding Cash Price at the time of first instalment**

Total Cash Price − Down Payment

= 29,800 − 8,000

= Rs. 21,800

ii) **Interest on first instalment**

$$\text{Outstanding Cash Price} \times \frac{\text{Rate of Interest}}{100}$$

$$= 21{,}800 \times \frac{5}{100}$$

= Rs. 1,090

iii) **Cash Price of first instalment**

Instalment − Interest on first instalmenl

= 8,000 − 1,090

= Rs. 6,910

iv) **Outstanding Cash Price at the time of second instalment**

Outstanding Cash Price at the time of 1st instalment − Cash Price of the first Instalment

= 21,800 − 6,910

= Rs. 14,890

v) **Interest on second instalment**

$$14{,}890 \times \frac{5}{100} = \text{Rs. } 745$$

vi) **Cash Price of second instalment**

= 8,000 − 745 = Rs. 7,255

vii) **Outstanding Cash Price at the time**

= 14,890 − 7,255 = Rs. 7,635

viii) **Interest on the last instalment**

= Instalment − Outstanding Cash Price at the time of last instalment

= Rs. 8,000 − 7,635

= Rs. 365

Alternatively, Total Interest − Sum of Interest of all previous years

= 2,200 − (1,090 + 745)

= 2,200 − 1,835

= Rs.,365

Verification

$$\text{Outstanding Cash Price at the time of last inst.} \times \frac{\text{Rate of Instalment}}{100}$$

$$= 7{,}635 \times \frac{5}{100}$$

= Rs. 382

As indicated earlier, the amount calculated above is not the same as calculated in step (viii). But the difference is small i.e., Rs. 17 (382 − 365).

For Steps from (i) to (viii) following table would be helpful,

	(1) Total Cash Price	(2) Instalments Paid	(3) Interest Paid	(2 – 3) Cash Price of the Instalments
Total **Cash Price**	29,800			
Less Down Payment	–8,000	8,000		8,000
Amount outstanding at the time of 1st instalment	21,800	8,000	$(21,800 \times \frac{5}{100})$	(8.000 – 1.090)
	–6,910		1,090	6,910
Amount outstanding at the time of 2nd instalment	14,890	8,000	$(14,890 \times \frac{5}{100})$	(8,000– 745)
	–7,255		745	7,255
Amount outstanding at the time of 3rd (last) instalment	7,635 –7.635	8,000	(8.000– 7.635) 365	7,635

You should calculate interest and cash price with the help of the above table. It makes your task easier.

b) When Total Cash Price and Instalments are given, but rate of interest is not given :

When the total cash price, down payment and the amount of each instalment is given, put the rate of interest is not given, the interest will be calculated by procedure mentioned below.

i) Calculate the total interest by subtracting the total cash price from the total hire purchase price.

ii) Calculate the amounts of hire purchase outstanding at the beginning of each year after subtracting the down payment.

iii) Find out the ratio of outstanding amounts calculated in step (ii). If the amount of each instalment is equal, the ascertainment of ratio is simple. For example, if there are four instalments of equal amounts the ratio will be 4 : 3 : 2 : 1 and if there are three instalments of equal amounts, it will be 3 : 2 : 1.

iv). Apply this ratio to the total interest and calculate the interest on each instalment.

Let us now take an example and clarify the calculation of interest included in each instalment.

Illustration 2

Taking the relevant data from Illustration 1 excluding the rate of interest, element in each instalment.

Hire Purchase Price	Rs. 32,000	[8,000 + 3 (8,000)
Cash Price	Rs. 29,800	
Down Payment	Rs. 8,000	

Solution :

Total Interest = 32,000 – 29,800
= Rs. 2,200

Beginning of the year	Amount outstanding	Ratio	Interest
	Rs.	Rs.	Rs.
1	24,000 (32,000 – 8,000)	24 (3)	1,100 $(2,200 \times \frac{3}{6})$
2	16,000 (24,000 – 8,000)	16 (2)	733 $(2,200 \times \frac{2}{6})$
3	8,000 (16,000 – 8,000)	8 (1)	367 $(2,200 \times \frac{1}{6})$
		48 (6)	2,200

You will observe that the amounts of interest for each instalment calculated with the help of ratio is almost the same as calculated with a given rate of interest.

4.4.2 Ascertainment of Total Cash Price

Sometimes, the total cash price is not given. In such a situation we cannot proceed with the accounting for hire purchase transaction because in the books of the buyer, the amount to be capitalised cannot be more than the cash price. The different methods of calculation of cash price are as below :

i) Without the help of annuity table
ii) With the help of annuity table

Let us now discuss both the methods

i) Without the Help of Annuity Table

Under this method interest is calculated starting with the last instalment. Suppose there are three instalments. The interest will be calculated first on the third instalment, then on the-second and lastly on the first instalment. No interest is calculated on down payment as it does not involve any element of interest.

You know that the interest is to be calculated on the outstanding amount of cash price. But since it is not known, it will have to calculated with the help of total amount due on hire purchase price. For this purpose we will have to use the following formula for calculating first-the interest involved in each instalment and then subtract this amount of interest from the total amount due, so as to work the outstanding amount of cash price.

$$\text{Interest} = \text{Total amount due at the time of instalment} \times \frac{\text{rate of interest}}{100 + \text{rate of interest}}$$

Let us now see what steps are followed for the calculation of Cash Price due at the time of each instalment assuming there are three yearly instalments.

a) Calculate the interest on the instalment of the third year, Deduct interest from this instalment. The resultant figure is the outstanding cash price at the time, of third (last) instalment.

b) Add the cash price calculated under (a) above to the instalment amount of the second year. Calculate the interest on the sum so obtained and subtract it from the total amount due at the end of'the second year to get the outstanding cash price at the time of second instalment.

c) Add the cash price calculated under (b) above to the instalment amount of the first year and calculate the interest on the sum so obtained. Deduct this amount of interest from the total amount due at the end of the first year., The resultant figure is the cash price due at the time of the first instalment.

d) Add the cash price calculated under (c) above to the down payment, if any. The sum so obtained will be the total cash'price.

Illustration 3 will help you to understrind the calculation of cash price.

Illustration 3

Renuka purchased a machine on January 1,1986 on hire purchase basis for Rs. 5,000 payable as under :

	Rs.
Down Payment	930
At the end of 1st year (1st instalment)	1,426
At the end of 2nd year (2nd instalment)	1,804
At the end of 3rd year (3rd instalment)	840
Rate of Interest 5% p.a.	

Calculate the Cash Price of the machine and interest paid with each instalment.

Solution :

	Amount	Interest
Total Amount Due on 3rd Instalment (last)	840	
Less Interest	40	40 $(840 \times \frac{5}{105})$
Outstanding Cash Price of 3rd Instalment	800	
Add 2nd Instalment	1,804	
Total Amount due on 2nd Instalment	2,604	
Less Interest	124	124 $(2,604 \times \frac{5}{105})$
	2,480	
Add 1st Instalment	1,426	
Total Amount due on 1st Instalment	3,906	
Less Interest	186	186 $(3,906 \times \frac{5}{105})$
	3,720	
Add Down Payment	930	
Total Cash Price	4,650	350

So Total Cash Price is Rs. 4,650 and Total Interest Rs. 350.

Note : **This calculation can be verified by following the procedure given for calculation of interest on each instalment when the cash price, instalments, down payment and rate of interest are given.**

ii) With the Help of an Annuity Table

If the annuity table is available, the calculation of interest involved in each instalment is simplified. In the annuity table the rate of interest is given in the rows and the years in the columps. With reference to the table, the present value of each instalment can be calculated. The sum of these present values as calculated, if added to the cash down payment gives us the cash price. The procedure is as follows :

a) See the given rate of interest in the row and the year in the column and find out the corresponding figure to the interest and year in the table.

b) This figure is the present value of Re. 1

c) Multiply the present value of Re. 1 with the amount of the instalment.

d) The resulting figure is the present value of the instalment. This is nothing but the amount of cash price included in the instalment.

e) Calculate the present values of all the instalments in same manner.

f) Add the present values of all the instalments to the down payment if any. The resultant figure will be the total cash price.

Illustration 4 will help us to understand the calculation of total cash price with the help of the annuity table.

Illustration 4

X Ltd. purchased a machine on hire purchase system. The payment is made as follows:

	Rs.
Down Payment	232.50
1st Instalment	356.50
2nd Instalment	451
3rd Instalment	210

The payments are made at the end of 1st year, 2nd year and 3rd year respectively. The rate of interest is 5% p.a. The annuity table shows that the present value of Re. 1 for one, two and three years is .9524, ,9070 and .8639 respectively. Calculate the cash price of the machine.

Solution

	(1) Instalment	(2) Present Value of Re. 1	(1 × 2) Present Value of the Instalment
Cash Down	232.50	1	232.50
1st Instalment	356.50	.9524	339.53
2nd Instalment	451.00	.9070	409.08
3rd Instalment	210.00	.8639	189.42
Total	1,250.00		1,162.53

So the Total Cash Price is Rs. 1,162.53

Check Your Progress B

1) Calculate total interest and interest on each instalment for the following cases.

   i) Cash Price of a machinery is Rs. 349. Down payment is Rs. 100 to be followed by three annual instalments of Rs. 100 each. The rate of interest is 10%.

   ii) Cash price of a machine is Rs. 1900. Payment is to be made in 3 equal instalments of Rs. 800 each.

1) Calculate cash price for each of the following cases.

   i) The price of a machinery is to be paid in four instalments of Rs. 5,000 each, the first one being made as initial payment. The rate of interest is 5% p.a. and the instalment is paid annually.

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   ii) The price of a machinery is to be paid in five annual instalments of Rs. 10,000 each. The rate of interest is 5% p.a. The first instalment is to be paid at the end of the first year. At 5% interest the present value of Re. 1 payable at the end of each year for 5 years is Rs. 4.3294.

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4.5 ACCOUNTING RECORDS IN THE BOOKS OF THE PURCHASER

You know there are two parties to a hire purchase agreement, i.e., the Vendor and the Purchaser. Both these parties have to maintain books of account and record all the transactions relating to that particular hire purchase.

Before explaining the accounting records let us first see what information is required for recording the hire purchase transaction in the books of account. The list of items required for accounting records is as follows :

1 Date of Purchase and down payment
2 Date at which the instalments become due
3 Date of closure of accounts
4 Cash Price
5 Hire Purchase Price
6 Number, Amount and Mode of each instalment
7 Rate of Interest
8 Rate of Depreciation
9 Method of Depreciation

Let us now see how accounting records arc maintained in the books of the purchase. There are two methods by which the purchaser can record the hire purchase transaction in the books of account. These are as follows :

i) When the asset is recorded at full cash price, and

ii) When the asset is recorded at the cash price actually paid.

Let us now discuss these methods in detail.

4.5.1 When the Asset is Recorded at Full Cash Price

In this method when the asset is purchased on hire purchase, it is assumed that the purchaser has full intention of paying all the instalments. It is believed that hire purchase is just a method of financing fixed assets. Under this method, on purchase of plant and machinery, the Plant & Machinery Account (Fixed Asset) is debited with the total amount of Cash Price, and the corresponding credit is given to Hire Vendor's Account. Interest is recognised and accounted for at the time of instalments becomes due by debiting the Interest Account and crediting the Hire Vendor's Account. For the purpose of accounting for initial cash down payment and annual instalments, the Hire Vendor's A/c is debited on the relevant date, and the credit is given to Bank Account. The following journal entries are passed in the books of the purchaser.

1 **When the asset is purchased on hire purchase**
Asset A/c Dr
To Hire Vendor
(With the total cash price)

2 **For cash down payment**
Hire Vendor Dr.
To Bank A/c

3 **When the first instalment becomes due**
Interest A/c Dr.
To Hire Vendor

4 **When the first instalment is paid**
Hire Vendor Dr.
To Bank A/c

5 **For Depreciation Charge** (at the end of accounting period)
Depreciation Dr.
To Asset A/c

6 **For transfer of interest and depreciation to Profit & Loss A/c**
Profit & Loss A/c Dr.
To Interest A/c
To Depreciation A/c

Entries 3 and 4 will be repeated for all subsequent instalments.

With the help of the journal entries we can easily prepare the Asset Account and the Hire vendor's Account. Look at Illustration 5 and see how the journal entries are passed and ledger accounts made in the books of the purchaser.

Illustration 5

ABC Ltd. bought on 1.1.86 a machine from XYZ Ltd. Under a hire purchase system of payment under which three annual instalments of Rs. 2,412 would be paid. There is no down payment and the cash price is Rs. 6,000, The rate of interest would be 10% and depreciation @ 20% p.a. would be charged on straight line basis.

Solution :

Let us first find out all the information required.

1) Date of Purchase – January 1,1986; No down payment.

2) Date at which the instalments become due – December 31,1986,1987 and 1988.

3) Date of closure of accounts – December 31.

4) Cash Price – Rs. 6,000.

5) Hire Purchase Price – Rs. 2,412 x 3 = Rs. 7,236.

6) Number, amount and mode of each instalment 3 instalments of – Rs. 2,412 each payable annually.

7) Rate of Interest – 10% p.a.

8) Rate of Depreciation – 20% p.a.

9) Method of Depreciation – Straight Line.

Journal Entries in the Books of ABC Ltd.

Date	Particulars		Amount (Dr.)	Amount (Cr.)
			Rs.	Rs.
1986 Jan. 1	Machinery A/c To XYZ Ltd. (Being a machine purchased on hire purchase)	Dr.	6,000	6,000
Dec. 31	Interest A/c To XYZ Ltd. (Being the charge of interest @ 10% on Rs. 6,000)	Dr.	600	600
Dec. 31	Depreciation A/c To Machinery A/c (Being the charge of depreciation)	Dr.	1,200	1,200
Dec. 31	XYZ Ltd. A/c To Bank A/c (Being the payment of annual instalment)	Dr.	2,412	2,412
Dec. 31	Profit & Loss A/c To Interest A/c To Depreciation A/c (Being the annual charges transferred to Profit & Loss A/c)	Dr.	1,800	600 1,200
1987 Dec. 31	Interest A/c To XYZ Ltd. (Being the charge of interest @ 10% on Rs. 4,188)	Dr.	418	418
Dec. 31	Depreciation A/c To Machinery A/c (Being the annual charge of depreciation)	Dr.	1,200	1,200
Dec. 31	XYZ Ltd. A/c To Bank A/c (Being the payment of annual instalrnent)	Dr.	2,412	2,412
Dec. 31	Profit & Loss A/c To Interest A/c To Depreciation A/c (Being the transfer of annual charges to Profit & Loss A/c)	Dr.	1,618	418 1,200
1988 Dec. 31	Interest A/c To XYZ Ltd. (Being the charge of interest @ 10% on Rs. 2,194)	Dr.	218	218
Dec. 31	Depreciation A/c To Machinery A/c (Being the annual charge of depreciation)	Dr.	1,200	1,200
Dec. 31	XYZ Ltd. A/c To Bank A/c (Being the 3rd and final instalment paid)	Dr.	2,412	2,412
Dec. 31	Profit & Loss A/c To Interest A/c To Depreciation A/c (Being the transfer of annual charges to Profit & Loss A/c)	Dr.	1,418	218 1,200

Ledger Accounts in the Books of ABC Ltd.

Machinery Account

Dr.					Cr.
1986		Rs.	1986		Rs.
Jan. 1	To XYZ Ltd.	6,000	Dec. 31	By Depreciation A/c	1,200
			Dec. 31	By Balance c/d	4,800
		6,000			6,000
1987			1987		
Jan. 1	To Balance b/d	4,800	Dec. 31	By Depreciation A/c	1,200
			Dec. 31	By Balance c/d	3,600
		4,800			4,800
1988			1988		
Jan. 1	To Balance b/d	3,600	Dec. 31	By Depreciation A/c	1,200
			Dec. 31	By Balance c/d	2,400
		3,600			3,600

XYZ Ltd. (Hise Vendor) Account.

Dr.					Cr.
1986		Rs.	1986		Rs.
Dec. 31	To Bank A/c	2,412	Jan. 1	By Machinery A/c	6,000
Dec. 31	To Balance c/d	4.188	Dec. 31	By Interest A/c	600
		6,600			6,600
1987			1987		
Dec. 31	To Bank A/c	2,412	Jan. 1	By Balance b/d	4,188
Dec. 31	To Balance c/d	2,194	Dec. 31	By Interest A/c	418
		4,606			4,606
1988			1988		
Dec. 31	To Bank A/c	2,412	Jan. 1	By Balance b/d	2,194
			Dec. 31	By Interest A/c	218
		2,412			2,412

Working Notes:

	Re.
Cash Price	6,000
Add Interest on 1st Instalment	
$(\frac{10}{100} \times 6,000)$	600
	6,600
Less 1st Instalment	2,412
Amount outstanding at the time of 2nd Instalment	4,188
Add Interest on 2nd Instalment	
$(\frac{10}{100} \times 4,188)$	418
	4,606
Less 2nd Instalment	2,412
Amount outstanding at the time of 3rd Instalment	2,194
Add Interest on 3rd Instalment	218
	2,412

4.5.2 When the Asset is Recorded at Cash Price Actually Paid

You know that in case of hire purchase, the ownership of the goods passes to the hire purchaser after the last instalment has been paid. Since the goods do not become the property of the purchaser, he does not have any right to debit the asset at its full price. Hence, no entry is passed when the asset is purchased unless it involves down payment. The entries are passed as and when the instalments become due and the amount is paid towards the price of the article. The journal entries are as follows :

1 **When the asset is purchased**
No entry

2 **When the down payments is made**
Asset A/c Dr.
To Bank A/c

3 **When the instalment becomes due**
Asset A/c Dr. (cash price part of instalment)
Interest A/c Dr. (interest on instalment)
To Hire Vendor

4 **When instalment is paid**
Hire Vendor Dr.
To Bank A/c

5 **When Depreciation is charged**
Depreciation A/c Dr.
To Asset A/c

6 **When Interest and depreciation accounts are closed by transfer to Profit & Loss A/c**
Profit & Loss A/c Dr.
To Interest A/c
To Depreciation A/c

It should be noted that though the asset account is debited with the amount of the cash price paid (not full cash price), the **depreciation is charged on the full cash price.** The Balance Sheet will reflect the amount of cash price debited to the asset account minus depreciation charged.

Look a the Illustration 6 and see how accounting records are maintained in case the asset is recorded at cash price actually paid.

Illustration 6 .
Solve Illustration 6 by debiting the asset account at cash price actually paid.

Solution :

Journal Entries in the Books of ABC Ltd.

Date	Particulars		Amount (Dr.)	Amount (Cr.)
1986			Rs.	Rs.
Dec. 31	Machinery A/c	Dr.	1,812	
	Interest A/c	Dr.	600	
	To XYZ Ltd.			2,412
	(Being first instalment due)			
Dec. 31	XYZ Ltd	Dr.	2,412	
	To Bank A/c			2,412
	(Being first instalment paid)			
Dec. 31	Depreciation A/c	Dr.	1,200	
	To Asset A/c			1,200
	(Being annual depreciation charged)			
Dec. 31	Profit & Loss A/c	Dr.	1,800	
	To Depreciation A/c			1,200
	To Interest A/c			600
	(Being annual charges transferred to Profit & Loss A/c)			

Date	Particulars		Amount (Dr.)	Amount (Cr.)
1987				
Dec. 31	Machinery A/c	Dr.	1,994	
	Interest A/c	Dr.	418	
	To XYZ Ltd.			2,412
	(Being second instalment due)			
Dec. 31	XYZ Ltd.	Dr.	2,412	
	To Bank A/c			2,412
	(Being second instalment paid)			
Dec. 31	Depreciation A/c	Dr.	1,200	
	To Asset A/c			1,200
	(Being annual depreciation charged)			
Dec. 31	Profit & Loss A/c	Dr.	1,618	
	To Depreciation A/c			1,200
	To Interest A/c			418
	(Being annual charges transferred to Profit & Loss A/c)			
1988				
Dec. 31	Machinery A/c	Dr.	2,194	
	Interest A/c	Dr.	218	
	To XYZ Ltd.			2,412
	(Being third instalment due)			
Dec. 31	XYZ Ltd.	Dr.	2,412	
	To Bank A/c			2,412
	(Being third instalment paid)			
Dec. 31	Depreciation A/c	Dr.	1,200	
	To Asset A/c			1,200
	(Being annual depreciation charged)			
Dec. 31	Profit & Loss A/c	Dr.	1,418	
	To Depreciation A/c			1,200
	To Interest A/c			218
	(Being annual charges transferred to Profit & Loss A/c)			

Note: Depreciation has been charged on straight line method @ 20% p.a. at the full cash price of Rs. 6.000.

4.6 ACCOUNTING RECORDS IN THE BOOKS OF VENDOR

So far as the vendor is concerned a hire purchase sale is just like an ordinary sale with the exception that payment is deferred over a period of time for which the vendor charged interest, He debits the Hire Purchaser's A/c with full cash price and credit is given,to Sales A/c. The interest amount is debited to Hire Purchaser's A/c as and when the instalments become due. Instalment amounts received are credited to the Hire Purchaser's A/c and debited to Bank A/c. The journal entries passed are as follows:

1 **On sale of goods under hire purchase**
Hire Purchaser — Dr.
  To Sales A/c — **(with full cash price)**

2 **On receiving cash down payment**
Bank A/c — Dr.
  To Hire Purchaser

3 **On instalment becoming due**
Hire Purchaser — Dr.
  To Interest A/c

4 **On getting payment on the due instalment**

Bank A/c Dr.

To Hire Purchaser

With the help of above entries you can easily prepare the Hire Purchaser's A/c and Interest A/c. Look at Illustration 7 and see how accounting records are maintained in the books of the vendor.

Illustration 7

On January 1, 1987, IFB Ltd. acquired machinery from JK Ltd. for Rs. 1.886 (cash price) under a hire'purchase agreement where Rs. 400 was the initial payment and two instalments of Rs. 800 would be paid. Interest @ 6% p.a. .would be charged. Prepare the ledger accounts in the books of IFB Ltd. assuming rate of depreciation @ 10% (straight line).

Solution :

In the books of JK Ltd.

IFB LTD.

Dr.					Cr.
1987		Rs.	1987		Rs.
Jan. 1	To Sales A/c	1,886	Jan. 1	By Bank A/c	400
Dec. 31	To Interest A/c	89	Dec. 31	By Bank A/c (1st Inst.)	800
			Dec. 31	By Balance c/d	775
		1,975			1.975
1988			1988		
Jan. 1,	To Balance b/d	775	Dec. 31	By Bank A/c (2nd Inst.)	800
Dec. 31	To Interest A/c	25			
		800			800

Interest Account

1987		Rs.	1987		Rs.
Dec. 1	To Profit & Loss A/c	89	Dec. 31	By IFB Ltd.	89
		89			89
1988			1988		
Dec. 31	To Profit & Loss A/c	25	Dec. 31	By IFB Ltd.	25
		25			25

Working Note :

Statement showing calculation of hire purchases interest and the amount of principal in each instalment.

	Rs.	Interest Rs.	Cash Price Rs.
Cash Price	1,886	–	
Less : Down Payment	400		400
	1,486		
Add : Interest on 1st instalment to be paid on Dec. 31, 1987 @ [illegible]	89		
	1,575		
Less : 1st Instalment on Dec. 31,1987	800	89	711
	775		
Add : Interest on 2nd instalmcnt @ 6%	25		
	800		
Less : 2nd Instalment on Dec. 31, 1988	800	25	775

Check Your Progress C

1) Enlist the information required before solving the hire purchase problem.

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2) State whether following statements are True or False.

   i) When the asset is recorded at full cash price, the hire purchase becomes a method of financing the fixed asset.

   ii) When the asset is recorded at the price actually paid the Asset A/c is debited and the Hire Vendor's A/c is credited with full cash price.

   iii) The Hire Vendor debits the hire purchaser and credits the sales on sale of goods with cash price.

   iv) When the asset is recorded at cash price actually paid no entry is passed when the instalment becomes due.

   v) The Hire Vendor's A/c is in the nature of a personal account.

4.7 LET US SUM UP

In the hire purchase agreement the buyer takes the delivery of the goods and promises to pay the price in instalments. Under this agreement, though the buyer takes the possession of the goods, but he does not have the ownership. The ownership of the goods passes only after the last instalment has been paid. In case the buyer fails to pay any of the instalments, the seller can take back the possession of the goods.

The hire purchase price is always more than the cash price, the difference between the two is the interest charged for deferred payment. If two of the three items of information i.e., hire purchase price, cash price and interest, are given, the third can be found out with the help of the formula HP = CP + Interest (HP is hire purchase price and CP is cash price).

Both the parties to hire purchase agreement i.e., the vendor aqd the purchaser record the hire purchase transactions in their books.

The purchaser can prepare accounting records in two ways : (i) When the asset 'is recorded at full cash price, or (ii) When the asset is recorded at the cash price actually paid.

The purchaser mainly maintains two accounts i.e., the Hire Vendor Account and the Asset Account. The vendor on the other hand maintains the Hire Purchaser's Account and the Interest Account.

4.8 KEY WORDS

Agreement to Sell : In a contract of sale, when the ownership of goods sold is to pass to the buyer subject to fulfilment of certain conditions, such sale is termed as an agreement to sell.

Cash Price : The amount to be paid in outright sale on cash.

Down Payment : Initial payment made at the time of purdhase under hire purchase agreement.

Hire Charges : If the hirer in a hire purchase agreement fails to pay even the last instalment, the amounts he has paid so far, will be treated as hire charges for using the asset.

Hire Purchase : An agreement to sell under which the buyer takes the delivery of goods promising to pay the price in instalments and until full payment is made, to treat payment as hire charges for using the goods.

Hire Purchaser : The purchaser in a hire purchase contract.

Hire Vendor : The seller in a hire purchase agreement who agrees to receive the price in instalments, and has the right to treat the amounts paid by the hirer as hire charges if the hirer fails to pay the last instalment.

Instalment Payment **System** : When the price in a contract of sale is paid over a period of time, but at fixed intervals the system of payment is called instalment payment.

4.9 ANSWERS TO CHECK YOUR PROGRESS

A 1 i) agreement, ii) sell, iii) pass, conditions, iv) instalment, v) hire charges, vi) repossess, vii) writing, viii) terminate, ix) right, title

2 i) False ii) True iii) False iv) True v) False vi) False

B 1 i) Total interest = Rs. 51(25+17+9)
ii) Total interest = Rs. 500 (264+178+58)

2 i) Cash Price = Rs. 18,616, ii) Cash Price = 43,294

C 1 i) True ii) False iii) True iv) False v) True

4.10 TERMINAL QUESTIONS AND EXERCISES

Questions

1) What are the characteristics of a hire purchase agreement?,
2) Describe the rights of a hirer under hire purchase agreement.
3) What steps would you take to calculate the interest when the total cash price and instalments are given?

Exercises

1 Based on particulars given below, give entries in the books of the purchaser and the seller both under the hire purchase system :

a) Rarnesh & Co. - Purchaser
Date of Purchase - Jan. 1, 1989 goods purchased - Trucks; Cash Price - Rs. 1,49,000. Instalments Rs, 40,000 on signing of the agreement, Rest in three instalments of Rs. 40,000 each, Rate of interest - 5%. Depreciation - 10% on the diminishing balance.

b) All particulars as above except that the rate of interest is not given,

c) All particulars as In (a) above except that the cash price Is not given.

2 Hire Purchases Ltd. purchased motor car on hire purchase system Rs. 12,000 was payable on delivery i.e., on 1.1.89 and the rest in four,equal instalments of Rs: 12,000 each payable at the end of each year. The seller, Hire Vendors Ltd. agreed to charge interest @ 5% on the yearly balances, The cash price of the car was Rs. 54,551. Depreciation @ 25% on written down values was to be written off in each year.

Give the necessary journal entries and ledger accounts in the books of Hire Purchasers Ltd.

(Answer : Total Interest Rs. 5,449. The written down value of the car at the end of fourth year is Rs, 17,260)

3 Dinesh Ltd., on 'April 1, 1989, purchased a machine from Rajesh Ltd., on hire purchase basis. The c-sh price of the machine was Rs. 25,000. The payment was to be made Rs. 5,000 on the date of the contract and the balance in four annual instalments of Rs. 5,000 each plus interest at 5% per annum payable on December 31 each year, and the first such instalment being payable on 31.12.89. Depreciation is to be charged @ 10% on original cost,

Show the journal entries and ledger accounts in the books of both the parties.

(Answer : The amount of total interest Rs. 2,500, balance of Machinery A/c on 1.1.93 Rs. 15,000).

4 An engineering company purchased machine on Hire Purchase System over a period of three years paying Rs. 846 as initial payment on 1.1.89 and further annual **payments** of Rs. 2,000 due on 31.12.89, 31.12.90 and 31.12.91. The cash price of the machine was Rs. 6,000 and the vendor company was to charge interest at 8% p.a. on outstanding balances.

Show the appropriate ledger accounts in the books of the hire purchaser assuming depreciation @ 10% p.a. was to be charged on the machine. Assume that capitalisation was to be done at the time of payment of each instalment.

(**Answer** : Interest (total) Rs. 846).

Note: These questions and exercises will help you to understand the unit better. Try to write answers for them. Do not send your answer to the University, these are for your practice only.

UNIT 5 HIRE PURCHASE ACCOUNTS II

Structure

5.0 Objectives
5.1 Introduction
5.2 Default and Repossession
 5.2.1 Rights of the Hire Vendor
 5.2.2 Restrictions on the Owner
5.3 Accounting for Default and Repossession
 5.3.1 Complete Repossession
 5.3.2 Partial Repossession
5.4 Instalment Payment System
5.5 Accounting for Instalment Payment System
 5.5.1 Books of the Buyer
 5.5.2 Books of the Vendor
5.6 Let Us Sum Up
5.7 Key Words
5.8 Answers to Check Your Progress
5.9 Terminal Questions and Exercises

5.0 OBJECTIVES

After studying this unit you should be able to :

- explain default and repossession in relation to a hire purchase contract,
- pass accounting entries for complete and partial repossession of goods in the books of both hire vendor and hire purchaser,
- describe the instalment payment system and distinguish it from hire purchase system,
- pass accounting entries in case an asset is bought under the instalment payment method.

5.1 INTRODUCTION

In Unit 4 you learnt about the nature, legal position and the accounting treatment of a hire purchase contract. So tar as the accounting treatment goes, we discussed a simple situation where the purchaser had paid all the instalments and consequently the ownership was transferred to him. But, sometimes the purchaser is unable to pay all instalments. In such a situation, the vendor h35 the right to take back the possession of goods and treat the instalments paid as hire charges for the use of the asset. Rut, in practice, he may arrive at some compromise witlt the hire purchaser. In this unit you will learn how default in payment of instalments is treated in the books of account of both the parties. We shall also discuss the accounting treatment in case the asset is purchased under instalment payment system as against the hire purchase system.

5.2 DEFAULT AND REPOSSESSION

'Default' is the failure to act, appear or pay i.e., failure to meet obligation. Under a hire purchase agreement the hirer has an obligation to pay up to the last instalment so that the ownership of goods smoothly passes to him. If he fails to meet this obligation, it will be treated as default on his part.

Possession of goods means physical holding of goods. You know that under hire purchase agreement the vendor simply transfers the possession of goods. He does not transfer the ownership, and if the hirer fails to pay even the last instalment he has 'the legal right to recover the possession of the goods. This act of recovery of possession is termed as 'repossession'.

The legal position of the hire vendor and hire purchaser (hirer) in case of default is complicated. The Hire Purchase Act of 1972 did codify this issue first, but as this Act was not put to operation, the legal position is not very clear. However, the relevant provisions of the said Act are discussed below.

5.2.1 Rights of the Hire Vendor

1 Rights of hire vendor to terminate hire purchnse agreement: Where the hirer makes more than one default in payment of instalment as provided in the agreement, the hire vendor (the owner) shall be entitled to terminate the agreement by giving the notice of termination in writing.

2 Rights of the hire vendor on **termination:** Where a hire purchase agreement is terminated, the hire vendor (the owner) shall-be entitled (i) to enter the premises of the hirer and seize the goods, (ii) to retain the hire charges already paid and to recover the arrears of hire charges due, and (iii) to claim damages for yon-delivery of the goods.

5.2.2 Restrictions on the Owner

The above rights of the owner are, however, subject to the following restrictions :

1 Rights of hirer in case of seizure of goods by the owner: Where the owner seizes the goods lent under a hire purchase agreement, the hirer may recover from the owner the amount, if any, by which the hire purchase price falls short of the aggregate of two amounts (a) the amounts paid in respect of the hire purchase price up to the date of seizure) and (b) the value of the goods on the date of seizure.

2 Restrictions on owner's right to repossess: Where goods have been let under a hire purchase agreement, and the statutory amount of the hire purchase price has been paid, the owner shall not enforce any right to recover possession of the goods from the hirer otherwise than by 'verdict of any competent court.

5.3 ACCOUNTING FOR DEFAULT AND REPOSSESSION

You know that when the purchaser fails to pay any of the instalments, the hire vendoı can take back the possession of the goods, The amount already paid to the vendor as a part of the payment for the asset is treated as the hire charge. So, far as the repossession of goods is concerned the vendor can either take back the whole of the asset or a part of it. Let us now discuss what entries will be passed in case of (i) complete repossession and (ii) the partial repossession.

5.3.1 Complete Repossession

When the hire purchaser does not pay the instalment the vendor can take back the possession of goods. In case the vendor takes the possession of all the goods it is called complete repossession. It means the vendor will close Hire Purchaser's Account in his books and vice *versa.*

The journal entries passed are as follows :

i) All the entries (except the entry forpaymentj are passed as usual up to the date of default.

ii) For closing the account of the purchaser :
Goods Repossessed A/c Dr.
To Hire Purchaser
(Transfer of balance)

iii) For repairs and other expenses on the repossessed goods :
Goods Repossessed A/c Dr.
To Cash A/c
(Repairs and other expenses)

iv) For resale of **goods repossessed** :
Cash A/c Dr.
To Goods Repossessed A/c

v) Any balance left in Goods Repossessed Account is either profit or loss, which is ultimately transferred to Ptofit & Loss A/c.

In case of profit, the entry will be :
Goods Repossessed A/c Dr.
To Profit & Loss A/c
In case of loss, the entry will be reversed.

In the books of Hire Purchaser

i) All the entries (except the entry for payment) are passed as usual up to the date of default, including the entry for depreciation.

ii) **For closing the account of the vendor :**
Hire Vendor Dr.
To Asset A/c

iii) **For closing the Asset Account**
Profit & Loss A/c Dr.
To Asset A/c

Generally there is a loss to the hire purchaser, so the above entry is passed for loss on seizure of goods. In case of profit the above entry will be reversed.

Look at Illustration 1 and see how entries are passed and the books are closed in case of complete repossession.

Illustration 1

On January **1,1987,** ABC Ltd. sold some plant & machinery costing Rs. 28,000 (cash price) to XYZ Ltd. on hire purchase. Payment was to be made as Rs. 7,500 cash down and three instalments of Rs. **7,500** at the end of each year. Rate of interest was @ 5% p.a. The rate of depreciation for the asset was 10% p.a.

XYZ Ltd. made the down payment and paid the first instalment. But they could not pay the second instalment. Consequently, ABC Ltd. repossessed the goods.

ABC Ltd. spent Rs. **300** on repairs and disposed off the asset for Rs. **15,350.** Open ledger accounts in the books of both the parties.

Solution :

Books of XYZ Ltd.

Dr. **Plant & Machinery Account** Cr.

Date	Particulars	Amount	Date	Particulars	Amount
1987		Rs.	1987		Rs.
Jan. 1	To ABC Ltd.	28,000	Dec. 31	By Depreciation (10% on 28,000)	2,800
			Dec. 31	By Balance c/d	25,200
		28,000			28,000
1988			1988		
Jan. 1	To Balance b/d	25,200	Dec. 31	By Depreciation A/c (10% on 25,200)	2,520
			Dec. 31	By ABC Ltd.	14,726
			Dec. 31	By Profit & Loss A/c	7,954
		25,200			25,200

ABC Ltd's Account

Date	Particulars	Amount	Date	Particulars	Amount
1987		Rs.	1987		Rs.
Jan. 1	To Cash A/c (down payment)	7,500	Jan. 1	By Plant & Machinery A/c	28,000
Dec. 31	To Cash A/c (first instalment)	7,500	Dec. 31	By Interest A/c	1,025
Dec. 31	To Balance c/d	14,025			
		29,025			29,025
1988			1988		
Dec. 31	To Plant & Machinery A/c (default)	14,726	Jan. 1	By Balance c/d	14,025
			Dec. 31	By Interest A/c	701
		14,726			14.776

Books of ABC Ltd.

XYZ Ltd's Account

1987		Rs	1987		Rs.
Jan 1	To Sales A/c	28,000	Jan 1	By Cash A/c	7,500
Dec 31	To Interest A/c (5% on 20,500)	1,025	Dec. 31	By Cash	7.500
			Dec. 31	By Balance c/d	14,025
		29,025			29,025
1988			1988		
Jan 1	To Balance b/d	14,025	Dec. 31	By Goods Repossessed A/c	14,776
Dec. 31	To Interest A/c (5% on 14,025)	701			
		14,726			14,726

Goods Repossessed Account

1988		Rs.	1988		Rs.
Dec. 31	To XYZ Ltd.	14,726	Dec. 31	By Cash A/c (sales)	15,350
Dec. 31	To Cash A/c (repairs)	300			
Dec. 31	To Profit & Loss A/c (profit on sale)	324			
		15,350			15,350

5.3.2 Partial Repossession

Sometimes, in case of default, the vendor enters into a compromise with the hirer and does not reposses the complete goods. But, he repossesses a part of the goods called 'partial repossession'. In this case some part of the asset is still left with the buyer.

So far as the accounting treatment of partial possession is concerned, interest and depreciation entries are passed as usual in the books of both the parties, but not the Entry foı payment. These entries are passed up to the date of default,.

As some part of the asset is left with the hire purchaser, the hire vendor does not close the I-Iire Purchaser's Account in his books, nor does the hire purchaser close the Hire Vendor's Account in his books. They ascertain the current value of the asset repossessed with the help of an agreed rate of depreciation (it is usually an enhanced rate). The hire vendor debits the same to the Goods Repossessed Account and credits it to the Hire Purchaser's Accotint. Similarly, the hire purchaser debits the Hire Vendor's Account and credits the Asset Account with the agreed valuepf the asset repossessed. As for the part of asset left with him, the hire purchaser applies the normal rate of depreciation and shows the depreciated value as a balance in the Asset Account. The balancing figure in the asset account will show the profit or loss on default and it will be transferred to the Profit & Loss Account.

Look at the Illustration 2 and see how accounts are prepared in case of partial repossession.

Illustration 2

Jalani Distributors sold three light commercial vans to Jain Enterprises on January 1, 1987 on hire purchase system. The price of each van was Rs. 90,000 payment of which was to be made as follows :

i) Rs. 30,000 as down payment for each van;
ii) Remaining amount in 3 annual equal instalments along with interest @ 15%.

Jain Enterprises were charging depreciation @ 20% each year on written down value method. After payment of the first instalment as on December 31, 1987, they could not pay further instalments. It was agreed between the parties for repossession of two vans adjusting their value against the amount due, For the purposes of repossession, depreciation @ 30% p.a. was charged.

Repossessed goods were repaired at a cost of Rs. 2,000 and were then sold for Rs. 92,000. Calculate the value of repossessed stock and show the necessary accounts in the books of both the parties.

Solution

In the books of Jain Enterprises

Light Commercial Vans Account

Dr. Date	Particulars	Amount	Date	Particulars	Cr. Amount
		Rs.			Rs.
1987 Jan. 1	To Jalani Distributors (Rs. 90,000 x 3)	2,70,000	1987, Dec. 31	By Depreciation A/c (20% on 2,70,000)	54,000
				By Balance c/d	2,16,000
		2,70,000			2,70,000
1988 Jan. 1	To Balance b/d	2,16,000	1988 Dec. 31	By Depreciation A/c (20% on 2,16,600)	43,200
			Dec. 31 Dec. 31	By Jalani Distributors (value of two vans on repossession)	88,200
			Dec. 31	By Profit & Loss A/c (loss on repossession)	27,000
			Dec. 31	By Balance c/d	57,600
		2,16,000			2,16,000
1989 Jan. 1	To Balance b/d	57,600			

Jalani Distributors' Account

Date	Particulars	Amount	Date	Particulars	Amount
		Rs.			Rs.
1987 Jan. 1	To Bank A/c (down payment) (Rs. 30,000 x 3)	90,000	1087 Jan. 1	By Light Commercial Vans A/c	2,70,000
Dec. 31	To Bank A/c (first instalment Rs. 60,000 + 27,000)	87,000	Dec. 31	By Interest A/c $(2,80,000 \times \frac{15}{100})$	27,000
Dec. 31	To Balance c/d	1,20,000			
		2,97,000			2,97,000
1988 Dec. 31	To Light Commercial Vans A/c	88,200	1988 Jan. 1	By Balance b/d	1,20,000
Dec 31	To Balance c/d	49,800	Dec. 31	By Interest $(1,20,000 \times \frac{15}{100})$	18,000
		1,38,000			1,38,000
			1989 Jan. 1	By Balance b/d	49,800

Books of Jalani Distributors

Jain Enterprises' Account

Date	Particulars	Amount	Date	Particulars	Amount
		Rs.			Rs.
1987 Jan. 1	To Sales A/c	2,70,000	1987 Dec. 31	By Bank A/c (down payment)	90,000
Dec. 31	To Interest A/c $(\frac{15}{100} \times 1,80,000)$	27,000	Dec. 31	By Bank A/c (1st Instalment)	87,000
			Dec. 31	By Balance c/d	1,20,000
		2,97,000			2,97,000
1988 Jan. 1	To Balance b/d	1,20,000	1988 Dec. 31	By Goods Repossessed A/c	88,200
	To Interest $(\frac{15}{100} \times 1,20,000)$	18,000	Dec. 31	By Balance c/d	49,800
		1,38,000			1,38,000
1989 Jan. 1	To Balance b/d	49,800			

Goods Reposeessed Account

1988		Rs.	1988		Rs.
Dec. 31	To Jain Enterprises	88,200	Dec. 31	By Cash A/c (sale)	92,000
Dec. 31	To Cash A/c (repairs)	2,000			
Dec. 31	To Profit & Loss A/c (profit on sale)	1,800			
		92,000			92,000

Working Notes :

1 **Calculation of the value of repossessed asset :**

		Rs.
Cost Price of two vans (90,000 x 2)		1,80,000
Depreciation		
First year ($\frac{30}{100}$ × 1,80,000)	54,000	
Second year ($\frac{30}{100}$ × 1,80,000 - 54,000)	37,800	91,800
Value of repossessed stock		88,200

2 **Loss on Repossession**

		Rs.
Cost Price of two vans (90,000 × 2)		1,80,000
Depreciation		
First year ($\frac{20}{100}$ x 1,80,000)	36,000	
Second year ($\frac{20}{100}$ × 1,80,000 - 36,000)	28,800	64,800
Depreciated value of two vans		1,15,200
Less : Value of the two vans at higher rate of depreciation for repossession		88,200
Loss on repossession		27,000

5.4 INSTALMENT PAYMENT SYSTEM

Instalment Payment System also called the Deferred Instalments is a system where the buyer is given the ownership as well as the possession of the goods right at the time of signing the contract. The buyer has the facility to pay the price in instalments. The features of Instalment Payment System are as follows :

i) It is an outright sale.

ii) The possession as well as the ownership is passed to the buyer on signing of the contract.

iii) The buyer can make the payment in Instalments.

iv) In case of default in payment. the seller cannot repossess the goods.

v) The amount paid up to the default is not forfeited and the seller can sue the buyer for the amount due.

From the above discussion we can see that the Instalment Payment System has some similarities with the Hire Purchase System, but there are some points of difference as well. They are as follows :

Hire Purchnse System	Instalment Payment System
i) It is an agreement of hiring.	i) It is an agreement of salc.
ii) The buyer gets only the possession of goods at the time of signing the contract.	ii) The buyer gets possession as well as the ownership of the goods on signing the contract.
iii) In case of default, the goods can be repossessed.	iii) The goods cannot be repossessed in case of default.
iv) In case of default the payment made up to the date of default is forfeited and treated as hire charge.	iv) The payment made up to the date of default is a payment towards the price of the asset and cannot be forfeited. The seller can at the most sue the buyer for the amount due.
v) The buyer cannot sell, destroy, transfer, damage or pledge the goods.	v) Buyer can sell, destroy, damage, transfer or pledge the goods.

5.5 ACCOUNTING FOR INSTALMENT PAYMENT SYSTEM

You know that the property in goods passes to the buyer immediately on the signing of the contract. Hence, while accounting for the purchase under the Instalment payment system, this fact should be taken into account. Accordingly, the buyer credits the vendor with the full amount 'payable to him (inclusive of total interest) and debits the assets with cash price and the Interest Suspense Account with the total amount of interest being the difference between the full amount payable and the cash price. The Interest Suspense Account is credited with the actual amount of interest at the time of each instalment by transferring the same,to Interest Account. Similarly, the vendor debits the buyer with the full amount and credit sale with cash price and Interest Suspense Account with total interest. He transfers the actual amount of interest to Interest Account at the time of each instalment by debiting Interest Suspense Account and crediting the Interest Account.

Thus, from accounting point of view, the main point of difference between Instalment Payment System and the Hire Purchase System relates to the treatment of interest. But in practice, even this may be dispensed with.

The asset account is maintained by the buyer in a manner similar to that of Hire Purchase System i.e., depreciation is charged in the usual manner and the depreciated value of the asset shown in the Balance Sheet. It should be noted that the balance in Venddr's Account shall be shown on the liability side everv year.

Let us now study the journal entries both in the books of the buyer andseller under Instalment Payment System.

5.5.1 Books of the Buyer

The buyer passes the following journal entries in his books.

i) **When the Asset is purchased**

Asset A/c	Dr.	(with cash price)
Interest Suspense A/c	Dr,	(difference between cash price and instalment price)
To Vendor		(with Instalment price)

ii) **For cash down payment**

Vendor	Dr,
To Bank A/c	

iii) **For interest due at the time of Instalment**

Interest A/c	Dr.
To Interest Suspense A/c	

iv) **For the payment of instalment**

Vendor	Dr.
To Bank A/c	

v) **For Depreciation at the end of the accounting year**
Depreciation A/c Dr.
To Asset A/c

vi) **For transfer of interest and depreciation to Profit & Loss A/c**
Profit & Loss A/c Dr.
To Interest A/c
To Depreciation A/c

After passing the above mentioned journal entries, the purchaser prepares the following ledger accounts.

i) Asset A/c
ii) Vendor's A/c
iii) Interest Suspense Account
iv) Interest Account

Look at the Illustration 3 and see how ledger accounts are maintained in the books of the buyer when goods are purchased under Instalment Payment System.

Illustration 3

Fire industries Ltd, purchased a plant on 1.1.1985 from MMC Ltd. under instalment payment system The cash price was Rs. 20,000 payable as Rs. 6,384 for clown payment and the balance by three equal annual instalment of rs...5,000 each including 5% interest. Depreciation @ 10% was to he charged as per W.D.V. method.

Show the necessary ledger accounts in the books of Fire Industries Ltd.

Solution : **In the books of Fire Industries Ltd.**

MMC Ltd. Account

Dr. **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
1986		Rs.	1986		Rs.
Jan. 1	To Bank A/c	6.384	Jan. 1	By Plant A/c	20,000
Dec. 31	To Bank A/c (1st Instalment)	5,000	Dec. 31	By Interest Suspense A/c	1,384
Dec. 31	To Balance c/d	10,000			
		21,384			21,384
1987			1987		
Dec. 31	To Bank A/c (2nd instalment)	5,000	Jan. 1	By Bnlnncc bld	10,000
Dec. 31	To Balance c/d	5,000			
		10.000			10,000
1988			1988		
Dec. 31	To Bank (3rd instalment)	5,000	Jan. 1	By Balance bld	5,000
		5,000			5,000

Plant Account

Dr. **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
1986		Rs.	1986		Rs.
Jan. 1	To MMC Ltd.	20,000	Dec. 31	By Depreciation A/c	2,000
			Dec. 31	By Balance c/d	18,000
		20,000			20,000
1987			1987		
Jan. 1	To Balance b/d	18,000	Dec. 31	By Depreciation A/c	1,800
			Dec. 31	By Balance c/d	16,200
		18,000			18,000
1988			1988		
Jan. 1	To Balance b/d	16,200	Dec. 31	By Depreciation A/c	1,620
			Dec. 31	By Balance c/d	14,580
		16,200			16,200

Interest Suspense Account

Dr.					Cr.
		Rs.			Rs.
1986 Jan. 1	To MMC Ltd.	1,384	1986 Dec. 31	By Interest A/c (annual charge)	681
				By Balance c/d	703
		1,384			1,384
1987 Jan. 1	To Balance b/d	703	1987 Dec. 31	By Interest A/c	465
				By Balance c/d	238
		703			703
1988 Jan. 1	To Balance b/d	238	1988 Dec. 31	By Interest A/c	238
		238			238

Interest Account

Dr.					Cr.
		Kc			Rs
1986 Dcc. 31	To Interest Suspense A/c	681	1986 Dec. 31	By Profit & Loss A/c	681
		681			681
1987 Dec. 31	To Interest Suspense A/c	465	1987 Dec. 31	By Profit & Loss A/c	465
		465			465
1988 Dcc. 31	To Interest Suspense A/c	238	1088 Dec. 31	By Profit & Loss A/c	238
		238			238

Working Note:

Stntemcnt showing calculation of Interest for deferment period

Particulars	Amount	Principal	Interest	Total
	Rs.	Rs. (a)	Rs. (b)	Rs. c = (a + b)
Cash Rice (6384 + 13616)	20,000			
1.1.86 Less : Down Payment	6,384	6,384		6,384
	13,616			
31.12.86 Add : Interest @ 5% ($\frac{5}{100}$ x 13,616)	681			
	14,297			
Less : 1st Instalment	5.000	4,319	681	5,000
	9,297			
31.12.87 Add . Interest @ 5% ($\frac{5}{100}$ × 9,217)	465			
	0.762			
Less : 2nd Instalment			465	5,000
	5,000	4,535		
31.12.88 Add : Interest @ 5% ($\frac{5}{100}$ × 4,262)	4,762			
	238			
	238			

	5,000			
Less : 3rd Instalment	5,000	4,762	238	5,000
Total	NIL	20,000	1,384	21,384

5.5.2 Books of the Vendor

The vendor passes the following journal entries when the goods are sold on instalment payment system.

i) **When the goods are sold**
Purchaser Dr. (with total price)
To Sales A/c (with cash price)
To Interest Suspense A/c (with the difference between the total price and cash price).

ii) **For cash received as down payment**
Bank A/c Dr.
To Purchaser

iii) **For interest due on instalment**
Interest Suspense A/c Dr.
To Interest A/c

iv) **For receipt of the amount of instalment**
Bank A/c Dr.
To Purchaser

v) **For transfer of interest to Profit & Loss A/c**
Interest A/c Dr.
To Profit & Loss A/c

Like the buyer the vendor also prepares certain Ledger accounts. They are ;

i) Buyer's Account
ii) Interest Suspense Account
iii) Interest Account

Look at the Illustration 4 and see how the accounts are maintained in the books of the vendor when the goods are sold on instalment payment system.

Illustration 4

We consider the problem given in Illustration 3 and prepare ledger accounts in the books of the vendor.

Solution :

In the books of MMC Ltd.
Fire Industries Ltd. Account

Dr. Cr.

Date	Particulars	Amount	Date	Particulars	Amount
1986		Rs.	1986		Rs.
Jan. 1	To Sales A/c	20,000	Jan. 1	By Bank A/c (down payment)	6,384
Dec. 31	To Interest Suspense A/c	1,384	Dec. 31	By Bnnk A/c (1st Instalment)	5,000
			Dec. 31	By Bnlance c/d	10,000
		21,384			21,384
1987			1987		
Jan. 1	To Balance b/d	10,000	Dec. 31	By Bank A/c (2nd instalment)	5,000
			Dec. 31	To Balance c/d	5,000
		10,000			10,000
1988			1988		
Jan. I	To Balance b/d	5,000	Dec. 31	By Bank A/c (3rd instalment)	5,000
		5,000			5,000

Interest Suspense Account

Dr.					Cr.
		Rs.			Rs.
1986 Dec. 31	To Interest A/c	681	1986 Jan. 1	By Fire Industries Ltd.	1,384
Dec. 31	By Balance c/d	703			
		1,384			1,384
1987 Dec. 31	To Interest A/c	465	1987 Jan. 1	By Balance b/d	703
Dec. 31	To Balance c/d	238			
		703			703
1988 Dec. 31	To Interest A/c	238	1988 Jan. 1	By Balance b/d	238
		238			238

Interest Account

Dr.					Cr.
		Rs.			Rs.
1986 Dec. 31	To Profit & Loss A/c	681	1986 Dec. 31	By Interest Suspense A/c	681
		681			681
1987 Dec. 31	To Profit & Loss A/c	465	1987 Dec. 31	By Interest Suspense A/c	465
		465			465
1988 Dec. 31	To Profit & Loss A/c	238	1988 Dec. 31	By Interest Suspense A/c	238
		238			238

Check Your Progress A

1) Fill in 'the blanks

   i) .Default is .... to act, appear or pay,

   ii) Possession of goods means .... of goods.

   iii) The act of .... of .... is termed as repossession.

   iv) Where a hire purchase agreement is .... due to default in payment, the hire vendor shall be entitled to enter the premises of the hire and .... the goods.

   v) In case of termination due to default in paynient the hire vendor is entitled to .... for non-delivery of goods.

   vi) Under an instalment payment system, the buyer gets the .... of the goods on the date of ....

2) State whether the following statements are True or.False.

   i) Under a hire purchase agreement, failure in payment of only the last instalment would be considered as a default.

   ii) On default, the vendor under the instalment payment system is entitled to retain the amount which has already been paid and recover the arrears of hire due.

   iii) After repossession a hire vendor has no right to resell the goods repossessed,

   iv) In case of an instalment payment system the buyer is entitled to dispose off the goods he has bought.

   v) Under an instalment payment system, the buyer can return the goods at any time.

5.6 LET US SUM UP

Under the hire purchase agreement, the hire vendor delivers only the physical possession of the goods to the buyer (the hirer) and not the title of the goods. Title passes whgn the payment of the last instalrnent is made, and, if the buyer makes default, the hire vendor has the right to repossess the goods. But, he can also enter into a compromise and repossess a part of the goods. When, on default by the buyer, the vendor repossesses only a part of the goods, he reassesses its value and adjusts the same against the amount due from hirer.

The basic difference between the hire purchase system and the instalment payment system relates to the point of time when the property in goods passes frorn the seller to the buyer. In case of hire purchase system. the property in goods passes at the time of payment of the last instalment while in case of instalment payment system it passes at the time of signing the contract. Accounting treatment in both systems is more or less the same. The only difference relates to the treatment of interest. In case of hire purchase system, the actual amount of interest is debited to the purchaser as and when the instalments fall due. But, in case of instalment payment system, the buyer is debited with the total amount of interest right at the time of sale by crediting it to Interest Suspense Account. This account is debited with the actual amount of interest as and when the instalments fal! due. Under this system. the buyer is treated as a debtor for the full amount including total interest. However, in practice, even this may be dispensed with.

5.7 'KEY WORDS

Default : Failure on the part of the hirer (the buyer of the goods) to pay instalment.

Instalment Sale : An ordinary sale transaction where the payments are made on deferred terms, but the buyer becomes the owner of the goods immediately on completion of the transaction.

Passing of title : Transfer of ownership,

Seizure : Repossession of goods within the provision of the law. A hire purchase agreement may give the right to the hire vendor to seize the goods he has sold if the hirer (the buyer) makes default in payment of instalments.

5.8 ANSWERS TO CHECK YOUR PROGRESS

A) 1 i) failure ii) physical holding iii) recovery, possession
iv) terminated, seize, v) damages vi) title, initial payment.

2 i) False ii) True iii) False iv) True v) False

5.9 TERMINAL QUESTIONS AND EXERCISES

Questions

1 Explain the terms 'Default' and 'Repossession' both in relation to a hire purchase transaction and an instalment sale transaction.

2 What are the rights of a hire vendor in case of default under the Hire Purchase Act, 1972?

3 What are the rights of hirer in case of seizure and repossession of goods under the Hire Purchase Act, 19727

4 Describe the difference between the accounting treatment under the hire purchase system and the instalment payment system.

5 Discuss in detail the similarities and dissimilarities of Hire Purchase System and Instalment Payment System.

Exercises

1 PQR Ltd. sold a piece of machinery to RST Ltd. on 1.1.86 under a hire purchase agreement. The payments were to be made in four annual instalments of Rs. 4,230 each at the end of each year. The rate of interest @ 5% was to be charged: RST Ltd. defaulted at the time of the third instalment and PQR Ltd. repossessed the machinery. RST Ltd. charged depreciation @ 10% p.a. on W.D.V. method.

Show necessary ledger accounts in the books of RST Ltd.

(**Answer** : Cash Price Rs. 15,000, Total Interest Rs. 1920, Loss on repossession Rs. 2,676).

2 Karim Ltd. purchased some furniture from Solman Ltd. on hire purchase system on 1.1.87 at a cash price of Rs. 60,000, of this Rs. 15,480 was to be paid as down payment and the balance in five annual instalments of Rs. 10,000 each. The rate of interest was charged @ 4% p.a. Karim Ltd., could only pay the first instalinent and, on default, Solman Ltd. repossessed the goods which were revalued by charging depreciation @ 15% p.a. on straight line method. On 1.3.89 Solman Ltd. incurred Rs. 1,500 for reconditioning of the goods and sold them at Rs. 45,000.

Show the ledger accounts in the books of Solman Ltd.

(**Answer** : Amount due from Karim Ltd, on 31.12.88 Rs. 37,753; Profit taken to P & L A/c in 1988 Rs. 4,247 : Profit on resale in 1989 Rs. 1,500.

3 Fair Ltd. purchased on 1.1.87 machinery valued at Rs. 12,000 from Unfair Ltd. under a hire purchase system under which the payments were to be made in three equal annual instalments of Rs. 4,000. The interest @ 6% p.a. was to be charged and paid along with the instalments.

Fair Ltd. could not pay the second instalment and it was agreed that Unfair Ltd. would partly repossess machinery costing Rs. 8,000 at Rs. 4,500 provided Fair Ltd. paid the 'arrear interest to-date.

Show ledger accounts in the books of Fair Ltd. assuming that depreciation @ 10% p.a. was charged on W.D.V. method.

(**Answer** : Loss on partial repossession Rs. 1,980, value of the machinery carried forward Rs. 3,240. Total amount of interest paid Rs. 1,200).

4 Ajay purchased five trucks on hire purchase on July I, 1986. The cash price of each truck was Rs. 1,00,000. He was to pay 25% of the cash price as down payment with the delivery and the balance in five yearly instalments together with the interest @ 5% per annum. Ajay fails to pay the third instalment due on June 30,1989. It was agreed that two trucks would be returned to the vendor and the value of these two trucks would be adjusted against the amount due. The trucks to be returned will be valued at depreciation of 25% p.a. on W.D.V. method.

The repossessed trucks were overhauled at a cost of Rs. 4,000 and sold for Rs. 90,000.

Show the necessary ledger accounts in the books of both the parties. Books are closed on June 30 every year and depreciation @ 20% per annum is charged.

(**Answer** : Goods Repossessed Rs. 84,375. Loss on Goods repossessed Rs. 18,025. Balance due to Hire Vendor Rs. 1,88,297)

5 Harish purchased from Ramesh some motor pumps on 1.1.87 under instalments payment system. The cash price was Rs. 74,466 which was to be paid Rs. 20,000 as down payment and the balance in three equal annual instalments of Rs. 20,000 including interest @ 5% p.a.

Show the ledger accounts in the books of Harish and Ramesh assuming depreciation @ 10% p.a. on straight line method.

(**Answer** ; Total Interest for Interest Suspense A/c Rs. 5,534 adjusted Rs. 2,723 in 1987, Rs. 1,859 in 1988 and Rs. 952 in 1990).

6 Lokesh purchased on 1.1.87 some machinery from Suresh 'under instalment payment system under which Rs. 6,000 was to be paid as down payment and the

rest in 3 equal annual instalments at interest @ 5%. The cost price was Rs. 22,350. Depreciation was charged @ 10% on W.D.V. method.

Show the ledger accounts in the books of both the parties.

(**Answer** : Total interest for Interest Suspense A/c Rs. 1,650 adjusted as Rs. 818 in 1987, Rs. 558 in 1988 and Rs. 274 in 1989)

Note: These questions and exercises will help you to understand the unit better. Try to write answers for them. Do not send your answers to the University for assessment. These are for your practice only.

UNIT 6 HIRE PURCHASE ACCOUNTS III

Structure

6.0 Objectives
6.1 Introduction
6.2 Basic Record for Goods of Small Value Sold on Hire Purchase
6.3 Relevant Terms
6.4 Ascertainment of Profit
  6.4.1 Treatment of Goods Repossessed
  6.4.2 Calculation of Missing Figures
6.5 Stock and Debtors System
6.6 Let Us Sum Up
6.7 Key Words
6.8 Answers to Check Your Progress
6.9 Terminal Questions and Exercises

6.0 OBJECTIVES

After studying this unit, you should be able to :

- explain the basic record maintained for hire purchase transactions of goods of small value,
- explain the terms like cost price, goods sold on hire purchase, hire purchase stock, hire purchase debtors, etc. considered relevant for ascertainment of profit on hire purchase business,
- prepare hire purchase trading account and ascertain the profit/loss on hire purchase business,
- ascertain the profit or loss on hire purchase business through stock and debtors method.

6.1 INTRODUCTION

In the previous two units you learnt about the accounting for hire purchase transactions in the books of both the hire purchaser and the hire vendor. This system of maintaining accounting records relates to hire purchase transactions for goods of substantial sales value. In practice, however, the goods bearing small value like fridge, T.V., scooter, etc. are also sold on hire purchase basis. The retailers often keep separate fecords for thcsc transactions and compute the profit on hire purchase business separately. This involves a peculiar method of accounting and profit ascertainment. In this unit we shall discuss the accounting treatment of hire purchase transactions for goods of small value and study the methods of ascertaining the profit or loss on such transactions during an accounting period.

6.2 BASIC RECORD FOR GOODS OF SMALL VALUE SOLD ON HIRE PURCHASE

You are aware of the fact that with advancement of technology and improvement in the standard of living of the people both in India and abroad, the demand for consumer durables like fridge, T.V., automobiles, etc. has increased manifold over the years. To meet this demand explosion, the dealers have come up with innovative schemes which attract the prospective consumers to purchase such goods. One such scheme is the sale on hire purchase basis. The consumers with limited resource are naturally interested in buying under this scheme in view of the benefits of deferred payment at reasonable rate of interest. Hence, a large volume of transactions in these goods are being conducted everyday.

It Should be noted that these transactions take place between a retailer (dealer) and the consumers, and not between two business units. Hence, **the accounting is important only for the vendor and not the buyer.** Let us now study how a hire vendor

(retailer) maintains the accounts when goods of small value are sold on hire purchase basis.

In case of hire purchase transactions of numerous goods of small value it becomes practically inconvenient for a particular dealer of these items to maintain separate accounts for each transaction. Hence, the accounting system is designed in such a way that overall control can be exercised on all the transactions during a particular accounting period through control accounts. However, for individual transactions, detailed record may be kept in a subsidiary book called 'Hire Purchase Sale Register' showing the necessary information as may be required to control individual accounts of the buyers. A specimen of the register is given in Figure 6.1.

Fig 6.1 : Hire Purchase Sales Register

S.No.	Date of Agreement	Name of Article	Name of Customer	Cost Price	Hire Purchase Price	Cash Down Payment	No. of Instalments	Instalments Due				Total Instalments Received	Instalments due but not paid	Instalments not yet due
								1	2	3	4			

In Hire Purchase Sales Register as given in Figure 6.1, you will observe that, besides the details of individual hire purchase transactions, there are columns showing cost price, hire purchase price, cash down payment, instalments received, instalments due but not yet paid, and instalments not yet due. The figures are very relevant for the accounting fur hire purchase transac'tions and the ascertainment of profit/loss from hire purchase business and, therefore, the accountant must be careful in recording the amounts and the casting (totalling) of these columns. The totals of these columns are posted to the relative control accounts periodically, say monthly, quarterly, half yearly, or yearly by passing the necessary journal entries.

6.3 RELEVANT TERMS

In connection with the accounting for goods of small value sold on hire purchase basis, we have to define certain terms before we study different methods of ascertaining the profit or loss on such transactions. These relevant terms are :

1 Cost price of goods sold on hire purchase
2 Value of goods sold on hire purchase
3 Cash received
4 Hire Purchase Debtors
5 Hire Purchase Stock
6 Stock at shop

1 **Cost price of goods sold on hire purchase** : You know the hire vendor is only a dealer. He purchases goods from various manufacturers and sells them to the consumers under hire purchase system. Naturally, he sells the goods at a price higher than the price at which he has bought. His mark-up on hire purchase sales is bound to be more than even the cash price because he has also to cover the loss of interest on such transactions. Normally, interest is accounted for separately as you studied in the case of sale of goods of a substantial value. But, **in the case of *sale* of goods of small value, interest is ignored and the profit is worked out on**

the basis of the difference between cost price and hire purchase price. This is called 'loading'. Loading is generally given in terms of percentage on cost or as percentage of hire purchase price. Usually you are provided with the figure of hire purchase price and you have to work out the cost price with the help of loading. Alternatively, both the hire purchase price and cost price are given and you may have to work out the loading for purposes of ascertaining profit or loss in hire purchase business.

2 **Goods sold on hire purchase** : For the purpose of finding out the profit or loss on the hire purchase business during an accounting period, we need the figure of the value of goods sold on hire purchase. This reflects the hire purchase price of all the goods sold on hire purchase basis during the accounting period. This is mostly given. If, however, the value of goods sold on hire purchase is not given, it can be worked out by applying the loading rate to the cost of goods sold on hire purchase. Alternatively, it can be worked out with the help of the first part of the Hire Purchase Trading Account. (This is explained in Section 6.4)

3 **Cash received** : This refers to the total amount received during the accounting period in respect of hire purchase sales wbether they relate to previous years or the current year. This includes the amount of down payment and the amount of instalments paid during the year.

4 **Hire Purchase Debtors** : It is also known as **'Instalments due but not yet paid'** or **'Instalment due, customers paying'.** Thus, it refers to the total amount of such instalments which have fallen due during the accounting period but have not yet been paid by the hire purchase customers. For purposes of profit on hire purchase business, the total of 'cash received' and 'hire purchase debtors' is taken as the 'realised sales' during an accounting period, and not the goods sold on hire purchase.

5 **Hire Purchase Stock** : You know when goods are sold on hire purchase basis, the customer makes some down payment and agrees to pay the balance in instalments. Some of these instalments become due during the accounting year when goods were sold to him while others shall become due during the following year/years. The instalments which have not become due during the current year, are called 'instalments not yet due' or 'hire purchase stock'. It should be noted that hire purchase stock does not mean stock of goods in the shop. It **is a special term used for the total amount of instalments which have not become due during the current year.** It represents the unrealised sales and needs adjustment of loading involved. This amount is required for the purpose of ascertaining profit or loss on hire purchase business.

The amount of 'instalments not yet due' (hire purchase stock) is usually given But, if it is not given the same can be worked out with the help of Hire Purchase Trading A/c.

6 **Stock at Shop** : 'Stock at shop' should not be confused with 'hire purchase stock'. You know that hire purchase stock represents the instalments not yet fallen due. But, the stock at shop is a common term used for unsold goods lying in store. The amount of stock at shop is not relevant to the ascertainment of profit or loss of the hire purchase business. This however, can be helpful in ascertaining the cost of goods sold on hire purchase which, in turn, helps the ascertainment of the value of goods sold on hire purchase (if not given) by adding the loading thereto.

6.4 ASCERTAINMENT OF PROFIT

For the ascertainment of profit or loss on goods of small value sold on hire purchase, we have to prepare a 'Hire Purchase Trading Account'. It is just like the Consignment Account prepared for ascertaining the profit/loss on consignment of goods invoiced at selling price. For preparing the Hire Purchase Trading Account, therefore, we require the amounts of goods sold on hire purchase, cash received, goods repossessed, hire purchase debtors (both at the beginning and at the end), hire purchase stock (both at the beginning and at thr end).

These figures can be extracted from the Hire Purchase Sales Register or the relevant control accounts and taken to Hire Purchase Trading Accounting by passing the necessary closing entries in the Journal. Further, we shall have to ascertain the

percentage of loading and the amount of expenses incurred on hire purchase business. The proforma of Hire Purchase Trading Account is given in Figure 6.2.

Figure 6.2 : Proforma of Hire Purchase Trading Account

Dr.	Hire Purchase Trading Account		Cr.
To H.P. Stock (opening)	...	By Cash Received	...
To H.P. Debtors (opening)	...	By Goods Repossessed (market value)	...
To Goods Sold on H.P. (at H.P. price)	...	By H.P. Stock (closing)	...
To Stock Reserve (loading on closing H.P. stock)	...	By H.P. Debtors (closing)	...
To Expenses	...	By Stock Reserve (loading on opening H.P. stock)	...
To Net Profit. (transferred to P & L A/c)	...	By Goods Sold on H.P. (loading)	...
	...		...

The proforma of Hire Purchase Trading Account as given in Figure 6.2 is the usual form in which the Hire Purchase Trading Account is prepared. But, it is better to divide it into two parts as shown in Figure 6.3, the first part to contain only those items which are recorded at H.P. price and the second part showing the adjustment of loading and the expenses, losses, etc. relating to hire purchase business for ascertaining the profit or loss.

Figure 6.3 : Another Proforma of Hire Purchase Trading Account

Dr.	Hire Purchase Trading Account		Cr.
To H.P. Stock (opening)		By Cash Received	...
To H.P. Debtors (opening)	...	By Goods Repossessed (instalments unpaid)	...
To Goods Sold on H.P. (at H.P. price)	...	By H.P. Stock (closing)	...
		By H.P. Debtors (closing)	...
	...		...
To Stock Reserve (loading on closing H.P. stock)	...	By Stock Reserve (loading on opening H.P. stock)	...
To Loss on Goods Repossessed (dif, between market value or cost and unpaid instalments)	...	By Goods sold on H.P. (loading)	...
To Expenses (on hire purchase business)			
To Profit (transferred to P & L A/c)			
	...		...

It should be noted that the totals **of two sides in the first part of the Hire Purchase Trading Account will be equal.** If they are not equal, it would mean that there is some mistake. Not only that, the first part can also help us in finding out the amount of any item which is missing (being the balancing figure) provided all the other figures are given.

Look at Illustration 1 and see how profit is ascertained in respect of goods of small value sold on hire purchase with the help of Hire Purchase Trading Account.

Illustration 1

Capital Electronics & Co. started business on 1.1.88 for selling electronic goods on hire purchase basis. During the year end on 31.12.88, the following transactions were made.

a) Krishna purchased a T.V. costing Rs. 3,000 at Rs. 4,500 payable Rs. 1,500 as down payment and the balance in 12 monthly instalments of Rs. 250 each,

b) Vim purchased one grinder costing Rs. 1,000 at Rs. 1,500 payable Rs. 300 as down payment and the balance in 12 monthly instalments of Rs. 100 each, and

c) Arjun purchased a refrigerator costing Rs. 2,400 at Rs. 3,000 payable Rs. 600 as down payment and the balance in 12 monthly instalment of Rs. 200.

As on 31.12.88, Krishna could not pay one instalment out of the seven instalments due, Vim could not pay one instalment out of the five instalments due, and Arjun could not pay the two instalments out of eight instalments due.

Calculate the profit or loss on Hire Purchase Transactions.

Solution :

Hire Purchase Trading Account

Dr.	Rs.		Cr. Rs.
To Goods Sold on Hire Purchase	9,000	By Cash Received	5,500
		By Goods Repossessed	
		By Hire Purchase Stock (closing)	2,750
		By Hire Purchase Debtors (closing)	750
	9,000		9,000
To Stock Reserve (loading on closing H.P. stock)	810	By Goods Sold on Hire Purchase (closing)	2,600
To Net Profit transferred to P & L A/c	1,790		
	2,600		2,600

Working Notes :

a **Goods sold on hire purchase** (H.P. Price)

		Rs.
i) TV purchased by Krishna		4,500
ii) Grinder purchased by Vim		1,500
iii) Refrigerator purchased by Arjun		3,000
	Total,	9,000

b **Cash received**

i) From Krishna	[Rs. 1,500 + (250 × 6)]		3,000
ii) From Vim	[Rs. 300 + (100 × 4)]		700
iii) From Arjun	[Rs. 600 + (200 × 6)3		1,800
		Total	5,500

c **Amount of instalment due but not paid (H.P. Debtors)**

i) From Krishna	Rs. 250 × 1		250
ii) From Vim	Rs. 100 × 1		100
iii) From Arjun	Rs. 200 × 2		400
		Total	750

d **Amount of instalment which are not due (H.P. Stock)**

i) From Krishna			
Amount not due	Rs. '250 × 5		1,250
ii) From Vim			
Amount not due	Rs. 100 × 7		700
iii) From Arjun			
Amount not due	Rs. 200 × 4		800
		Total	2,750

e) Loading

i) On **goods sold** on **hire purchase**

Hire Purchase Price - Cost Price

= (4,500 + 1,500 + 3,000) - (3,000 + 1,000 + 2,400)

= 9,000 - 6,400

= Rs. 2,600

ii) On **hire** purchase **stock (closing)**

	A.P. Stock	Loading				
	Rs.					Rs.
Krishna	1,250	$\frac{1,500}{4,500}$	×	1,250	=	417
Vim	700	$\frac{500}{1,500}$	×	700	=	233
Arjun	800	$\frac{600}{3,000}$	×	800	=	160
					Total	810

6.4.1 Treatment of Goods Repossessed

You know when the hire purchase customer commits default in payment of **instalments**, the vendor may repossess the goods. The amount of instalrnents unpaid (also termed as instalments due) in respect of such goods are shown on the credit side of the first part of the Hire Purchase Trading Account as shown in its ptoforma given in Figure 6.3.

If the market value of such goods is given or they have **been sold** out immediately on repossession, the difference between the unpaid amount and the market value (or **sale** value, if sold out) is treated as loss or profit on goods repossessed. If it is loss, the same is debited in the second part of the Hire Purchase Trading Account, and if it is profit (it is rare), the same can be shown on its credit side. **The difficulty arises when** the market **value or** sales value **of repossessed** goods **is not** available. **In** such a situation, **you** will **have** to adjust the loading **involved** in the **unpaid instalment** in **respect of such goods because its true value is equal to its proportionate cost.** Thus, having credited the **first** part of Hire Purchase Trading Account with amount of the unpaid instalments, you must debit the **amount** of loading included in the unpaid instalments. Alternatively, if you are preparing Hire Purchase Trading Account without dividing it into two parts, credit the Hire Purchasing Trading Account with. its true **value/market value/sale** value itself. In that case, no adjustment **will** be necessary.

Look at Illustration 2 and see how goods repossessed have been treated in the Hire Purchase Trading Account.

Illustration 2

Easy Payment Ltd, sells goods on hire purchase basis at a profit of 50% **on** cost. The following particulars are given for the year ending December 31, 1989. Prepare the Hire Purchase Trading Account,

	Rs.
Hire Purchase Stock (opening)	18,000
Instalments due, customers paying (opening)	10,000
Goods sold on hire purchase during the year (at hire purchase price)	1,74,000
Cash received from customers	1,20,000
Goods repossessed valued at (instalments due Rs, 6,000)	3,000
Hire Purchase Stock at the end	60,000
Instalments due (at the end), customers paying	16,000
Expenses	19,000

Solutions :

Dr. Hire Purchase Trading Account Cr.

	Rs.		Rs.
To Hire Purchase Stock (opening)	18,000	By Cash Received	1,20,000
To Hire Purchase Debtors (opening)	10,000	By Goods Repossessed (instalments unpaid)	6,000
To Goods sold on Hire Purchase	1,74,000	By Hire Purchase Debtors (closing)	16,000
		By Hire Purchase Stock (closing)	60,000
	2,02,000		2,02,000
To Loss on Goods Repossessed (dif. between instalments unpaid and market value)	3,000	By Stock Reserve (loading on opening H.P. stock)	6,000
To Stock Reserve (loading on closing H.P. stock)	20,000	By Goods sold on Hire Purchase (loading)	58,000
To Expenses	19,000		
To Profit & Loss A/c (Profit)	22,000		
	64,000		64,000

Working Notes :

1 Loading

a) On Opening H.P. Stock $18,000 \times \frac{50}{150} =$ Rs. 6,000

b) On Goods Sold on H.P. $1,74,000 \times \frac{50}{150} =$ Rs. 58,000

c) On Closing H.P. Stock $60,000 \times \frac{50}{150} =$ Rs. 20,000

2 Loss on Goods Repossessed : Amount of unpaid instalments less Market Value = 6,000 – 3,000 = Rs. 3,000

Alternatively

Dr. Hire Purchase Trading Account Cr.

	Rs.		Rs.
To Hire Purchase Stock (opening)	18,000	By Cash Received	1,20,000
To Hire Purchase Debtors (opening)	10,000	By Goods Repossessed (market value)	3,000
To Goods sold on Hire Purchase (H.P. price)	1,74,000	By Hire Purchase Debtors (closing)	16,000
To Stock Reserve (loading on closing H.P. stock)	20,000	By Hire Purchase Stock (closing)	60,000
To Expenses	19,000	By Stock Reserve (loading on opening H.P. stock)	6,000
To Net Profit (transferred to P & L A/c)	22,000	By Goods Sold on H.P. (loading)	58,000
	2,63,000		2,63,000

6.4.2 Calculation of Missing Figures

Many times some of the figures needed to calculate the profit or loss on sale of goods of small value on hire purchase are missing. These items may be H.P Stock (at the beginning or at the end), instalments due (opening or closing), purchases, cash received, etc. Therefore, it becomes necessary to first calculate the figures of these

items and then prepare the Hire Purchase Trading Account. If **there is only one figure missing, the same can be** worked out **with the help of the first part of the Hire Purchase** Trading **Account.** But, if more than one figure is missing, the following steps should be taken for the calculation of the missing figures.

1 Prepare three memorandum accounts in the order mentioned below
   i) Memorandum Stock at Shop Account,
   ii) Memorandum Stock out with Customers Account or Hire Purchase Stock Account, and
   iii) Memorandum Instalments Due Account or Hire Purchase Debtors Account.

2 Fill up all the figures given.

3 Start with the account having maximum figures available. This will help you to find out the missing figure of that account.

4 Transfer the figure so calculated to the relevant account.

5 Stock at Shop Account shows all figures at cost, whereas Hire Purchase Stock Account and Hire Purchase Debtors Accounts shows all figures at hire purchase price. Therefore, while transferring any figure from Stock at Shop Account to the other accounts, the figure should be raised to hire purchase price. Similarly, while transferring any amount from other accounts to the Stock at Shop Account, the figure has to be brought down to cost.

6 The process of transfer will continue until all the amounts are filled in these accounts.

The Proforma of the three accounts is given below.

Dr. Memorandum Stock at Shop Account Cr.

	Rs.		Rs.
To Balance b/d		By Goods Sold on Hire Purchase (at cost) (1)	
To Purchases		By Balance c/d	

Memorandum Hire Purchase Stock Account

	Rs.		Rs.
To Balance b/d		By Instalment Due (2)	
		By Goods Repossessed (instalments not yet fallen due)	
To Goods Sold on Hire Purchase (at H.P. price) (1)		By Balance c/d	

Memorandum Hire Purchase Debtors Account

	Rs.		Rs.
To Balance b/d		By Cash Received from Customers	
To Stock with Customer Account (total instalments fallen due) (2)		By Goods Repossessed (instalment due but not paid)	
		By Balance c/d	

Illustration 3 will help you **to** understand **the calculation of missing** figure for the preparation of Hire Purchase Trading Account.

Illustration 3

Home Appliances Ltd. sell goods on hire purchase terms at a profit of 25% on hire purchase price. Following are the transactions for the year ended December 31, 1989.

		Rs.
January 1	Stock out on hire at cost	6,000
	Stock on hand (at shop)	1,000
	Instalrnent due	600
	Cash Received	16,000
December 31'	Stock out on hire (at cost)	6,900
	Stock on hand (at, shop)	1,400
	Instalrnent due	1,000

Calculate the profit or loss on hire purchase under Debtors Method.

Solution :

Hire **Purchase Trading** Account

Dr..	Rs.		Cr. Rs.
To Stock with Customers	8,000	By Cash Received	16,000
To Instalments Due	600	By Stock with Customers	9,200
To Goods Sold on Hire Purchase	17,601)	By Instalment Due	1,000
	26,200		26,200
To Stock Reserve (loading)	2,300	By Stock Reserve (loading)	2,000
To Profit & Loss A/c (Profit)	4,100	By Goods sold on Hire Purchase (loading)	4,400
	6,400		6,400

Working Note :

Calculation of missing figure

Memorandum Stock at **Shop** Account

Dr.	Rs.		Cr. Rs.
To Balance b/d	1,000	By Stock with Custbmers (at cost)	13,200
To Purchases (balance figure)	13,600	By Balance c/d	1,400
	14,600		14,600

Memorandum Stock with Customers Account

	Rs.		Rs.
To Balance b/d	8,000	By Instalment Due	16,400
To Stock at Shop (at hire purchase price) (missing figure)	17,600	By Balance c/d	9,200
	25,600		25,600

Memorandum Instalments Due Account

	Rs.		Rs.
To Balance b/d	600	By Cash Received	16,000
To Stock with Customers (balancing figure)	16,400	By Balance c/d	1,000
	17,000		17,000

Check Your Progress A

1 Fill in the blanks

i) The accounting treatment of goods of small value is recorded in the books of .... only.

ii) The vendor maintains a ....register.

iii) The vendor prepares ....Account to calculate profit or loss on hire purchase business.

iv) Goods sold on hire purchase are shown on the ....side of the Hire Purchase Trading Account.

v) Loss on goods repossessed by the vendor is equal to the difference between the market value of the goods repossessed and the .... in respect of such goods.

vi) Three Accounts prepared for the calculation of missing figures are Stock at Shop Account, ...Account and Instalments Due Account.

2 What do you understand by Hire Purchase Debtors?

....

....

....

....

3 What do you mean by Hire Purchase Stock?

....

....

....

....

6.5 STOCK AND DEBTORS SYSTEM

The profit or loss for an accounting period on goods of small value sold on hire purchase basis can also be ascertained by another method called 'Stock and Debtors System'. This system is similar to the system followed in case of branch accounts. Under this system, we make use of the four control accounts viz (i) Hire Purchase Stock Account, (ii) Hire Purchase Debtors Account, (iii) Goods Sold on Hire Purchase Account, and (iv) Goods Repossessed Account; and prepare Hire Purchase Adjustment Account for working out the profit or loss on the hire purchase business. The Hire Purchase Adjustment Account is similar to the second part of the Hire Purchase Trading Account wherein entries are made for the loading involved in the goods sold on hire purchase and the opening and closing balances of hire purchase stock (instalments not yet due), and shows the expenses and losses relating to the hire purchase business. The balancing figure in the Hire Purchase Adjustment Account represents the profit or loss on the hire purchase business.

The following journal entries are passed under this system to open the necessary accounts in the ledger.

1 For goods sold on hire purchase

Hire Repossessed A/c Dr.

To Goods sold on H.P. A/c

2 **For total instalments due during the year**
Hire Purchase Debtors A/c Dr.
To Hire Purchase Stock A/c

3 **For cash received**
Cash A/c Dr.
To Hire Purchase Debtors A/c

4 **For goods repossessed** (unpaid instalments)
Goods Repossessed A/c Dr.
To Hire Purchase Stock A/c

5 **For loading on goods sold on H.P.**
Goods sold on H.P. A/c Dr.
To Hire Purchase Adjustment A/c

6 **For loading on opening W.B. stock**
Stock Reserve A/c Dr.
To Hire Purchase Adjustment A/c

7 **For loading on closing N.P. stock**
Hire Purchase Adjustment A/c Dr.
To Stock Reserve A/c

8 **For loss on goods repossessed**
Hire Purchase Adjustment A/c Dr.
To Goods Repossessed A/c

(With difference between'instalments unpaid and market value of goods repossessed **or** for loading only)

9 **For expenses on hire purchase business**
Hire Purchase Adjustment A/c Dr.
To Expenses A/c

10 **For transfer of profit on hire purchase business**
Profit & Loss A/c Dr.
To Hire Purchase Adjustment A/c
In case of loss, the entry can be reversed

11 **For closing good sold on Hire Purchase Account**
Goods Sold on H.P. A/c Dr.
To Trading (Stock at shop) A/c

Look at Illustrations 4 and 5 and see how profit or loss is ascertained with the help of control accounts under the Stock and Debtors System:

Illustration 4

Prepare necessary accounts in the books of S.S.K. & Co. who sold goods at a profit @ 25% on cost price, with the help of the following information. Follow Stock and Debtors System.

	Rs.
Stock In Shop	
On 1.4.88	15,000
On 31.3.89	12,500
Goods with customers on hire purchase on 1.4.88	18,000
Purchases for shop stock	32,300
Goods sold on H.P. during the year 88-89	43,500
Instalments received	30,000
Overdue Instalments	
On 1.4.88	1,000
On 31.3.89	1,500

Solution :

Hire Purchase Stock Account

Dr.	Rs.		Cr. Rs.
To Balance b/d	18,000	By Hire Purchase Debtors A/c (1)	30,500
To Goods Sold on Hire Purchase A/c	43,500	By Balance c/d	31,000
	61,500		61,500
To Balance b/d	31,000		

Hire Purchase Debtors Account

	Rs.		Rs.
To Balance bid	1,000	By Bank A/c	30,000
To Hire Purchase Stock Aic (1) (amount of instalments due - balancing figure)	30,500	By Balance c/d	1,500
	31,500		31,500
To Balance b/d	1,500		

Goods Sold on Hire Purchase Account

	Rs.		Rs.
To Hire Purchase Adjustment A/c	8,700	By Hire Purchase Stock A/c	43,500
To Shop Stock	34,800		
	43,500		43,500

Hire Purchase Adjustment Account

	Rs.		Rs.
To Stock Reserve A/c (loading on closing M.P.Stock)	6,200	By Stock Reserve A/c (loading on opening H.P. stock)	3,600
To Profit & Loss A/c (balancing figure)	6,100	By Goods Sold on I-I.P. A/c (loading)	8,700
	12,300		12,300

Working Notes:

Loading is 25% on cost. The figures of items on which loading is to be calculated are given at H.P. price. Hence, the loading on various items has been calculated as follows:

i) On goods sold on H.P. $= 43{,}500 \times \frac{25}{125}$ = Rs. 8,700

ii) On opening H.P. stock $= 18{,}000 \times \frac{25}{125}$ = Rs. 3,600

iii) On closing H.P. stock $= 31{,}000 \times \frac{25}{125}$ = Rs. 6,200

Illustration 5

Taking the information from Illustration 2, ascertain the profit on hire purchase business by following the Stock and Debtors system.

Solution :

Dr. Hire Purchase Stuck Account Cr.

	Rs.		Rs.
To Balance b/d (at hire purchase price)	18,000	By Hire Purchase Debtors A/c (balancing figure)	1,28,000
		By Goods Repossessed A/c	6,000
To Goods Sold on Hire Purchase A/c (at hire purchase price)	1,74,000	By Balance c/d (at hire purchase price)	60,000
	1,92,000		1,92,000
To Balance b/d	60,000		

Dr. Hire Purchase Debtors Account Cr.

	Rs.		Rs.
To Balance b/d	10,000	By Cash A/c	1,20,000
To Hire Purchase Stock A/c (total instalment due—balancing figure)	1,26,000	By Balance c/d	16,000
	1,36,000		1,36,000
To Balance b/d	16,000		

Dr. Goods Repossessed Account Cr.

	Rs.		Rs.
To H.P. Stock A/c	6,000	By H.P. Adjustment A/c (loss being the dif. betweeninstalments unpaid and its market value)	3,000
		By Balance c/d	3,000
	6,000		6,000
To Balance b/d	3,000		

Dr. Hire Purchase Adjustment Account Cr.

	Rs.		Rs.
To Stock Reserve A/c (loading on closing H.P. stack)	20,000	By Stock Reserve A/c (loading on opening H.P. Stock)	6,000
To Loss on Goods Repossessed (diff. between instalment due and market price)	3,000	By Goods Sold on Hire Purchase A/c (loading)	58,000
To Expenses A/c	19,000		
To Profit & Loss A/c (profit)	22,000		
	64,000		64,000

Check Your Progress B

1 Fill in the blanks

i) Hire Purchase Adjustment Account shows the .... on the opening and closing stocks, and the goods sold on hire purchase,

ii) Hire Purchase Debtors Account is credited with the closing balance and ....

iii) The Goods Sold on Hire Purchase are shown at .... in Shop Stock Account.

iv) The loss on goods repossessed is shown on the debit side .... Account.

v) The balance of .... Account represents the value of stock with customers at .... price.

2 List the accounts opened for ascertaining the profit or loss on hire purchase business under the Stock and Debtors System.

....

....

....

6.6 LET US SUM UP

When the goods of small value are sold on hire purchase terms, a special accounting treatment is required. The accounting records of sale of such goods are maintained by the vendor only. He keeps a Hire Purchase Sale Register with appropriate columns. The totals of thdse columns are posted in different control accounts periodically.

There are two methods of ascertaining profit or loss on goods of small value sold on hire purchase. They are : (i) Debtors method under which Hire Purchasing Trading Account is prepared, and (ii) Stock and Debtors Method.

The Hire Purchase Trading Account is like Consignment Account; the first part of which shows the opening H.P. stock, opening H.P. debtors and the goods sold on hire purchase on the debit side, and cash received, goods repossessed and closing H.P. stock and H.P. debtors on the credit side. The total of these two sides should be equal. Its second part mainly shows the loading on goods sold on hire purchase, loading on opening and closing stocks, the loss on goods repossessed and the expenses on hire purchase business. The difference represents the profit or loss on hire purchase business which is transferred to the Profit & Loss Account.

Sometimes, certain items needed to prepare Hire Purchase Trading Account may be missing. These can be ascertained by preparing three memorandum accounts : (i) Stock at Shop Account, (ii) Stock with Customers Account, and (iii) Instalments Due Account. If, however, only one item is missing, it can be ascertained directly from the first part of the Hire Purchase Trading Account.

Under Stock and Debtors Method, the accounts prepared for ascertaining the profit or loss on hire purchase business are :
(i) Goods sold on Hire Purchase Account, (ii) Mire Purchase Stock Account, (iii) Hire Purchase Debtors Account, (iv) Goods Repossessed Account, and (v) Hire Purchase Adjustment Account. The Hire Purchase Adjustment Account is nothing but the second part of Hire Purchase Trading Account which shows the profit or loss on Hire Purchase sale. It is similar to Branch Adjustment Account prepared in case of branch accounts.

6.7 KEY WORDS

Control Accounts : Accounts prepared with aggregate figures to check the accuracy of respective accounts like H.P. Stock, H.P. Debtors, etc.

Hire Purchase Debtors : Amount of instalment due but not yet paid.

Hire Purchase Stock : Instalments not yet fallen due.

Hire Purchase Trading Account : An account prepared far ascertaining the profit or loss on goods of small value sold on hire purchase basis.

Stock Reserve : Amount of loading involved in hire purchase stock.

Stock at Shop : Stock of unsold goods lying in the store.

6.8 ANSWERS TO CHECK YOUR PROGRESS

A 1 i) vendor ii) hire purchase sales iii) hire purchase trading
iv) debit v) instalment unpaid vi) stock with customers.

B 1 i) loading ii) cash received iii) cost iv) hire purchase adjustment
v) hire purchase stock, hire purchase.

6.10 TERMINAL QUESTIONS AND EXERCISES

Questions

1 Describe how you can keep a detailed record of individual transactions in a subsidiary book.

2 State the journal entries passed to open various accounts under Stock and Debtors System as applicable to hire purchase business.

3 Distinguish between 'Stock and Debtor System' and 'Hire Purchase Trading A/c Method' (Debtors System) of ascertaining profit or loss on goods of small value sold on hire purchase basis.

Exercises

1 Premier Trader Co., a hire vendor, furnished the following information for the year ended 31.12.1988.

	Rs.
Goods with hire purchase Customers (at hire purchase price) on 1.1.1988	32,000
Goods sold on hire purchase during the year (at hire purchase price)	1,60,000
Cash received during the year	1,12,000
Goods received back (instalments unpaid Rs. 4,000) at market value	*600*
Goods with hire purchase customers (at hire purchase price) on 31.12.1988	72,000

Prepare Hire Purchase Trading Account in the books of Premier Trader Co. who sold goods on hire purchase at cost plus 60%.

(Answer : Profit Rs. 41,600; Missing figure : H.P. Debtors at the end Rs. 4,000)

2 From the following transactions of Lee Ltd.. a hire vendor, prepare the necessary accounts under Debtors Method in its books for the year ended 31.12.88. The goods are sold at cost plus 33 1/3.

		Rs.
January 1,1988	Stock in the shop	2,000
	Instalments due	1,200
	Stock with customers at H.P. price	16,000
December **31.12.88**	Stock in the shop	2,800
	Instalments due and unpaid	2,000
	Stock with customers at H.P price	18,400
	Cash received during the year	32,000
	Expenses on hire purchase business	3,000
	Purchases	27,200

(Answer : Goods sold on Hire Purchase at H.P price Rs. 35,200; Profit Rs. 5,200)

3 H.C. Sales, a hire vendor, was engaged in hire purchase business. The following information is provided to you for the year ended December 31,1988, in respect of his business.

		Rs.
January 1,1988	Stock with Customers at H.P. price	4,500
	Instalment due	2,500

December 31, 1988	Cash received from customers	30,000
	Goods repossessed (instalrnents due Rs. 1,000) at market value	650
	Instalment due	4,500
	Goods sold on hire 'purchase	43,500

Prepare necessary accounts under Stock and Debtors System assuming H.P. Price at cost plus 50%.

(**Answer** : Net profit Rs. 10,650 missing figure H.P. Stock at end Rs. 15,000)

4 Following information was available for the year ended June 30,1988, in respect of Auto Dealers Ltd. who was engaged in hire purchase business. Calculate the amount of profit under Stock and Debtors Method.

		Rs.
July 1,1987	Instalments due	4,000
	Stock. at shop	12,000
	Stock out with customers (at H.P. Price)	25,000
	Cash received during the year	2,00,000
	Purchases	1,67,000
	Goods repossessed (instalments due Rs. 3,000) valued at	500
June 30, 1988	Instalments due	6,000
	Stock at shop	11,000
	Stock out with customers (at H.P. Price)	30,000

The goods were sold on purchase at 20% on hire purchase price.
(Answer : Profit Rs. 38,500'1

5 Girdhari also sells goods on hire purchase basis. The hire purchase price is fixed by adding 50% to the cost. The following are the figures relating to his hire purchase business for the year 1989.

	Rs.
H.P. Stock as **on** 1.1.1989	36,000
H.P. Debtors as on 1.1.1989	900
Goods sold on hire purchase at **H.P.** price	2,71,800
Cash received during the year	2,77,200
Total amount of instalments that fell due during 1989	2,78,100

A customer to whom goods had been sold for Rs. 3,600 paid three instalments of Rs. 300 each. His fourth instalment fell due on December 1, 1989 which he failed to pay. Consequently, the goods were repossessed on December 27, 1989 after due legal notice.

Prepare the necessary accounts under the Stock and Debtors System for the year ending December 31, 1989.

(**Answer** : Profit Rs. 92,600; Missing figures; **H.P.** Stock at the end Rs. 27,300 and H.P. Debtors at the end Rs. 1,500 after crediting Rs, 2,400 and Rs. 300 for goods repossessed.)

Note: These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University. These are for your practice only.

SOME USEFUL BOOKS

Maheshwari S.N., 1984. Introduction to Accounting, Vikas Publishing House : New Delhi. (Chapter 6 Section II)

Monga J.R. and G. Ahuja, 1989. ***Financial Accounting,*** National Publishfng House. New Delhi. (Chapter 6 Section II)

William Pickles, 1982. ***Accountancy,*** E.L.B.S. and Pitman, London. (Chapter 20)

Gupta, R.L. and M. Radhaswamy, 1986. ***Advanced Accountancy,*** Vol. *I*. Sultan Chand & Sons, New Delhi (Chapter 12)

Shukla, M.C. and T.S. Grewal, 1987. ***Advanced Accounts,*** S. Chand & Co. (Pvt.) Ltd., New Delhi. (Chapter 14)

UNIT 7 GENERAL INTRODUCTION AND DISTRIBUTION OF PROFITS

Strueture

7.0 Objectives
7.1 Introduction
7.2 What is Partnership?
7.3 Partnership Deed
7.4 . Provisions Affecting Partnership Accounts
7.5 Distribution of Profits
7.5.1 Profit and Loss Appropriation Account
7.5.2 Calculation of Interest on Capital
7.5.3 Calculation of Interest on Drawings
7.6 Guarantee of Minimum Profit to a Partner
7.7 Past Adjustments
7.8 Fixed and Fluctuating Capitals
7.9 Final Accounts
7.10 Let Us Sum Up
7.11 Key Words
7.12 Answers to Check Your Progress
7.13 Terminal Questions/Exercises

7.0 OBJECTIVES

After studying this unit you will be able to:

- define partnership
- explain the need for partnership deed and list its contents
- describe the provisions of the Partnership Act which, in the absence of specific provision in the partnership agreement, are relevant for accounts
- distribute the profits of the firm among the partners
- prepare capital accounts under both fixed and fluctuating capital methods
- prepare the final accounts of a partnership firm

7.1 INTRODUCTION

You have learnt about the basics of an accounting system and the preparation of final accounts of a sole proprietory concern. But you know that a large number of business units are owned by partnership firms and joint stock companies. Though, the basic principles and the process of accounting are similar in all cases, there are certain pecularities in the accounts of a partnership firm and those of a company. In the case of partnership firm, for example, the pecularities relate to the distribution of profits, the maintenance of capital accounts and the adjustments required when a firm is reconstituted. In this unit you will learn about the provisions of Partnership Act which affect accounts and study the method of distribution of profits among the partners and the preparation of firm's final accounts.

7.2 WHAT IS PARTNERSHIP?

A partnership consists of more than one owner, It is formed by individuals who contribute capital, skill and administrative ability, and agree to share profits and losses of the business. According to Section 4 of the Partnership Act 1932, partnership means "the relationship between persons who have agreed to share the profits of a business catried on by all or any of them acting for all" The persons who come together to form partnership are indjvidually known as 'partners' and collectively a 'firm'.

From the above definition we can say that the following constitute the essential features of partnership.

i) Agreement: Partnership is created by an agreement and not by operation of law as in case of Hindu Undividual Family. The agreement forms the basis of their mutual relationship.

ii) Number of Persons: There must be at least two persons to form a partnership. The maximum number of persons constituting a partnership must not exceed 10 in the case of banking business and 20 in any other business.

iii) Business: The agreement should be to carry on some business so as to make profits. A joint ownership of some property does not constitute partnership.

iv) Sharing profits and losses: The agreement must be to share the profits and losses of the business. An agreement entered into by individuals for a charitable purpose will not treated as a partnership.

v) Mutual Agency: The business may be carried on by all the partners or any of them acting for all. Thus, each partner acts in two capacities, one as an agent and the other as a principal. He can bind the firm and its other partners by his acts' and he is also bound by the acts of other partners with regard to the business of the firm.

7.3 PARTNERSHIP DEED

A partnership comes into existence by an agreement among the partners. This agreement can be either oral or in writing. The law does not stipulate the partners to have a written agreement. But in order to avoid the disputes that are likely to arise in the conduct of bu'siness, a written agreement is preferred. A written document containing the terms and conditions of the conduct of partnership business is called 'partnership deed'. The partners are free to incorporate any provision in the deed subject to the Indian Partnership Act, 1932. A partnership deed generally consists of particulars relating to the following:

1) Name of the firm and place of business
2) Names and addresses of all the partners
3) Nature of business and its duration
4) The amount of capital to be contributed by each partner
5) The accounting period of the firm
6) The bank where the money is to be deposited and the authority of the partners to sign the cheques or documents
7) Profit and loss sharing ratio
8) Rate of interest both on capitals and drawings
9) The maximum amount and period of drawings
10) Loans from partners and the rate of interest on such loans
11) Conditions regarding the payment'of salary and commission to the partners
12) Rights, duties and liabilities of partners
13) Methods of maintaining accounts, their audit, and revaluation of assets and liabilities at the time of admission of a new partner or retirement of any partner,
14) Valuation and treatment of goodwill in the case of admission of a new partner or retirement or death of an existing partner
15) Treatmeht of loss arising out of insolvency of one or more partners
16) Method of settling the dues of deceased partner to his legal representatives
17) Method of settling disputes among the partners
18) Procedure for the dissolution and settlement of accounts after the dissolution
19) Any other matter relating to the conduct of business

7.4 PROVISIONS AFFECTING PARTNERSHIP ACCOUNTS

In the absence of any written or oral agreement among the partners, the following provisions of the Partnership Act shall apply.

i) Profit Sharing: .Partners share the profits and losses of the firm equally irrespective of their capital contribution.

ii) Interest on Capital: No partner is entitled to claim any interest on the amount of capital contributed. Where, however, the agreement provides for interest on capital it is payable only out of the profits of the business. In other words, if there are losses, interest on capital will not be allowed even if the agreement so provides.

iii) Interest on loan: If any partner, apart from his share of capital, advances loan to the firm, he is entitled to receive interest at the rate of 6 per cent per annum.

iv) Interest on drawings: No interest will be charged on drawings made by the partners.

v) Remuneration to partners: No salary or commission will be paid to any of the partners for participating in the business of the firm.

Check Your Progress A

1 Why is it considered desirable to make a partnership agreement in-writing?

....

....

....

2 Define partnership deed.

....

....

....

3 A,B and C were partners who contributed Rs. 1,00,000, Rs. 80,000 and Rs. 70,000, respectively as capital. C advances a loan of Rs. 50,800 to the firm.

i) How do they share profits

ii) In what form C's loan is remunerated and at what rate?

iii) For taking part in management, B claims a salary of Rs. 6,000 per annum. Is he entitled to it?

7.5 DISTRIBUTION OF PROFITS

The profits or losses of the firm are distributed among the partners in an agreed ratio. If, however, there is 'no provision in the agreement with regard to the sharing of profits, they will be shared equally.

7.5.1 Profit and Loss Appropriation Account

In case of a sole trader, the net profit or net loss as ascertained by the Profit and Loss Account is directly transferred to the Capital Account of the proprietor.

But, this is not so in the case of partnership. There are certain items like interest on capitals, interest on drawings, salary or commission to partners, etc. which are to be adjusted before the profits or losses of the firm can be distributed among the partners. For this purpose, another account called 'Profit and Loss Appropriation Account' may be prepared. This is merely an extension of the Profit and Loss Account. It is credited with net profit and interest on drawings; and is debited with interest an capitals, salary or commission to partners, etc. Sometimes, there may be net loss in the Profit and Loss Account. In'such a case, the loss will be shown on the debit side of Profit and Loss Appropriation Account, After incorporating all these adjustments, the balance in the Profit and Loss Appropriation Account being net profit or net loss shall be transferred to the partners' capital accounts in their profit sharing ratio.

The proforma of Profit and Loss Appropriation Account is given in Figure 7.1.

Figure 7.1 Proformn of Profit and Loss Appropriation Account

Profit and Loss Appropriation Account
for the year ended.........

Dr.	Rs.		Cr. Rs.
To Profit and Loss A/c (if there is loss)		By Profit and Loss A/c (if there is profit)	
To Interest on Partners' Capitals		By Interest on Drawings	
To Partners' Salary		By Partners' Capital A/cs (distribution of loss)	
To Partners' Commission			
To Interest on Partners' Loan			
To Partners' Capital A/cs (distribution of profit)			

Look at illustration 1 and see how profit or loss is distributed among the partners by preparing the Profit and Loss Appropriation Account.

Illustration 1

A, B and C set up a partnership firm on January 1, 1990. They contributed Rs. 50,000, Rs. 40,000 and Rs. 30,000, respectively as their capitals and agreed to share profit and loss in the ratio of 3:2:1. A is to be paid a salary of Rs. 1,000 per month and B a commission of Rs. 5.000. It is also provided that interest be allowed at 6% p.a. The drawings for the year were A-Rs. 6,000, B-Rs. 4,000 and C-Rs. 2,000. Interest on drawings was charged Rs. 270 on A's drawings, Rs. 180 on B's drawings and Rs. 90 on C's drawings. The net profit as per the Profit and Loss Account for the year 1990 was Rs. 35,660. Prepare the Profit and Loss Appropriation Account to show the distribution of profits among the partners.

Solution

Profit and Loss Appropriation Account

Dr.	Rs.		Cr. Rs.
To A's Salary	12,000	By Net Profit	35,660
To B's Commission	5,000	By Interest on Drawings	
To Interest on Capital A 3,000 B 2,400 C 1,800	7,200	A 270 B 180 C 90	540
To Share of Profit transferred to Capital A/cs A 6.000 B 4.000 C 2,000	12,000		
	36,200		36,200

7.5.2 Calculation of Interest on Capital

You know interest on partner's capital is not allowed unless the partnership agreement makes a special provision for it. Allowing interest on partners capital can be justified where all partners actively participate in firm's business but do not contribute capitals in their profit sharing ratio. The interest on capital is calculated at the given rate with reference to time period. In case there is no addition to capital during the year, the interest is calculated on the opening balance in the capital account. If, however, any partner introduces additional capital during the year, the interest on this additional cepital will also have to be calculated. This is worked out for that part of the period for which it remained with the business. For example, Ram

and Shyam were partners in a firm. Their capital accounts showed the balances of Rs. 30,000 and Rs. 20,000, respectively on 1.1.1990. Ram introduced additional capital of Rs. 10,000 on 1.7.1990. The sate of interest on capital is given as 6% per annum. If the accounting year closes on December 31, 1.990, the interest on capital allowed to Ram and Shyam shall he worked out as follows:

For Ram
On Rs. 30,000 far full year 1,800
On Rs. 10,000 for 6 months 300 2,100

For Shyam
On Rs. 20,000 for full year 1,200

It should be noted that no interest is worked out on the partners Current Account balances when capital accounts are maintained at fixed capital method. You will learn about the fixed and fluctuating capital methods in Section 7.8 in this unit.

7.5.3 Calculation sf Interest on Drawings

Interest on drawings can also be charged provided the partnership agreement makes a special provision in this regard. This may be justified on the grounds of discouraging overwithdrawal by the partners. Interest on drawings is also charged with reference to time period. **When the dates of drawings are not specified, the interest on drawings is calculated on the total** amount **of drawings for a period of six months based on the assumption that the amounts arc drawn evenly throughout the year.** But, when the date of drawings are clearly given, the interest must be calculated separately for each amount based on the period involved. Alternatively, you can use the **product method** and calculate the interest on the sum of the products for one month or one day, as the case may be. Look at Illustration 2 for use of the product method for calculating interest on drawings.

Illustration 2

Gopal is a partner in a firm, who withdrew the following sums during the year:

January 31,1988	Rs. 600
March 31,1988	Rs. 400
April 1,1988	Rs. 800
September 30,1988	Rs. 300
October 31, 1988	Rs. 500

The accounts of the firm are closed on December 31, 1989. Interest on drawings is charged at 6 per cent per annum. Calculate the interest.

Solution

Date	Amount of drawings	Period for which money has been used	Product 7 x 3
1	2	3	4
	Rs		
31.1.1988	600	11 months	6,600
31.3.1988	400	9 "	3.600
01.7.1988	800	6 "	4,800
30 9.1988	300	3 "	900
31.10.1988	500	2 "	1,000
			16,900

Interest for one month on the product of 16,900 at 6 %

$= 16{,}900 \times 1/12 \times 6/100 = \text{Rs. } 84.50$

When a fixed amount is drawn at regular intervals, then interest can be calculated on the total amount of drawing for the average period. The calculation of the average period depends upon the fact whether the fixed amount is withdrawn on the first day of every month or the last day of every month. If the fixed amount is drawn on the first day of every month, the following formula will be used for calculating the average period.

$$\text{Average period} = \frac{\text{Total period in months} + 1}{2}$$

If, however, the fixed amount is drawn on the last day of every month, the formula will be

$$\text{Average Period} = \frac{\text{Total period in months} - 1}{2}$$

Look at Illustration 3 and see how interest on drawings can be ascertained on the basis of the average period when a fixed amount is drawn at regular intervals.

Illustration 3

Ram and Gopal are partners in a firm. Ram withdraws Rs. 500 regularly at the beginning every month while Gopal draws Rs. 500 at the end of every month. Assuming rate of interest is 6% p.a. calculate interest on their drawings for the year ending December 31, 1989.

Solution

	Ram Rs.	Gopal Rs.
Total Amount of Drawings	6,000	6,000
Average period (in months)	6.5	5.5
For Ram $\frac{12+1}{2}$		
For Gopal $\frac{12-1}{2}$		
Interest on Drawings	195	165
For Ram $6{,}000 \times \frac{13}{2} \times \frac{1}{12} \times \frac{6}{100}$		
For Gopal $6{,}000 \times \frac{11}{2} \times \frac{1}{12} \times \frac{6}{100}$		

Illustration 4

Hari and Giri entered into partnership contributing capitals of Rs. 60,000 and Rs. 30,000 respectively. They agreed to share profits and losses in the ratio 2:1. During the year Hari and Giri withdraw Rs. 10,000 and Rs. 6,000, respectively. The profit for the year ended December 31,1989 was Rs. 42,000. Prepare Profit and Loss Appropriation Account taking into consideration the following:

i) Hari is to be allowed a salary of Rs. 3,000 p.a.

ii) Interest on capitals is to be provided at 5% p.a.

iii) Interest on Giri's Loan Account of Rs. 20.000 is to be charged for the whole year.

iv) Interest on drawings is to be charged at 6% p.a.

Solution

Profit and Loss Appropriation Account

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
To Interest on Capitals Hari (60,000 × 5/100) 3,000 Gopal (30,000 × 5/100) 1,500	4,500	By Profit and Loss A/c (profit b/d)	42,000
To Interest on loan of Giri (20,000 x 6/100)	1,200	By Interest on Drawings Hari (10,000 × 6/100 × 6/12) = 300	
To Salary to Hari	3,000	Giri (6,000 × 6/100 × 6/12) 180	480
To Net Profit (transferred to capital accounts) Hari (2/3) 22,520 Giri (1/3) 11,260	33,780		
	42,480		42,480

Note: Since rate of interest on loan is not specified, it will be taken as 6% p.a. as provided by the Partnership Act.

7.6 GUARANTEE OF MINIMUM PROFIT TO A PARTNER

At times, a new partner admitted into the firm is assured of certain minimum amount by way of his share in profits of the firm. Such a guarantee can be given even to an existing partner. **The minimum guaranteed amount shall be paid to such a partner when his share of profit as calculated according to his profit sharing ratio is less than the guaranteed amount.** For example, X and Y arc partners in a partnership firm. They decide to admit Z into the firm. The profit sharing ratio is agreed as 3:2:1. The existing partners guarantee Rs. 6,000 to the new partner as his sharc of profit. In 1989, the firm earned a net profit of Rs. 30,000. Z's share works out at Rs. 5,000. This amount is Rs. 1,000 less than the guaranteed amount of Rs. 6,000. Hence, Z will get Rs. 6,000 as his share of profit and the deficiency of Rs. 1,000 will be bornc by X and Y in their profit sharing ratio 3:2. Thus X will contribute Rs. 600 and Y Rs. 400 to the deficiency in Z's share in the profits.

The guarantee may be given to the partner either by all the existing partners or by any of them on an agreed basis. In the above example, it was assumed that both X and Y had agreed to guarantee the minimum amount to Z in their respective profit sharing ratio: Hence, the deficiency of Rs. 1,000 in Z's share had been shared by X and Y. If, however, only X had given the guarantee, he alone would have contributed to the deficiency of Z's share in profits. Thus he would get Rs. 14,000 [(3/6 of 30,000) – 1,000] as his share of profit in the firm while Y would get Rs. 10,000 (2/6 of 30,000).

Illustration 5

Anand and Sadanand were in partnership sharing profits in the ratio of 3:2. In appreciation of the services of their clerk, Brahmanand, who used to draw a salary of Rs. 600 per month and a commission at 5% of net profits after charging salary and commission, took him as a partner from 1-1-1989 giving him 1/6th share of profits.

The agreement states that any excess over his sum of previous remuneration to which Rrnhrnanand is entitled will be bornc by Anand and Sadanand in ratio of 3:2. The Profit For the year ended December 31, 1989 was Rs. 66,000.

Show the distributing of profits among the partners.

Solution

Brahmanand's remuneration as a clerk		Brahmanand's share as a partner
Salary (Rs. 600 x 12)	7,200	Profit Rs. 66,0110
Commission		Rs. 66,000 × 1/6 = 11.000
$(58,800 \times \frac{5}{105})$	2,800	
	10,000	

The excess amount of Rs. 1,000 (Rs. 11,000 – Rs. 10,000) is to be borne by Anand and Sadanand in 3:2 ratio,

Anand = Rs. 1,000 × 315 = Rs. 600

Sadanand = Rs. 1,000 × 2/5 = Rs. 400

Divisible profits = Total Profit – Brahmanand's remuneration as a clerk.

= Rs. 66,000 – 10,000 = Rs. 56,000.

Anand gets Rs. 56,000 × 315 = 33,600 – 600 = Rs. 33,000

Sadanand gets Rs. 54,000 × 215 = 22,400 – 400 = 22,000

Brahmanand gets as 1/6th share in profits = Rs. 11,000

Check Your Progress B

1 A and B are partners in a firm their capitals on July 1, 1989 were Rs. 25,000 and Rs. 1,511,000, respectively. They share profits equally. On October 1, they decided that their capitals should be Rs. 2,00,000 each. The adjustment in capital was made by bringing in or withdrawing the necessary amount by the partners. Interest on capital is allowed at 8% p.a.

Calculate interest on capital for A and B for the year ending June 30, 1990.

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2 Gopal and Hari are partners in a firm sharing profit and losses in the ratio of 3:2. As per their partnership agreement, interest on drawings is to be charged at 10% p.a. Their drawings during 1989 were Rs. 24,000 and Rs. 16,000, respectively. Calculate interest on drawings.

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3 P, Q and R are in partnership sharing profits and losses in the ratio of 3:2:1. R is guaranteed by P and Q Rs.16,000 as his share in profit. The net profit for the year ending December 31, 1989 was Rs. 72,000. Ascertain the amounts finally due to P and Q.

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7.7 PAST ADJUSTMENTS

Sometimes, we omit or write wrong amounts for items like interest on capital, interest on drawings, salaries to the partners, etc. These ommissions or errors come to our notice only after closing the accounts for the year. In such a situation, these items are rectified by finding out the excess amounts debited or credited to the partners. In order to rectify these errors, adjustment entries are passed through an account called **'Profit and Loss Adjustment Account'.** Since we pass entries for the transactions omitted or recorded wrongly in the past, they are known as 'Past adjustments'.

The following procedure may be helpful in making the necessary adjustments to rectify the past errors.

1) When interest on capital is one of the items of omissions, ascertain first the partners' capitals at the beginning. This can be done by adding back partners' drawings to their capitals as at the end of the year and deducting therefrom their respective shares in profits.

2) Work out the amounts of omitted items which are to be credited to partners capital accounts such as interest on capital, salary to partners, etc. and pass the following journal entry for the adjustment.

   Profit & Loss Adj. A/c Dr.
   To Partners' Capital A/cs
   (Individually)
   (Being Interest on capital, salary to partner, etc.)

3) Work out the amounts of omitted items which are to be debited to partners capital accounts such as interest on drawings and pass the following adjustment entry.

   Partners' Capital A/cs Dr.
   (Individually)
   To Profit & Loss Adj. A/c
   (Being Interest on drawings)

4) Work out the balance of the Profit and Loss Adjustment Account. The debit balance in this account reflects the profit and credit balance, the loss. The same should be transferred to partners' capital accounts by passing the necessary journal entry.

Look at Illustration 6 and study how past adjustments are made in partners' capital accounts.

Illustration 6

Sun and Moon are in partnership whose capital accounts showed a credit balance of Rs. 18,000 and Rs. 12,000, respectively, after closing the accounts for the year 1989.

Subsequently, it was found that interest on capitals and drawings at 6% p.a. was not taken into account in arriving at the profits of the firm. During 1989, ihe drawings of Sun and Moon were Rs. 1,000 and Rs. 800, respectively.

The partners share profits and losses in the ratio of 2:1. The profit for the year 1989 before the above adjustments was Rs. 6,000. Pass the necessary journal entries and show the capital accounts of partners.

Solution

1) **Opening capitals are ascertained as follows:**

	Sun	Moon
	Rs.	Rs.
Balance of Capital as on 31.12.89	18,000	12,000
Add: Drawings during the year	1,000	800
	19,000	12,800
Less: Profits previously credited to capital accounts in 2:1 Ratio)	4,000	2,000
	15,000	10,800
2) **Interest on capital** at **6%** p.a.	900	648
3) Interest on **drawings** at 6% p.a. for 6 months	30	24

Journal

1989			Dr. Rs.	Cr. Rs.
1	Profit & Loss Adj A/c	Dr.	1.548	
	To Sun's Capital A/c			900
	To Moon's Capital A/c			648
	(Being interest on capital)			
2	Sun's Capital A/c	Dr.	30	
	Moon's Capital A/c	Dr.	24	
	To Profit & Loss Adj. A/c			54
	(Being interest on drawings)			
3	Sun's Capital A/c	Dr.	996	
	Moon's Capital A/c	Dr.	498	
	To Profit & Loss Adj A/c			1494
	(Being loss on adjustment)			

Profit and Loss Adjustment Account

Dr.			Cr.
To Interest on capital	Rs.	By Interest on drawings	Rs.
Sun 900		Sun 30	
Moon 648	1,548	Moon 24	54
		By Loss on Adjustment	
		Sun 996	
		Moon 498	1,194
	1.548		1,548

Capital Accounts

	Sun	Moon		Sun	Moon
	Rs.	Rs.		Rs.	Rs.
To P & L Adj. A/c	30	24	By Balance b/d	18,000	12,000
To P & L Adj. A/c (loss)	996	498	By P & L Adj. A/c	900	648
To Balance c/d	17,874	12,126		18,9011	12,648
	18,900	12,648	By Balance b/d	17,874	12,126

7.8 FIXED AND FLUCTUATING CAPITALS

There are two methods by which the capital accounts of partners are maintained. They are: (i) fixed capital method and (ii) fluctuating capital method.

Fixed Capital Method: Under this method the capitals of the partners shall remain fixed unless additional capital is introduced or a part of capital is withdrawn by an agreement among the partners. Adjustments like interest on capital, drawings, interest on drawings, salary or commission to partners, share of profit or loss, etc. are shown in a separate account called 'Current Account'. It means that under this method each partner has two accounts viz., Capital Account and Current Account. You know that the partners' capital account balances are usually shown on the liabilities side. Rut, partners' current account balances will appear on the liabilities side if they have credit balances and asset side if they have debit balances.

Fluctuating Capital Method: Under this method each partner has a Capital Account in which not only the capital, but also all the adjustments like interest on capital, drawings, interest on drawings, salary or coinmission to partners, share of profit or loss, etc., are recorded. This makes the balance in capital account fluctuate year after year and so this method is called fluctuating capital method. This is the usual method of preparing the partners' capital accounts. Hence, in the absence of any instruction, capital should be prepared by this method.

Look at the Illustration 7 and see how capital accounts are prepared under both these methods.

Illustration 7

On January 1,1989, A B and C entered into partnership with capitals of Rs. 10,000, Rs. 6,000 and Rs. 4.000 respectively. They agreed to share profits and losses in the ratio of 5:3:2 During 1989 their drawings were: A—Rs. 2,000, B—Rs. 1,500 and C—Rs. 1,500. C is entitled to receive a salary of Rs. 1,200 per annum. Interest on capitals and drawings is provided at the rate of 6 per cent per annum. Before adjusting the above items, the profit for the year ended December 31, 1989 was Rs. 9.200.

Prepare Profit and Loss Appropriation Account and partner's capital accounts both under fluctuating and fixed capital methods.

Solution

a) Fluctuating Capital Method

Profit and Loss Appropriation Account for the year ended December 31, 1989

Dr.	Rs.		Cr. Rs.
To Partners Capital A/cs (interest on Capital)		By Profit and Loss A/c (profit)	9,200
A 600		By Partners Capital A/cs (interest on drawings)	
B 360			
C 240	1,200		
To C's Capital A/c (C's salary)	1,200	A 120 B 90 C 90	300
To Partners Capital A/cs (net profit transferred)			
A (5/10) 3,550			
B (3/10) 2,130			
C (2/10) 1,420	7,100		
	9,500		9,500

Partner's Capital Accounts

Particulars	A	B	C	Particulars	A	B	C
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
To Cash A/c (drawings)	2,000	1,500	1,500	By Balance b/d	10,000	6,000	4,000
To P&L App. A/c (interest on drawings)	120	90	90	By P&L App. A/c (interest on capital)	600	360	240

To Balance c/d	12,030	6,900	5,270	By L A A/c (salary)	—	—	1,200
				By Profit and Loss App. A/c (profit)	3,550	2,130	1,420
	14,150	8,490	6,860		14,150	8,490	6,860

b) Fixed Capital Method

Profit and Loss Appropriation Accounl for the year ended December 31, 1989

Dr.	Rs.		Cr. Rs.
To Partners Current A/c (interest on capitals) A 600 B 360 C 240	1,200	By Profit and Loss A/c (profit)	9,200
To C's Current A/c (C's salary)	1,200	By Partners Capital A/c (interest on drawings)	300
To Partners Current A/cs (net profit transferred to Current A/c) A 3,550 B 2,130 C 1,420	7,100		
	9,500		9,500

Partner's 'Capital Accounts

Particulars	A	B	C	Particulars	A	B	C
To Balance c/d	10,000	6,000	4,000	By Balance b/d	10,000	6,000	4,000
				By Balance b/d	10,000	~ , O W	4,000

Partners' Current Accounts

Particulars	A	B	C	Particulars	A	B	C
To Cash A/c (drawings)	2,000	1,500	1,500	By P&L App. A/c (interest on capital)	600	360	240
To P&L App. A/c (interest on drawings)	120	90	90	By P&L App. A/c (salary)	—	—	1,200
To Balance c/d	2,030	900	1,270	By P&L App. A/c (profit)	3,550	2,130	1,420
	4,150	2,490	2,860		4,150	2,490	2,860
				By Balance b/d	2,030	900	1,270

Check Your Progress C

1 State whether the following statements are True or False.

i) Under the fixed capital method, any addition to capital will be shown in the partner's capital account.

ii) Current accounts of the partners are maintained under the fluctuating capital method.

iii) Interest on capital is computed on the partner's current account credit balance as well.

iv) Drawing's under the fixed capital method are shown on the debit side of the partner's current account.,

v) Interest on drawings is shown on the debit side of the partner's capital account under the fluctuating capital method.

vi) If nothing is specified, partners' capital accounts are prepared according to the fixed capital method.

2) State how partner's current accounts are shown in the Balance Sheet of a partnership firm.

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7.9 FINAL ACCOUNTS

There is not much of a difference between the preparation of final accounts of sole **trading** concern and those of partnership firm except the distribution of profit between the partners. Therefore. the Trading and Profit & Loss Account of the firm is prepared on similar lines as in case of sole trading concern. But, for distribution of the profit as shown by the Profit and Loss Account, we prepare a Profit and Loss Appropriation Account about which you have learnt in Section 7.5 of this unit. While preparing the Balance Sheers of the firm, all partners' capital accounts (and partners current accounts. if fixed capital method is followed) should be shown separately. The adjustments in respect of interest on capital, interest on drawings, partners' salary and his share of profit or loss can also be shown directly in the Balance Sheet. However, **it** is better **if we prepare the capital account** (or **current account) of each** partner, make **all** these **adjustments** in **that** account **and then show only the final** balance **in the** Balance Sheet.

Illustration 8

Sharma and Verma were partners sharing profits and losses in the proportion of 315 and 2/5. The following balance were extracted from the books of account for the year ended March 31, 1989.

	Debit Rs.	Credit Rs.
Capitals:		
Sharma	—	60,000
Verma	—	50,000
Current A/cs (on 1-4-1988)		
Sharma	—	2,800
Verma	—	1,600
Drawings:		
Sharma	12,000	—
Verma	8,000	—
Stock as on 1-4-1988	11,000	—
Purchases and Sales	54,000	80,000
Returns	2,000	1,500
Wages	2,500	—
Salaries	4,000	—
Printing and Stationery	500	—
Bills receivable	12,000	—
Bills payable	—	2,000
Debtors and Creditors	36,000	8,000
Discounts	1,200	1,500
Rent and Rates	800	—
Bad Debts	1,400	—
Insurance	400	—
Postage and Telegrams	300	—
Verma's Commission	3,400	—

Land and Buildings	24,000	—
Plant and Machinery	20,000	—
Furniture	13,500	—
Overdraft	—	2,000
Trade Expenses	400	—
Cash in hand	500	—
Cash at bank	1,500	—
	2,09,400	2,09,400

Prepare the final accounts of the firm taking into consideration the following;

a) Stock on March 31, 1989 was Rs. 18,000

b) Provision for doubtful debts is to be provided at 5% on debtors.

c) Outstanding salaries were Rs. 1,000.

d) Goods worth Rs. 8,000 were destroyed by fire on December 10,1988. The Insurance Company agreed to pay Rs. 7,000 in full settlement of the claim.

e) Interest on capitals is allowed at 6% per annum and interest on drawings is also charged at 6% per annum.

f) Sharma is entitled to a salary of Rs. 1,200 per annum.

g) Write off land and buildings at 5%, furniture at 10% and plant and machinery at 15%.

Solution

Trading and Profit & Loss Account for the year ended March 31, 1989

Dr. Cr.

		Rs.			Rs.
To Opening stock		11,000	By Sales	80,000	
To Purchases	54,000		Less : Returns	2,000	78,000
Less : Returns	1,500	52,500	By Closing stock		18,000
To Wages		2,500	By Goods destroyed by fire		8,000
To Gross Profit c/d		38,000			
		1,04,000			1,04,000
To Salaries	4,000		By Gross Profit b/d		38,000
Add : Outstanding	1,000		By Discount Received		1,500
		5,000			
To Printing and Stationery		500			
To Rent and Rates		800			
To Insurance		400			
To Discount Allowed		1,200			
To Trade Expenses		400			
To Postage and Telegrams		300			
To Bad Debts	1,400				
Add : Provision	1,800	3,200			
To Loss due to fire (Rs. 8000 – Rs. 7000)		1,000			
To Depreciation:					
Land and Buildings	1,200				
Furniture	1,350				
Plant and Machinery	3,000	5,550			
To Prufit transferred to Profit and Loss Appropriation A/c		21,150			
		39,500			39,500

Profit and Loss Appropriation Account for the year ended March 31, 1989

		Rs.		Rs.
To Interest on Capital			By Profit and Loss A/c	21,150
Sharma	3,600		By Interest on Drawings	
Verma	3,000	6,600	(for 6 months)	

		Rs.			Rs.
To Salary to Sharma		1,200	Sharma	360	
To Commission to Verma					
To Nef Profit (transferred to capital accounts)					
Sharma 3/5 -	6,330				
Verma 2/5 -	4,220	10,550			
		21,750			21,750

Partner's Current Accounts

	Sharma	Verma		Sharma	Verma
	Rs.	Rs.		Rs.	Rs.
To Drawings	12,000	8,000	By Balance b/d	2.800	1,600
To Interest on Drawings	360	240	By Interest on Capital	3,600	3,000
To Balance c/d	1,570	580	By Salary	1,200	—
			By Share of Profit	6,330	4,220
	13,930			13,930	8,820
			By Balance b/d	1,570	580

Balance Sheet as on March 31, 1989

Liabilities		Amount	Assets		Amount
		Rs.			Rs.
Overdraft		2,000	Land and Buildings	24,000	
Bills payable		2,000	Less Depreciation	1,200	22,800
Creditors		8,000	Plant and Machinery	20,000	
Outstanding Salaries		1,000	Less Depreciation	3,000	17,000
Capitals:			Furniture	13,500	
Sharma	60,000		Less Depreciation	1,350	12,150
Verma	50,000	1,10,000	Stock		18,000
Current Accounts			Debtors	36,000	
Sharma	1,570		Less Prov. for B.D.	1,800	34,200
Verma	5,80	2,150			
			Insurance Company		7,000
			Bills Receivable		12,000
			Cash at Bank		1,500
			Cash in Hand		500
		1,25,150			1,25,150

7.10 LET US SUM UP

A partnership comes into existence by an agreement among the individuals for carrying out certain business with the intention of sharing profits and losses thereof.

The partnership deed is a document which contains necessary provisions relating to the conduct of firm's business and the mutual relationship amongst the partners. In the absence of specific provisions in the agreement, the partners have to share profits and losses equally and they will not have any right to claim any remuneration etc. for taking part in firm's business. Of course, if any partner advances a loan to the business, he is entitled to receive interest thereon at 6% per annum.

A Profit and Loss Appropriation Account is prepared to show the distribution of profits or losses among the partners. In this account adjustments like interest on capital, salary or commission to partners, interest on drawings etc. are recorded. If a partner is guaranteed a minimum share in profits, any shortfall in the guaranteed amount will be borne by the other partners in the agreed ratio.

Sometimes, the accounts are closed without taking items like interest on capital or. interest on drawings into account because they are noticed later on. Under such

circumstances, a Profit and Loss Adjustment Account is prepared for making necessary adjustments for such items.

The capital accounts of the partners can be maintained by two methods viz., fixed capital method and fluciuating capital method.. Under fixed capital method, each partner has two accounts viz., capital account and current account. in capital account only the capital brought in by the partner is recorded. All other items like interest on capital, interest on drawings, share of profit or loss etc., are recorded in his current account. Under fluctuating capital method, each partner will have only one account (capital account) and all transactions relating to the partner are recorded therein.

There is not much difference between the final accounts of a sole trading concern and that of a partnership concern except that in case of a partnership we prepare an additional account called Profit & Loss Appropriation Account to show the distribution of profits and losses arnong the partners.

7.11 KEY WORDS

Fixed Capitals: A method of maintaining capital accounts of partners where two accounts viz., capital account and current account, are prepared for recording transactions relating to each partner.

Fluctuating Capitals: A method of maintaining capital accounts of partner where only one account viz., capital account is prepared for recording all transactions relating to each partner.

Partner's Current Account: An account prepared (under fixed capitals method) for recording all transactions relating to a partner other than the capital brought by him.

Partnership **Deed:** A document containing the terms and conditions of the agreement between the partners to carry on the business of the firm.

Partnership Firm: A business unit owned by two or more persons under an agreement to share profit of the business carried on by all or any of them acting for all.

Past Adjustments: Adjustments relating to the errors in the past in partners capital accounts after the accounts have been closed.

Profit **and Loss** Adjustment Account: An account prepared for on recording adjustments of past errors and to ascertain the profit or loss on such adjustments.

Profit and Loss Appropriation Account: An account prepared for distribution of profit or loss of the firm among the partners.

7.12 ANSWERS TO CHECK YOUR PROGRESS

A 3 i) equally ii) interest at 6% p.a. iii) No.

B 1 A — Rs. 17,000 B — Rs. 15,000
2 Gopal — Rs. 1,200; Hari — Rs. 800
3 P — Rs. 33,000; Q — Rs. 22,400

C i) True ii) False iii) False
iv) True v) True vi) False

7.13 TERMINAL QUESTIONS/EXERCISES

1) Define Partnership and state its main characteristics.
2) Explain the methods of maintaining capital accounts of partners.
3) List the items that usually appear on the debit and credit sides of partner's current account.
4) Illustrate how will interest on drawings be calculated under different situations.
5) Distinguish between fixed and fluctuating capitals.

Exercises

1) Pankaj, Pramod and Pranab started partnership business on January 1, 1989

without any agreement. In the beginning of the year itself, they had dispute over certain matters.

a) Pankaj and Pramod claim interest on capital but Pranab does not agree for it.

b) Pramod says that any loan advanced by partners bear an interest of 8% p.a. But others say 'no'.

c) Pramod claims salary at the rate of Rs. 600 per month. But other partners do not accept it.

d) Pankaj who brings in capital twice the amount of other two partners. He proposes that profits should be shared in the ratio of capitals contributed. But the remaining partners do not agree.

How do you settle these disputes, if the partners approach you.

2) On January 1, 1988 Keval Khanna and Deepak Khanna started a business contributing Rs. 20,000 and Rs. 60,000 as their capitals. As per the partnership agreement, Deepak Khanna is entitled to a salary of Rs. 800 per month. Interest on capitals is to be allowed at 5% p.a They have agreed to share the profits in 3:2 ratio.

For the year ending December 31, 1988 the firm made a profit of Rs. 45,000 before making the above adjustments. During the year their drawings were: Keval Khanna Rs. 10,000 and Deepak Khanna. Rs. 8,000.

Prepare the Profit and Loss Appropriation Account and the Capital Accounts of Partners.

(Answer: Divisible Profits Rs. 31,400; Keval Khanna's Capital — Rs. 29,240; Deepak Khanna's capital—Rs. 77,160).

3) On April 1, 1988, Mohan and Sohan entered into partnership introducing Rs. 20,000 and Rs. 12,000 as their respective capitals. Sohan brings in Rs. 4,000 as additional capital on October 1, 1988. For the year ended March 31, 1989, the firm made a profit of Rs. 12,000 before allowing interest on capital at 6% p.a., interest on drawings at 6%, p.a. and a commission of Rs. 1,200 to Mohan. Their total drawings with regular intervals amounted to: Mohan — Rs. 3,000 and Sohan — Rs. 2,000.

Pass the necessary journal entries, prepare the Profit and Loss Appropriation Account and show the capital accounts of partners by fixed capital method.

Hint: Interest on drawings should be calculated for 6 months as the dates of drawings were not given.

(**Answer:** Divisible profit: Rs. 8,910; Capitals: Mohan—Rs. 20,000 and Sohan—Rs. 16,000; Current Accounts Mohan—Rs. 3,765, Sohan—Rs. 3,235)

4) X, Y and Z were equal partners. On January 1, 1988, their capitals were Rs. 24,000, Rs. 26,000 and Rs. 20,000 respectively.

After preparing the accounts for the year 1988, it is discovered that interest or capital at 5% p.a. was omitted. The drawings during the year were X—Rs. 4,000. Y—Rs. 2,500 and Z—Rs. 1,500. The Profits for the year 1988 amounting Rs. 12,000 had been credited to the capital accounts of X, Y and Z.

Pass the rectification entries and show the Profit and Loss Adjustment Account.

(**Answer:** Interest on Capital: X—1,200, Y— 1,225 and Z—875; as per P & L Adj. A/c Rs. 3,300).

5) A, B and C were partners sharing profits and losses in 3:2:1 ratio. Their capitals. on December 31, 1988 stood at Rs. 30,000, Rs. 20,000 and Rs. 16,000 after the distribution of Rs. 18,000 profit for the year 1988. Their drawings were; A—Rs. 3,000, B—Rs. 2,000, and C—Rs. 1,000. It was discovered that, while determining the amount of profit. the following were not taken into account.

i) Interest on Capitals at 5% p.a.
ii) B's salary of Rs. 1,800 p.a.
iii) Interest on the loan amount of Rs. 6,000 given on 1-1-1988 at 10% by C.
iv) Interest on drawings at 8% for the whole year.

Prepare Profit and Loss Adjustment Account, Capital Accounts and pass journal entries for the adjustments.

(**Answer:** Loss an adjustment Rs. 4,620; Capital Accounts; A—Rs. 28,650; B—Rs. 20,900; C—Rs. 16,450).

6) A and B are partners sharing profits in 3:2 ratio. On January 1,1988, they admit their manager C into partnership giving 116th share of profits. C, as a manager, was receiving a salary of Rs. 300 per month and a commission of 5% upon the net profit after charging salary and commission.

   It is, however, agreed that any excess over the previous remuneration as manager of C is borne by A. The profit for the year ended December 31, 1988 was Rs. 45,600. Prepare Profit and Loss Appropriation Account.

   (**Answer:** A—Rs. 22,000; B—Rs. 16,000, C—Rs. 7,600).

7) John and George were sharing profits and losses in 2:1 ratio. The following is the list of balances extracted from the books of account as on December 31, 1988. Prepare final accounts of the firm.

	Debit	Credit
	Rs.	Rs.
John's Capital	—	60,000
George's Capital	—	40,000
John's Drawings	5,000	—
George's Drawings	4,000	—
Purchases and Sales	64,000	1,12,000
Oil and Fuel	2,400	—
Rent, Rates and Taxes	4,000	—
Wages	16,200	—
Transport	2,500	—
Returns	3,000	2,000
Debtors	40,000	—
Creditors	—	30,800
Salaries	10,000	—
Advertisement	1,500	—
Stock as on 1-1-1988	8,600	—
Discounts	1,500	2,400
Bills Receivable	26,000	—
Bills Payable	—	8,400
Plant and Machinery	29,000	—
Goodwill	6,000	—
Furniture	10,000	—
Provision for doubtful debts	—	1,500
Land and Buildings	19,500	—
Cash in hand	2,500	—
Cash at bank	1,400	—
	2,57,100	2,57,100

Adjustments

i) Allow interest on capital at 6% and charge interest on drawings at 8%.
ii) Wages outstanding Rs. 800.
iii) Write off the goodwill value by Rs. 1,200.
iv) Depreciate plant and machinery by 10% and furniture by 5%.
v) Stock as on 31st December, 1988 was Rs. 24,000.

(**Answer:** Gross Profit Rs. 40,500; Net Profit Rs. 16,020; Balance Sheet Total Rs. 1,52,300).

8) Rajesh and Nagesh were sharing Profits and Losses equally. The following balances were drawn from the books of account. You are required to prepare Trading, Profit and Loss Account for the year ended December 31,1988 and the Balance Sheet as on that date.

Debit Balances	Rs.	Credit Balances	Rs.
Rajesh's Drawings	30,000	Rajesh's Capital	1,40,000
Nagesh's Drawings	18,000	Nagesh's Capital	1,00,000
Land and Buildings	70,000	Sundry Creditors	60,000
Sundry Debtors	84,000	Sales	2,80,000
Purchases	1,65,000	Discount	6,000
Stock on 1-1-1988	28,000	provision for Doubtful Debts	3,000
Wages	14,000		
Salaries	12,500		
Insurance	2,000		
Carriage Inwards	4,800		
Carriage Outwards	3,500		
Factory Rent, Taxes, etc.	2,200		
Discount	3,500		
Bad debts	1,500		
Postage and Telegrams	500		
Printing and Stationery	2,000		
Cash at bank	18,000		
Cash in hand	9,000		
Plant and Machinery	1,20,500		
	5,89,000		5,89,000

Adjustments

1) Closing stock as on 31-12-1988 was Rs. 12,000.
2) Nagesh is entitled to a salary of Rs. 2,400 per annurn.
3) Prepaid insurance was Rs. 500.
4) Maintain provision for doubtful debts at 5% on debtors.
5) Provide depreciation on Plant and Machinery at 5%
6) Interest on capitals is to be provided at 4%.

(Answer: Gross Profit Rs. 78,000;
Net Profit Rs. 39,775;
Balance Sheet Rs. 3,03,775).

9) Reddy and Rao are partners in a firm sharing profits and losses as Reddy 70% and Rao 30%. Their balances as on December 31,1988 are given below. You are required to prepare a Trading and Profit and Loss Account for the year ended December 31, 1988 and a Balance Sheet as at that date.

Plant and Machinery is Rs, 75,000; Opening Stock Rs. 50,000

Purchases Rs. 1,80,000; Sales Rs. 3'75,000;

Discount (Dr.) Rs. 750; Carriage in Rs. 800;

Carriage out Rs. 1,200; Discount (Cr.) Rs. 1,250;

Sundry Debtors Rs. 45,000; Salary Rs. 12,000;

Wages Rs. 16,000; Bank loan Rs. 20,000;

Freehold Premises Rs. 1,70,000; Bills Receivables

Rs. 15,000; Furniture Rs. 20,000; Bills Payable Rs. 12,000;

Partners' Drawings: Reddy—Rs. 5,000; Rao—Rs. 1,500;

Cash in hand Rs. 4,000; Cash at bank Rs. 2,000;

Partners' Capital Accounts: Reddy—Rs. 1,50,000;

Rao—Rs. 40,000.

The following adjustments are required:

1) Closing stack Rs. 25,000.
2) Depreciate Plant at 10% and Furniture at 20%.
3) Provision for bad debts is to be created at $2\frac{1}{2}$% on debtors.
4) Interest on Capital at 5% p.a.

5) Interest on Drawings at 10% p.a.
6) Provide for outstanding salaries and wages Rs. 3,000 and Rs. 5,000 respectively.
7) Partners are to be allowed a salary of Rs. 3,000 each p.a.
8) Interest on Bank loan is to be provided for at 16% p.a.

(Answer: G.P. Rs. 1,48,200, N.P. Rs. 1,16,675, Capital A/c Balance:
Reddy—Rs. 2,26,277.50, Rao—Rs. 73,897.50; Balance Sheet Total
Rs. 3,43,375).

Note: These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University for assessment. These are for your practice only.

UNIT 8 ADMISSION OF A PARTNER

Structure

8.0 Objectives
8.1 Introduction
8.2 Admission of a Partner: List of Adjustments
8.3 Calculation of New Profit Sharing Ratio
8.4 Calculation of Sacrificing Ratio
8.5 Goodwill
8.5.1 Meaning of Goodwill
8.5.2 Factors Affecting the Value of Goodwill
8.5.3 Need for Valuation of Goodwill
8.5.4 Methods of Valuation of Goodwill
8.5.5 Treatment of Goodwill on Admission of a Partner
8.6 Revaluation of Assets and Liabilities
8.7 Adjustment of Accumulated Profits or Losses
8.8 Adjustment of Capitals
8.9 Change in the Profit Sharing Ratio
8.10 Let Us Sum Up
8.11 Key Words
8.12 Answers to Check Your Progress
8.13 Terminal Questions/Exercises

8.0 OBJECTIVES

After studying this unit you will be able to:

- list the adjustments required at the time of admission of a partner
- calculate the sacrifying ratio
- calculate the new profit sharing ratio
- define goodwill and explain the factors affecting its value
- explain the circumstances under which the valuation of goodwill becomes necessary
- describe various methods of valuation of goodwill
- explain how goodwill is treated in books of the firm when a new partner is admitted into partnership
- explain how is the adjustment in respect of revaluation of assets and liabilities made on admission of a new partner
- describe how are the accumulated profits and losses treated in books on admission of a new partner
- explain how capitals of old partners adjusted to make them proportionate to their new profit sharing ratio
- describe the adjustments required when the existing partners of a firm decide to change their profit sharing ratio.

8.1 INTRODUCTION

In Unit 7 you learnt about the distribution of profits and losses of a partnership firm among its patners and the preparation of its final accounts. Partners often resort to the reconstitution of the firm. This may happen in various ways. These are: (i) Admission of a new partner (ii) Change in the profit sharing ratio amongst the partners (iii) Retirement of a partner, (iv) Death of a partner. On each such occasion a number of adjustments have to be made in the books of the firm. In this unit you will learn about the adjustments which are required at the time of the admission of a new partner and study the accounting implications of a change in the profit sharing ratio.

8.2 ADMISSION OF A PARTNER: LIST OF ADJUSTMENTS

The partners of an existing firm may decide to admit a new partner when it needs additional capital or managerial help or both. According to the Indian Partnership

Act, a person can be admitted as a new partner either with the consent of all the existing partners or in accordance with an agreement already entered into providing for the admission of a new partner. In any case, when a new partner is admitted, he acquires two main rights in the firm (i) share in the assests of the firm, and (ii) share in the future profits of the firm. For acquisition of the first right, he usually brings in an agreed amount of capital. For the second right, he is required to bring in his share of firm's goodwill (also called premium) which will be shared by the existing partners because they sacrifice a part of their share of future profit in his favour. At this stage, the partners may also like to update the values of firm's assests and'liabilities to avoid any undue loss or profit to the new partner as well as to the existing partners. Thus, a number of adjustments are needed at the time of the admission of a new partner. These can be summarised as follows:

1) Calculation of the new profit sharing ratio
2) Calculation of the sacrificing ratio
3) Treatment of goodwill
4) Adjustments for revaluation of assets and liabilities
5) Adjustment of partners' capitals

We shall discuss these matters one by one

8.3 CALCULATION OF NEW PROFIT SHARING RATIO

An incoining partner is entitled to a share in the future profits of the firm. He acquires this share from the old partners. Hence, when a new partner is admitted, it becomes necessary to determine the new profit sharing ratio. This depends upon how the new partner acquired his share of profit from the old partners. There are possibilities. He may acquire it (i) in the same ratio in which they were sharing the profits earlier (old ratio) (ii) equally from all the old partners (iii) in some agreed ratio, or (iv) wholly from one partner. It should be noted that in **the absence at any agreement to the contrary, it is presumed that the new partner acquires his share in profits from the old partners in the old ratio.** This means that the old partners will continue to share the remaining profits in the old ratio.

Illustrations 1, 2, 3 and 4 show the calculation of nbw profit sharing ratio in the above mentioned situations.

Illustration 1

P and Q are partners sharing profits and losses in the ratio of 2:1. They admit R and agree to give him 1/5th share in profits. Determine the new profit sharing ratio..

Solution

Since nothing is specified, it is presumed that R acquires his share from P and Q in the old ratio and so P and Q will share the remaining profits in the old ratio of 2:1. The new profit ratio will be determined as follows:

R's share = 1/5
Remaining share = 1 − 1/5 = 4/5
P's share = 2/3 of 415 = 8/15
Q's share = 1/3 of 4/5 = 4115
R's share = 1/5 or 3/15
Thus the new profit sharing ratio for P, Q and R will be 8/15 : 4/15 : 3/15 or 8:4:3

Illustration 2

Suppose, in illustration 1 above, it is specified that R acquired his share in profits equally from P and Q, Determine the new profit sharing ratio.

Solution

Since R acquires his 1/5 share in profits equally from P and Q, it means he gets 1/10 (1/2 of 1/5) from P and 1/10 from Q. Therefore

P's share = 2/3 − 1/10 = $\frac{20-3}{30}$ = 17/30

Q's share 1/3 − 1/10 = $\frac{10-3}{30}$ = 7/30

R's share 1/5 or 6/30
Thus, the new profit sharing for P, Q and R will be 17/30 : 7/30 : 6/30 = 17:7:6

Illustration 3

Suppose, in illustration 1 above, it is specified that R acquired his share from P and Q in the ratio of 1:2. Determine the new profit sharing ratio.

Solution

Since **R** acquires his 1/5 share in profits in the ratio of 1:2 from P and Q, it means he gets 1/15 (1/3 of 1/5) from P and 2/15 (2/3 of 1/5) from Q. Therefore

P'sshare = $2/3 - 1/15 = \frac{10-1}{15} = 9/15$

Q's share = $1/3 - 2/15 = \frac{5-2}{15} = 3/15$

R's share = 1/5 or 3/15

Thus, the new profit sharing ratio for P, Q and R will be

9/15: 3115 : 3/15 = 9:3:3

Illustration 4

Suppose, in illustration above, it is specified that R gets his 1/5 share in profits wholly from P. Determine the new profit sharing ratio.

Solution

Since **R** acquire 1/5 share in profits wholly from P, therefore

P's share = $2/3 - 1/5 = \frac{10-3}{15} = 7/15$

Q's share = 113 or 5/15

R's share = 1/5 or 3/15

Thus, the new profit sharing ratio for P, Q and R will be:

7/15 : 5/15 : 3/15 = 7:5:3.

Sometimes, the new partner's share may not be specified. Instead, the proportion of share which is surrendered by each of the old partners in favour of the new partner is mentioned. In such a case, the share of the new partner is calculated by addigg the shares surrendered by all the old partners. The new shares of the old partners will, of course, be determined by deducting the surrend :red part from their old shares.

Illustration 5

A and B are partners in a firm sharing profits and losses in the ratio of 3:2. C is admitted as a new partner. A sacrifices 113 of his share and B 1/4 of his share in favour of **C.** Determine the new profit sharing ratio.

Solution

A's sacrifice of share = 1/3 of 3/5 = 3/15

B's sacrifice of share = 114 of 2/5 = 2/20

C's share = $3/15 + 2/20 = \frac{12+6}{60} = 18/60$

A's share = $3/5 - 3/15 = \frac{9-3}{15} = 6/15$ or 24/60

B's share = $2/5 - 2/20 = \frac{8-2}{20} = 6610$ or 18/60

Thus, new profit sharing ratio for A, B and C will be: 24:18:18 = 4:3:3

8.4 CALCULATION OF SACRIFICING RATIO

As already stated, the incoming partner is usually required to pay premium to the old partners for the right to participate in the future profits of the firm. The premium thus paid by the incoming partner must be shared by the old partners in the ratio in which they have agreed to forego their shares in favour of the incoming partner. This ratio is called 'Sacrificing Ratio'.

The old partners usually sacrifice their shares in favour of the incoming partner in the old profit sharing ratio. **In such a situation, the sacrificing ratio is the same as the old profit sharing ratio.** Sometimes the ratio in which the new partner acquires his share from the old partners is specified. The difficulty arises where the ratio in which new partner acquires his share from the old partners is not specified. Instead, the new profit sharing ratio is given. In such a case, the'sacrificing ratio shall be worked out by deducting new share of each partner from his old share.

Look at illustration 6 and study how sacrificing ratio is determined.

Illustration 6

P and Q are partners sharing profits and losses equally. R is admitted as a partner and the new ratio is fixed as 4:3:2. Calculate the sacrificing ratio.

Solution

Since the new ratio is given, the sacrificing ratio will be calculated by deducting the new share from the old share.

Partner	Old share	−	'New Share	=	Sacrifice
P	12	−	419	=	$\frac{9-8}{18} = \frac{1}{18}$
Q	112	−	3/9	=	$\frac{9-6}{18} = \frac{3}{18}$

Hence, the sacrificing ratio for P and Q is 1:3.

Sometimes, at the time of admitting a **new** partner, the old partners fix their shares in such a way that some of the existing **partners** may also gain an additional share in profits. In such a **situation, both** gain and **sacrifice** will have to be ascertained. For example, A and B who were sharing profits and losses in the ratio of 2:1, **admit** C into is fixed at 2:2:1. In this case, B is a gainer because his new share 215 is higher than his old share 113. His gain is **1/15th** share (215 — **1/3**). The sacrifice is made by A which works out at 4115 (213 — 2/5). Of this, 3/15 is in favour of C, the new partner and 1115 in favour of B, the old partner.

Check Your Progress **A**

1 List the various way in which a firm **may** be reconstituted.

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2 What do you mean by sacrificing ratio?

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3 Calculate the new profit ratio in the following **cases**:

i) X and Y are partners sharing profits and losses in the ratio of 3:2. They admit Z with 115th share **in** profits.

ii) A **and B** are partners sharing **profits** and losses in the ratio of 5:3. They admit C giving him 3110th share in profits, which he acquires **equally from** A and B.

4 Calculate the sacrificing ratio in **the** following cases:

i) X and Y are **partners** in a business sharing profits and losses in the **ratio of** 3:2. **They admit** a new partner Z with **1/4th** share of profits.

ii) A and B are partners sharing profits **and** losses in the ratio of **4:3**. They admit C as a partner. The new profit sharing ratio is to be **3:2:1**.

8.5 GOODWILL

You have learnt that when a new partner is admitted, the old partners will have to surrender a part of their share of future profits in favour of **the** new partner. Hence; the incoming partner has to **compensate** the old partners. This amount of compensation paid by the incoming partner is known as 'premium' and it is based upon the **firm's** goodwill. Before we discuss how this amount of premium is determined and **recorded** in books of the firm, let us study what goodwill is, **how** it is valued.

8.5.1 Meaning of Goodwill

Goodwill refers to the reputation or good name of a firm. It is a force which makes the old customers to go to the old place. The firms enjoying the goodwill need not spend so much for selling their product. It is this force which facilitates the firm to earn over and above the normal profits. Thus, a firm is said to have goodwill when it earns profits in excess of normal profits (also called super profits). Accordingly, Goodwill is defined as the present value of a firm's anticipated excess earnings. This definition is normally found acceptable to courts and in the accounting literature. The word 'excess' may mean

a) excess rate of return on tangible assets over and above the normal rate of return earned by representative firms in the industry, or

b) excess earnings over a comparable new firm,

Prof. Dicksee says that "when a man pays for goodwill, he pays for something which places him in the position of being able to earn more money than he would be able to do by his own unaided efforts"

Lord Lindlay says that "the term goodwill can hardly be said to have any precise significance. It is generally used to denote the benefit arising from connection and reputation, and its value can be got for the chance of being able to keep that connection and improve it. Upon the sale of an established business, its goodwill has a marketable value, whether the business is that of a professional man or any other person. But it is clear that goodwill has no meaning except in connection with a continuing business and the value of goodwill of any business to a purchaser depends in some cases entirely and in all very much on the absence of competition on the part of those by whom the business has been previously carried on"

On analysing the above statements, it can be said that goodwill is an intangible asset for the owners of an existing business which enable them to make more profits. The individual who wishes to join an existing business therefore, has to pay something to the existing owners for sharing the benefit of this asset. This is called his share of goodwill or premium. It should be noted that goodwill is enjoyed only by the profit making firms. A firm which is incurring losses or is in the process of dissolution has no goodwill.

8.5.2 Factors Affecting the Value of Goodwill

A firm's goodwill is affected by all factors which enhance the earning capacity of the firm.

1) Nature of business: Goodwill depends on the nature of goods produced and the demand for such goods in the market. Where the firm produces high value added items or goods which have stable demand, its profitability is high and therefore it has more goodwill.
2) Favourable location: A firm located at a central place of business or in a locality having heavy customer traffic, commands more goodwill than others.
3) Efficiency of Management: The business which is managed more efficiently will have more goodwill than others.
4) Intensity of Competition: Those business which have no competition or less competition will have more goodwill.
5) Special Advantages: If the firm enjoys special advantages like technical know-how, patents, copyrights, import licences, long-term contracts for supply of materials or sale of goods, etc., it commands more goodwill than others,

8.5.3 Need for Valuation of Gobdwiii

Normally the need for valuation of goodwill arises at the time of sale of an existing business. But in case of a partnership firms, it may also arise when the firm is reconstituted. A change in the constitution of the firm usually involves a change in the composition of partners resulting often to a change in their profit sharing ratio. This gives rise to the need for compensation by a partner who gains an additional share in profits to the one who sacrifices it. The amount of this compensation is usually based on the value of goodwill. Thus in partnership, the need for valuation of goodwill arises in the following circumstances.

1) Change in the profit sharing ratio
2) Admission of a new partner
3) Retirement of a partner
4) Dissolution of a firm which involves sale of the business
5) Amalgamation of partnership firms

8.5.4 Methods of Valuation of Goodwill

The important methods of valuing goodwill are 'as follows:

1) Average Profits Method

   Under this method, goodwill is calculated at an agreed number of years' purchase of the average profits of the past few years. It is generally felt that a new business will not be able to earn any profits for the first few years of its operation. Hence the buyer of a running business values its goodwill by multiplying the past average profits by the number of years during which he expects such profits to accrue. For example, if the past average profits work out at Rs. 50,000 and he expects that the benefit of such profits is likely to continue for another three years, the goodwill shall be valued at Rs. 1,50,000 (Rs. 50,000 x 3).

   It should be noted that while calculating the past average profits, necessary adjustments have to be made for any expected changes in the profitability of the firm. For example, if it is expected that certain expenses and losses are not likely to occur in future, their amounts should be added back to the average profits., Similarly, if certain additional expenses are likely to be incurred in future, their amounts should be subtracted from the average profits. Thus, for purposes of goodwill, we take into account the adjusted average profits and not the actual average profits. Look at illustration 7 and see how goodwill is valued on the basis of certain number of years' purchase of the average profits.

Illustration 7

A, B, and C arc in partnership sharing profits and losses in the ratio of 3:2:1. It is decided that the goodwill of the firm shall be calculated on the basis of 3 years' purchase of the average profits of the preceding 4 years. The net profits for the last 4 years were: 1984–Rs. 20,000; 1985–Rs. 24,000; 1986–Rs. 22,000 and 1987–Rs. 26,000. Calculate the value of goodwill.

Solution

Average profit of the last 4 years

$$= \frac{\text{Rs. } 20{,}000 + \text{Rs. } 24{,}000 + \text{Rs. } 22{,}000 + \text{Rs. } 26{,}000}{4} = \frac{92{,}000}{4} = 23000$$

Value of goodwill = 23,000 × 3 years = Rs. 69,000

2) Super Profits Method

   Under this method, it is assumed that a certain percentage of the capital employed is normal return (profit) in a similar type of business or industry. Hence, it is contended that the buyer's real benefit does not lie in total profits but is limited to such an amount of profits which is in excess of the normal return on capital employed. The excess of actual profit over the normal profit is called 'super profits'. Thus, goodwill is calculated by multiplying the average super profits with the agreed number of years' purchase.

   The steps involved under this method are as follows:

   1) Calculate the actual (or average) expected profits;
   2) Calculate the normal profits on capital employed;

      $$\text{Normal profits} = \text{Capital employed} \times \frac{\text{normal rate}}{100}$$

   3) Calculate super profits; and

      Super profits = Actual (or Average) profits minus Normal profits
   4) Multiply the super profits by the number of years' purchase to get the value of goodwill.

Look at illustration 8 and study how goodwill is valued under super profits method.

Illustration 8

Gopi Krishna & Co. employed a capital of Rs. 2,00,000. The normal rate of profit that is likely to be earned on the capital employed is 10% in similar type of business. During the year 1989 the firm had made a profit of Rs. 39,000. It is aaticipated that

the firm shall continue to earn the same amount of profits for another four years. Calculate the value of goodwill.

Solution

Normal amount of profit = $\frac{\text{Rs. } 2,00,000 \times 10}{100}$ = Rs. 20,000.

Actual profit earned = Rs. 39,000

Super profit = Actual profit − Normal profit
= Rs. 39,000 − Rs. 20,000 = Rs. 19,000

Goodwill will be 4 years' purchase of super profits
= Rs. 19,000 × 4 = 76,000

3) **Capitalisation Method**

According to capitalisation method, goodwill can be calculated in two ways: (a) by capitalising the average profits, or (b) by capitalising the super profits.

a) **Capitalisation of Average Profits Method:** Under the method the value of goodwill is ascertained by deducting the actual capital employed (net tangible assets) from the capitalised value of average profits based on normal rate of return. Thus, the steps involved to arrive at goodwill under this method are:

i) Ascertain the average profits based on the past few years' profits.

ii) Capitalise the average profit on the basis of the normal rate of return to ascertain the value of business as follows:

Value of business = $\frac{\text{Average profits} \times 100}{\text{Normal rate}}$

iii) Ascertain the actual capital employed. by deducting the external liabilities from the total assets (excluding goodwill).
Net (tangible) assests = Total (tangible) Assets minus liabilities

iv) Ascertain the, value of goodwill by deducting the net tangible assets from the capitalised value of business.
Goodwill.= Capitalised value of business minus Net tangible assets

Look at illustration 11 and study how goodwill is valued by capitalisation method.

Illustration 9

The average profits of a partnership business were Rs. 10,000 and the value of net tangible assets was Rs. 1,00,000. It is expected that the normal rate of return on the capital invested in the same type of business is 8%. Calculate the goodwill.

Solution:

Capitalised value of business = Rs. $\frac{10,000 \times 100}{8}$ = Rs. 1,25,000

Goodwill = Rs, 1,25,000 − Rs. 1,00,000 = Rs. 25,000

b) **Capitalisation of Super Profits Method:** Goodwill can also be ascertained by capitalising the super profits directly. In this case, there is no need to work out the capitalised value of business at all. For example, continuing illustration 43 where the average profits are Rs. 10,000 and the normal profits are Rs. 8,000, the super profit will work out as Rs. 2,000 (Rs. 10,000 − Rs. 8,000).

The goodwill shall be computed as follows:

Goodwill = Super profits × 100/ normal rate
= Rs. 2,000 × 10018 = Rs. 25,000.

Check Your Progress B

1 Define goodwill.

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2 Name the three methods of valuationof goodwill.

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3 State whether each of the following statements is True or False.

i) Goodwill refers to the repu ation of the firm,

ii) A firm incurring losses has good amount of goodwill.

iii) The amount of premium paid by incoming partner is based on firm's goodwill.

iv) The normal return on capital employed is called super profits.

v) Average profits need no adjustment for the purpose of calculating the value of goodwill.

vi) Goodwill computed under the capitalisation of average profits method and the capitalisation of super profits method is the same.

4 A and B are partners in a firm which has total capital of Rs. 24,00,000. In similar type of business, the normal rate of return on capital employed is expected at 15%. During the year 1989, the firm made a profit of Rs. 5,00,000 and it is expected that the firm will continue to earn the same amount of profits for another three years. Calculate the value of goodwill.

8.5.5 Treatment of Goodwill on Admission of a Partner

You know that an incoming partner gets his share in the profits from the existing partners for which he has to compensate them. This he may do either (i) by bringing in his share of goodwill in cash (also called premium) which will be shared by the existing partners, or (ii) by agreeing that a Goodwill Account be raised in the books of the firm to give necessary credit to the existing partners. Thus, when a new partner is admitted, goodwill can be treated in two ways: (i) by premium method, or (ii) by revaluation method.

Premium Method

This method is followed when the incoming partner brings in his share of goodwill in cash. **This amount (called premium) is shared by the old partners in their ratio of sacrifice.**

The amount of premium may be directly (privately) paid to old partners or it may be paid through the firm. **When it is paid directly to the old partners, no entry is made in the books of the firm.** But when the amount is paid through the firm, the following journal entries are passed:

i) **For the amount of premium brought**

Bank A/c	Dr.	
To Goodwill A/c		

ii) **For crediting the old partners**

Goodwill A/c	Dr.	in the ratio
To Old Partners' Capital A/cs (Individually)		of sacrifice

It is generally contended that the amount of premium brought in by the new partner should not be credited to goodwill. Instead, it should be credited to new partner's capital account and then adjusted in favour of the old partners in their ratio of sacrifice. In that case the journal entries will be as follows:

i)	Bank A/c	Dr.
	To New Partners' Capital A/c	
ii)	New Partner's Capital A/c	Dr.
	To Old Partners Capital A/cs	

Mostly, the old partners decide that the amount of premium credited to them should be retained in business. In that case, no additional entry will be necessary. **But.,** if they decide to withdraw their shares (either fully or partly), the following additional journal entry will be passed.

Old Partners' Capital A/cs	Dr.
To Bank	

(Being the amount of premium withdrawn by old partners)

Look at Illustration 10 and 11 and see how share of goodwill brought in by the new partner is treated in the books of the firm.

Illustration 10

P and Q are partners sharing profits and losses in the ratio of 3:2. They admit R as a partner with 1/4th share in profits. R brings in Rs. 20,000 as his capital and Rs. 10,000 as premium. Pass the necessary journal entries,

Solution

Journal

			Rs.	Rs.
i)	Bank A/c	Dt.	30,000	
	To R's Capital A/c			20,000
	To Goodwill A/c			10,000
	(Being the amount brought in by R as capital and premium)			
ii)	Goodwill A/c	Dr.	10,000	
	To P's Capital			6,000
	To Q's Capital			4,000
	(Being the amount of premium credited to P and Q in the ratio of 3:2)			

Note: Since the question is silent about the proportion in which P and Q have surrendered in favour of R, it is presumed that P and Q have made the sacrifice in the old ratio. Hence, the premium brought in by R has been credited to P and Q in the old ratio, i.e., 3:2

Illustration 11

X and Y are partners sharing profits and losses in the ratio 4:3. They admit Z as a partner. Z brings in Rs. 15,000 as his capital and the required amount of premium in cash. The goodwill of the firm is valued at Rs. 28,000. X and Y withdrew half of their share of goodwill. The new profit sharing ratio is 3:2:1. Pass the necessary journal entries.

Solution

Calculation of sacrificing ratio:

Partner	Old Share	-	New Share	=	Sacrifice	
X	4/7	-	3/6	=	$\frac{24-21}{42}$ =	$\frac{3}{42}$
Y	3/7	-	2/6	=	$\frac{18-14}{42}$ =	$\frac{4}{42}$

Journal

			Rs.	Rs.
i)	Bank A/c	Dr.	22,000	
	To Z's Capital A/c			15,000
	To Goodwill A/c			7,000
	(Being the amounts brought in by Z as capital and as goodwill)			
ii)	Goodwill A/c	Dr.	7,000	
	To X's Capital A/c			3,000
	To Y's Capital A/c			4,000
	(Being the amount of goodwill credited to X and Y in the ratio of 3:4)			
iii)	X's Capital A/c	Dr.	1,500	
	Y's Capital A/c	Dr.	2,000	
	To Bank A/c			3,500
	(Being withdrawal of half goodwill by X and Y)			

When **goodwill** already exists in the **books:** The treatment of goodwill (on admission of a partner) discussed above was based on the assumption that there was no Goodwill Account appearing in the books of the firm. But, if some goodwill already exists in the books of the firm, then, after crediting the old partners by the amount of premium brought in by the new partner, the existing goodwill must be written off by debiting the old partners in their old profit sharing ratio.

Sometimes, the partners may decide that the goodwill should continue to appear in the books at its old value. In that case, the amount of premium to be brought in by

the new partner should be. proportionately reduced. In other words, he shall bring cash only for his share of the excess of the agreed value of goodwill over the amount of goodwill already appearing in the books. For example, in Illustration 11, the goodwill of the firm is valued at Rs. 28,000 and Z who is admitted to 114th share in profits, brings in Rs. 7,000 as his share of goodwill. Suppose goodwill already appeared in books at Rs. 14,000 and the partners decide that it should continue to appear as such in the books. In that case Z should bring in Rs. 3,500 only as the premium i.e., 1/4th of Rs. 14,000 (Rs. 28,000—Rs. 14,000) which will be credited to X and Y in their sacrificing ratio.

Revaluation Method

This method is followed when the incoming partner does not bring his Share of goodwill in cash. In this case, goodwill is raised in the books at its full value. For this purpose, the following journal entry will be made.

Goodwill A/c Dr.
To Old Partners' Capital A/cs
(Being the value of goodwill raised and credited to old partners in the old ratio)

It should be noted that when goodwill is raised in the books, the capital accounts of the old partners are credited in the old profit sharing ratio. Thus, each of the old partners gets his legitimate share in the goodwill already built up. But, if goodwill is already appearing in the books of the firm, it is to be revalued and the entry is to be made only for the difference between the book value and the present value. If, however, the book value of goodwill is more than the present value, the loss due to the fall in the value of goodwill should be debited to the old partners in the old ratio.

Illustration 12

A and B are partners sharing profits and losses in the ratio 3:1. They admit C into partnership for 1/5th share in profit. He pays Rs. 20,000 as his capital. The goodwill of the old firm is valued at Rs. 40,000. C is unable to bring his share of goodwill in cash. Pass the necessary journal entries.

Solution

Journal

			Rs.	Rs.
i)	**Bank A/c**	**Dr.**	**20,000**	
	To C's Capital A/c			**20,000**
	(Being the amount brought in by C as his capital)			
ii)	**Goodwill A/c**	**Dr.**	**40,000**	
	To A's Capital A/c			**30,000**
	To B's Capital A/c			**10,000**
	(Being goodwill raised at its full value and credited to A and B in their old profit sharing ratio).			

Suppose, in the above case, goodwill already appeared in the books of the old firm at Rs. 24,000. In this case goodwill will be raised by Rs. 16,000, i.e., present value Rs. 40,000 – book value Rs. 24,000. The journal entry, therefore, will be

Goodwill	Dr.	16,000	
To A's Capital A/c			12,000
To B's Capital A/c			4,000
(Being the increase in the value of goodwill credited to A and B in their old profit sharing ratio)			

Goodwill not to appear in the Balance Sheet: When at the time of the admission of a new partner goodwill is raised in the books of the firm, it will be shown in the Balance Sheet at its full value. But, the partners may decide that goodwill should not appear in the Balance Sheet of the firm. In that case, it must be written off by debiting all

the partners (including the incoming partner) in the new profit sharing ratio. **The net effect of such treatment will be that the new partner's capital account would stand debited to the extent of his share of goodwill and the old partners' capital accounts credited in the ratio of their sacrifice.**

Look at illustration 13 and see how entries are made when it is decided that goodwill should not appear in the firm's Balance Sheet.

Illustration 13

X and Y are partners sharing profits and losses equally. They admit Z into partnership and the new ratio is fixed as 4:3:2. Z is unable to pay anything for goodwill but is to bring Rs. 25,000 as capital. Goodwill of the firm is valued at Rs. 36,000. Give journal entries on the admission of Z assuming that partners do not want goodwill to appear in the Balance Sheet.

Solution

Journal

			Rs.	Rs.
i)	Bank A/c	Dr.	25,000	
	To Z's Capital A/c			25,000
	(Being the amount brought in by Z as his capital)			
ii)	Goodwill A/c	Dr.	36,000	
	To X's Capital A/c			18,000
	To Y's Capital A/c			18,000
	(Being goodwill raised at its full value – old ratio)			
iii)	X's Capital A/c	Dr.	16,000	
	Y's Capital A/c	Dr.	12,000	
	Z's Capital A/c	Dr.	8,000	
	To Goodwill A/c			36,000
	(Being goodwill written off – new ratio)			

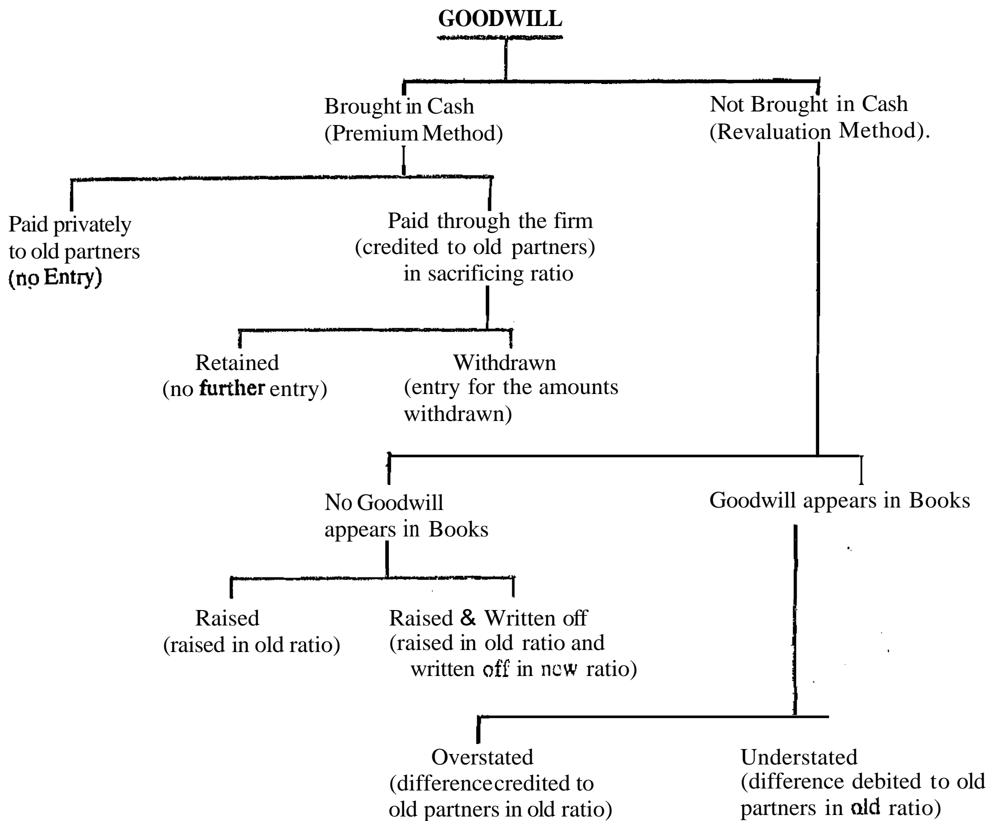
The net effect of entries (ii) and (iii) above is that Z's Capital Account has been debited by Rs. 8,000, and X's Capital Account and Y's Capital Account credited in their sacrificing ratio by Rs. 2,000 (credit Rs. 18,000 – debit Rs. 16,000) and Rs. 6,000 (credit Rs. 18,000 – debit Rs. 12,000), respectively.

Sometimes, the partners do not want to show goodwill any where in the books of the firm (not even in journal and ledger). In that case, the adjustment for goodwill can be made simply by debiting the new partner's capital account with his share of goodwill and crediting the old partners' capital accounts in their ratio of sacrifice. If, for example, in Illustration 13 above, the partners decide not to show goodwill anywhere in firm's books, the entries (ii) and (iii) would be replaced by the following one entry:

Z's Capital A/c	Dr.	8,000	
To X's Capital A/c			2,000
To Y's Capital A/c			6,000
(Being adjustment of Z's share of goodwill)			

The treatment of goodwill on new partner's admission has been summarised in Figure 8.1.

Figure 8.1: **Treatment** of Goodwill on admission of a new **partner**



8.6 REVALUATION OF ASSETS AND LIABILITIES

At the time of admission of a new partner, it is desirable to verify whether the book values of assets ahd liabilitiesof the firm are correct or not. If the assets and liabilities are overstated.or understated in the books, it is necessary to revalue them and to bring into account the loss or profit arising out of such revaluation. The **idea** underlying **this adjustment** is to **avoid any undue gain or loss to the incoming partner.** If there is any appreciation (increase) in the value of assets or reduction in **the** value of liabilities, the benefit should be enjoyed only by the old partners as it has occurred in the pre-admission period. The incoming partner should not benefit from such appreciation in the value of assets or **decrease in** the value of liabilities. **Similarly,** if there is any fall in the value of assets or **increase** in the value of liabilities up to the date of admission, the loss should be borne only by the old partners. The incoming partner should not be affected by the same. Hence, the revaluation of assets and liabilities is in the interest of both the old and the new partners.

The adjustments in the value of assets and liabilities are effected through an account called 'Revaluation Account' or 'Profit and Loss Adjustment Account'. Any increase in the value of assets or decrease in the amount of liabilities (it is a gain) should be credited to Revaluation Account. If there is any decrease in the value of assets or increase in the amount of liabilities (it is a loss), it should be debited to Revaluation Account. It is also possible that there are certain assets and liabilities which are still to recorded in the books of the firm. These shall be treated in the same manner as any increase in the assets and liabilities through the Revaluation Account. In other words, if there is an unrecorded asset, it shall be credited to **Revaluation** Account; and if there is an unrecorded liability, it shall be debited to Revaluation Account. The balance of the Revaluation Account representing profit or loss from the revaluation of assets and liabilities should be transferred to the capital accounts of the old partners in their old profit sharing ratio.

The following journal entries will be recorded in the books of the firm on revaluation.

i) **For increase** in **the value of an asset**
Asset A/c Dr.
To Revaluation A/c

ii) For decrease in the value of an asset
Revaluation A/c Dr.
To Asset A/c

iii) For **increase** in the value of a liability
Revaluation A/c Dr.
To Liability A/c

iv) For decrease in the value of a liability
Liability A/c Dr.
To Revaluation A/c

v) For an unrecorded asset
Asset A/c Dr.
To Revaluation A/c

vi) For an unrecorded liability
Revaluation A/c Dr.
To Liability A/c

vii) For transfer of the balance of Revaluation Account

If credit balance (profit)
Revaluation Account A/c Dr.
To Old Partners' Capital A/cs

If debit balance (loss)
Old Partners Capital A/cs Dr.
To Revaluation A/c

Illustration 14

The following is the Balance Sheet of P and Q who were equal partners on December 31, 1989.

Liabilities	Rs.	Assets	Rs.
Creditors	7,400	Cash	5,400
Capitals		Debtors	12,000
P 40,000		Stock	10,600
Q 30,000	70,000	Furniture	9,400
		Building	40,000
	77,400		77,400

On January 1, 1990, R was admitted into partnership on the following terms.

i) That R should bring in Rs. 10,000 as goodwill and Rs. 20,000 as capital for a fifth share,

ii) That Stock and Furniture be depreciated by 10%.

iii) That a provision of 5% on Debtors be created to cover doubtful debts.

iv) That the value of Building be appreciated by 20%.

v) An item of Rs. 600 included in creditors is not likely to arise and, hence, should be removed from books.

You are required to pass journal entries, and prepare Revaluation Account and Balance Sheet after giving effect to the above.

Solution

Journal

			Rs.	Rs.
1990 Jan. 1	Cash A/c	Dr.	30,000	
	To R's Capital A/c			20,000
	To Goodwill A/c			10,000
	(Being the amount brought in by R as capital and goodwill			
"	Goodwill A/c	Dr.	10,000	
	To P's Capital A/c			5,000

To Q's Capital A/c (Being the amount of goodwill credited to P and Q equally)			5,000
Revaluation A/c	Dr.	2,600	
To Stock A/c			1,060
To Furniture A/c			940
To Provision for Doubtful Debts A/c			600
(Being the fall in the value of various assets on revaluation on R's admission)			
Building A/c	Dr.	8,000	
To Revaluation A/c			8,000
(Being the increase in the value of Building on revaluation on R's admission)			
Creditors	Dr.	600	
To Revaluation A/c			600
(Being the item of Rs. 600 included in creditors not likely to arise eliminated from books)			
" Revaluation A/c	Dr.	6,000	
To P's Capital A/c			3,000
To Q's Capital Account			3,000
(Being profit on revaluation of assets and liabilities transferred to P and Q equally)			

Revaluation Account

Dr.					Cr.
		Rs.			Rs.
1990 Jan: 1	To Stock	1,060	1990 Jan. 1	By Building	8,000
"	To Furniture	940	"	By Creditors	600
"	To Provision for Doubtful Debts	600			
"	To Profit transferred to Capital Accounts: P 1/2 3,000 Q 1/2 3,000	6,000			
		8,600			8,600

Balance Sheet of M/s P, Q and R as on January 1, 1990

Liabilities		Rs.	Assets		Rs.
Creditors		6,800	Cash		35,400
			Debtors	12,000	
Capitals:			Less: Provision for		
P	48,000		Doubtful Debts	600	11,400
Q	38.000		Stock		9,540
R	20,000	1,06,000	Furniture		8,460
			Building		48,000
		1,12,800			1,12,800

Working Note:

The final capitals of the old partners in the reconstituted firm have been worked out as follows:

	P	Q
	Rs.	Rs.
Capital given	40,000	30,000

Add : Share of Goodwill	5,000	5,000
Profit on revaluation	3,000	3,000
Total	48,000	38,000

8.7 ADJUSTMENT OF ACCUMULATED PROFITS OR LOSSES

You are aware that some concerns create reserves out of profits for strengthening their financial position or for expansion purposes. If, at the time of admission of a new partner, such accumulated profits exist in the name of General Reserve or Profit and Loss Account (credit balance), they belong to the old partners. The new partner cannot claim any share in them. Hence, it is necessary, at the time of admission, to transfer them to the capital accounts of the old partners in the old ratio. For this purpose, the following journal entry is passed:

General Reserve A/c. Dr.
Profit and Loss A/c. Dr.
To Old Partners' Capital Accounts

Similarly, if, at the time of admission, there is a debit balance in the Profit and Loss Account (representing undistributed loss), it should be transferred to the capital accounts of the old partners in the old ratio. The journal entry will be

Old Partner's Capital A/cs Dr
To Profit and Loss A/c

Illustration 15

A and B are in partnership sharing profits and losses in the ratio of 2:1. The following is their Balance Sheet as on January 1, 1989:

Liabilities	Rs.	Assets	Rs.
Bills Payable	*4,500*	Cash	1,200
Sundry Creditors	14,000	Bills Receivable	5,300
General Reserve	*12,000*	Sundry Debtors	16,200
Capital Accounts:		Stock	22,900
A Rs. *39,200*		Furniture	10,700
B Rs. 28,600	67,800	Land and Building	42,000
	98,300		98,300

On the above date C was admitted as a partner on the follo[illegible] terms:

a) C should bring in Rs. *9,000* for goodwill and Rs. *25,000* as [illegible]pital.
b) Stock and Furniture be depreciated by *10%.*
c) *A* provision of 5% on debtors be created for doubtful debts.
d) There being a claim against the firm for damages, a provision of Rs. 600 is to be created.
e) The value of Land and Building be appreciated by 20%.
f) The new profit sharing ratio is to be 3:1:1.

Give the necessary journal entries and prepare Revaluation Account and the Balance Sheet of the firm as newly constituted.

Solution

Calculation of the sacrificing ratio:

Partner	Old Share	–	New Share	=	Sacrifice
A :	2/3	–	3/5	=	$\frac{10-9}{15}=\frac{1}{15}$
B :	113	–	1/5	=	$\frac{5-3}{15}=\frac{2}{15}$

Hence, the goodwill brought in by C, Rs. 9,000, should be credited to A and B in the ratio of 1:2.

Journal

			Rs.	Rs.
1989 Jan. 1	Cash A/c	Dr.	34,000	
	To C's Capital A/c			25,000
	To Goodwill A/c			9,000
	(Being the amount brought in by C as capital and goodwill)			
"	Goodwill A/c	Dr.	9,000	
	To A's Capital A/c			3,000
	To B's Capital A/c			6,000
	(Being the amount of goodwill brought in by C transferred to A and B in the ratio of 1:2)			
"	Revaluation A/c	Dr.	4,170	
	To Stock A/c			2,290
	To Furniture A/c			1,070
	To Provision for Doubtful Debts A/c			810
	(Being the fall in the value of various assets on revaluation on C's admission)			
	Revaluation A/c	Dr.	600	
	To Provision for Damages A/c			600
	(Being the provision for damages)			
	Land and Building A/c	Dr.	8,400	
	To Revaluation A/c			8,400
	(Being the appreciation in the value of Land and Building on revaluation on C's admission)			
	Revaluation A/c	Dr.	3,630	
	To A's Capital A/c			2,420
	To B's Capital A/c			1,210
	(Being the profit on revaluation of assets and liabilities transferred to A and B in the ratio of 2:1)			
"	General Reserve A/c	Dr.	12,000	
	To A's Capital A/c			8,000
	To B's Capital A/c			4,000
	(Being general reserve transferred to A and B in the ratio of 2:1)			

Revaluation Account

Dr. Cr.

1989		Rs.	1989		Rs.
Jan. 1	To Stock	2,290	Jan. 1	By Land and Building	8,400
"	To Furniture	1,070			
"	To Provision for Doubtful Debts	810			
"	To Provision for Damages	600			
"	To Profit transferred to Capital Accounts: A 2/3 2,420; B 1/3 1,210	3,630			
		8,400			8,400

Balance Sheet of M/s A, B & C
as on January 1, 1989

Liabilities		Rs.	Assets		Rs.
Bills Payable		4,500	Cash		35,200
Sundry Creditors		14,000	Bills Receivable		5,300
Provision for Damages		600	Sundry Debtors	16,200	
Capital Accounts:			Less: Provision for Doubtful Debts	810	
A	52,620				15,390
B	39,810		Stock		20,610
C	25,000	1,17,430	Furniture		9,630
			Land and Building		50,400
		1,36,530			1,36,530

Working Note: The final capitals of old partners in the reconstituted firm have been worked out by preparing their capital accounts as follows:

Capital Accounts

Dr. Cr.

	P Rs.	Q Rs.	R Rs.		P Rs.	Q Rs.	R Rs.
Goodwill	—	—	9,000	Balance b/d	39,000	28,600	—
Balance c/d	52,620	39,810	25,000	Cash	—	—	34,000
				Goodwill	3,000	6,000	—
				Profit on Rev.	2,420	1,210	—
				Gen. Reserve	8,000	4,000	
	52,620	39,810	25,000		52,620	39,810	34,000
				Balance b/d	52,6201	38,810	25,000

Check Your Progress C

1 Name two methods of treatment for goodwill at the time of admission of a partner.

....

....

2 Fill in the blanks

i) The share of goodwill brought in by the new partner in cash is termed as......................

ii) Premium brought in by the new partner is credited to the old partner in the .... ratio.

iii) When new partner fails to bring in his share of goodwill in cash, the goodwill is raised to its .... value.

iv) When goodwill appearing in the books is more than the agreed value, the difference shall be .... to old partners in the .... ratio.

v) If, at the time of admission of a partner, provision for doubtful debts is to be decreased, it shall be .... to Revaluation Account.

vi) An unrecorded liability is .... to Revaluation Account..

3 State whether the following statements are True or False.

i) When a new partner is admitted, any accumulated profit or loss is transferred to old partners in the old ratio.

ii) Balance of Revaluation Account is transferred to all the partners in the new ratio.

iii) When goodwill already exists in the books of the firm, the new partner is not required to bring any amount for his share of goodwill.

iv) If partners decide to write off goodwill raised on admission of a partner, the same shall be debited to all the partners in the new ratio.

v) The accumulated profits of the firm usually appears in the books of the firm General Reserve.

vi) If there is any accumulated loss appearing in the Balance Sheet at the time of admission of a new partner, the same should be transferred to old partners' capital accounts in the sacrificing ratio.

8.8 ADJUSTMENT OF CAPITALS

Sometimes, the partners may, at the time of admission, agree that the capitals should be in proportion to their respective shares in profits and losses. In such a case, the capital brought in by the new partner is taken as the basis for the adjustment of capitals of the old partners. For this purpose, the 'total capital of the firm should be calculated on the basis of the new partner's share and the capital brought in by him. Then the share of each of the old partners in the total capital should be ascertained on the basis of his share in profits. The capital thus ascertained should be compared with the balance in the capital account of each partner, after making all adjustments for goodwill, revaluation of assets and liabilities etc. If the actual balance is more . than the required capital, the excess will be paid to the partner concerned or it will be transferred to his current account. If, on the other hand, the actual balance is less than the required capital, the deficit will be brought in by him in cash or it will be debited to his current account.

Look at Illustration 16 and see how capitals of the old partners are adjusted so as to be in proportion to their respective shares in profits and losses.

Illustration 16

P and Q are partners sharing profits and losses in the ratio of 2:1. They admitted R as a partner with a share of 114 in the profits of the firm. R contributes Rs. 16,000 as his capital. The capitals of P and Q after making all adjustments in respect of goodwill, etc., are Rs. 35,000 and Rs. 14,000, respectively. It is agreed that capitals of partners should be in the new profit sharing ratio. Any excess or deficit should be transferred to current accounts. Adjust the capitals and pass the necessary journal entries.

Solution

The future profit sharing proportions of P and Q would be as under:

P will get 213 × 314-= 112

Q will get 113 × 314 = 114

R brings Rs. 16,000 as capital for 114th share. The total capital of the firm on the basis of R's share and his capital should be 16,000 × 411 = Rs. 64,000.

P's capital should be 64,000 x 112 or Rs. 32,000. Balance in his capital account after making the adjustments is Rs. 35,000. Hence, the excess of Rs. 3,000 (Rs. 35,000 – Rs. 32,000) should be transferred to his Current Account.

Q's capital should be 64,000 × 114 or Rs. 16,000. Balance in his capital account after making the adjustments is Rs. 14,000. Hence, the deficit of Rs. 2,000 (Rs. 16,000 – Rs. 14,000) should be debited to his Current Account,

The Journal entries are as follows:

Journal

			Rs.	Rs.
i)	P's Capital Account	Dr.	3,000	
	To P's Current Account			3,000
	(Being the transfer of excess capital to current account)			
ii)	Q's Current Account	Dr.	2,000	
	To Q's Capital Account			2,000
	(Being the transfer of deficit in capital tocurrent account)			

Illustration 17

X and Y are partners in a business sharing profits and losses in the ratio of 3:2. Their Balance Sheet on April 1, 1989 stood as under:

Liabilities	Rs.	Assets		Rs.
Sundry Creditors	31,200	Cash at Bank		10,200
Capital Accocnts:		Sundrv Debtors.	24,600	
X Rs. 55,000		Less: Provision for		
Y Rs. 45,000		Doubtful Debts	600	
	1,00,000			24,000
		Stock		22,000
		Furniture		15,000
		Building		60,000
	1,31,200			1,31,200

They decided to admit Z on the following terms:

a) That Z brings Rs. 40,000 as capital and he will receive 114th share in the future profits.

b) That the value of goodwill be fixed at Rs. 30,000.

c) That building and furniture be depreciated at 5%.

d) That a provision of Rs. 1,200 is required for doubtful debts.

e) That a provision of Rs. 650 be made for outstanding repair bills.

f) That the capitals of the partners be adjusted in proportion to their profit sharing ratio by opening current accounts;

Prepare the necessary Ledger Accounts and the B dance Sheet of the Finn as newly constituted.

Solution

Ledger

Revaluation Account

Dr. Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Building A/c	3,000	Apr. 1	By Loss transferred to	
"	To Furniture A/c	750		Capital Accounts:	
"	To Provision for			X - 3/5 3,000	
	Doubtful Debts A/c	600		Y - 215 2,000	5,000
"	To Provision for Outstanding Repairs A/c	650			
		5,000			5,000

Goodwill Account

1989		Rs.	1989		Rs.
Apr. 1	To X's Capital A/c	18,000	Apr. 1	By Balance c/d	30,000
"	To Y's Capital A/c	12,000			
		30,000			30,000
"	To Balance b/d	30,000			

Bank Account

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/f	10,200	Apr. 1	By Balance c/d	50,200
"	To Z's Capital A/c	40,000			
		50,200			50,200
"	To Balance b/d	50,200			

X's Capital Account

1989		Rs.	1989		Rs.
Apr. 1	To Revaluation A/c	3,000	Apr. 1	By Balance b/f	55,000
"	To Balance c/d	72,000	"	By Goodwill	18,000
			"	By X's Current Nc	2,000
		75,000			75,000
			"	By Balance b/d	72,000

X's Current Account

1989		Rs.			Rs.
Apr. 1	To X's Capital A/c	2,000			

Ys Capital Account

1989		Rs.	1989		Rs.
Apr. 1	To Revaluation A/c	2,000	Apr. 1	By Balance b/f	45,000
"	To Y's Current A/c	7,000	"	By Goodwill	12,000
"	To Balance c/d	48,000			
		57,000			57,000
			"	By Balance bid	48,000

Y's **Current Account**

		Rs.	1989		Rs.
			Apr. 1	By Y's Capital A/c	7,000

Z's Capital Account

		Rs.	1989		Rs.
			Apr. 1	By Bank	40,000

Balance Sheet of M/s **X, Y and Z**
as on **1st** April, 1989

Liabilities		Rs.	Assets		Rs.
Sundry Creditors		31,200	Cash at Bank		50,200
Provision for Outstanding Repairs		650	Sundry Debtors	24,600	
Capital Accounts:			Less: Provision for Doubtful Debts	1,200	
X	72,000				23,400
Y	48,000				
Z	40,000		Stock		22.000
		1,60,000	Furniture		14,250
Y's Current A/c		7,000	Building		57,000
			Goodwill		30.000
			X's Current Account		2,000
		1,98,850			1,98,850

Working Notes

1) **Calculation of the new profit sharing ratio**

Z's share is 1/4th of the total profit, hence, the remaining profit is 1 – 1/4 or 314.
X's share is 3/5 of 314; i.e., 3/5 × 314 = 9/20.
Y's share is 215 of 3/4; i.e., 215 x 314 = 6/20.
Thus, the new profit sharing ratio is
X : Y : Z = 9/20 : 6/20 : 1/4 or 5/20 = 9:6:5.

2) Adjustment of Capitals
Z brings Rs. 40,000 as capital for 114th share. The total capital of the firm on the basis of **Z's** share and his capital should be 40,000 × $\frac{4}{1}$ = Rs. 1,60,000.

X's share, therefore, is Rs. **1,60,000** × $\frac{9}{20}$ = **Rs.** 72,000. **Balance** in X's Capital Account after making the adjustments is Rs. **70,000** (55,000 + 18,000 – 3,000), Hence, the deficit of Rs. 2,000 (72,000 – **70,000)** should be debited to his Current Account.

Y's share will be : **1,60,000** × $\frac{6}{20}$ = Rs. 48,000.

Balance in Y's Capital Account after **making the** adjustments is Rs. 55,000 (45,000 + 12,000 – 2,000). Hence, the **excess of** Rs. 7,000 (55,000 – 48,000) should be credited to his Current Account.

Determining New **Partner's** Capital: Sometimes, the new partner is **required** to bring in capital equal to his share in profits **and** losses in the firm. In such a situation, the combined capital of the old partners (after adjustments) is taken as the basis for determining the capital to be contributed by the new partner. For example, X and Y are partners in a firm sharing profits and losses in the ratio of **3:2.** Z is admitted for 114th share of profits and is to pay the proportionate amount as capital. The capitals of X and Y, after making all adjustments in respect of goodwill and revaluation of assets and liabilities, are Rs. **52,000** and Rs. 38,000, respectively. In this case, **the** combined capital (after adjustments) of X and Y 'is Rs. 90,000 (Rs. 52,000 + Rs. 38,000) and their combined share in profits is 314 (deducting **Z's** 114th share from 1).

Hence, the total capital of the firm would be Rs. **1,20,000** (90,000 × **4/3**). Since **Z's** share is 114, he should contribute Rs. 30,000 (114 of Rs. **1,20,000)** as his capital.

Illustration 18

A and B were partners sharing profits and **losses** in the ratio of **3:2.** On January 1, 1989 their Balance Sheet was as follows:

Liabilities	Rs.	**Assets**	Rs.
Creditors	52,000	Cash	8,000
General Reserve	20,000	Debtors	30,000
Capitals:		Stock	24,000
A 71,000		Investments	20,000
B 57,000		Machinery	48,000
	1,28,000	Land & Building	70,000
	2,00,000		2,00,000

C was admitted as partner on the above date. The new profit sharing ratio was agreed to be **3:3:2.** C paid Rs. 20,000 as his share of goodwill and is to bring in capital **sufficient to** make it proportionate to his share in profits. Machinery was to be valued at Rs. **44,000** and Land and Building at Rs. 84,000. The firm has to pay an amount of Rs. 2,500 to a worker as compensation. Investments should be reduced to their market value, viz., Rs. 18,000. Z, an old **customer,** whose account was written off as bad, has promised to pay Rs. 500 in settlement of his claim.

Prepare **Revaluation** Account, Partners' Capital Accounts and the Opening Balance Sheet of the new firm.

Solution

Revaluation Account

Dr.						Cr.
1989		**Rs.**	**1989**			**Rs.**
Jan. 1	**To Machinery**	**4,000**	**Jan. 1**	**By Land & Building**		**14,000**
"	**To Outstanding compensation**	**2,500**	"	**By Z**		**500**
"	**To Investments**	**2,000**				
	To Profit transferred to Capital Accounts					
	***A 315* 3,600**					
	***B 215* 2,400**	**6,000**				
		14,500				**14,500**

A's Capital Account

1989		Rs.	1989		Rs.
Jan. 1	To Balance c/d	1,04,600	Jan. 1	By Balance b/d	71,000
			"	By Goodwill	18,000
			"	By Profit and Loss Adjustment A/c	3,600
			"	By General Reserve	12,000
		1,04,600			104600
			"	By Balance b/d	1,04,600

B's Capital Account

1989		Rs.	1989		Rs.
Jan. 1	To Balance c/d	69,400	Jan. 1	By Balance b/d	57,000
			"	By Goodwill	2,000
			"	By Profit and Loss Adjustment A/c	2,400
			"	By General Reserve	8,000
		69,400			69,400
			"	By Balance b/d	69,400

C's Capital Account

		Rs.	1989		Rs.
			Jan. 1	By Cash	58,000

Balance Sheet of M/s A, B and C as on January 1, 1989

Liabilities		Rs.	Assets	Rs.
Creditors		52,000	Cash	86,000
Outstanding Compensation		2,500	Debtors	30,500
Capital Accounts:			Stock	24,000
A	1,04,600		Investments	18,000
B	69,400		Machinery	44,000
C	58,000		Land and Building	84,000
		2,32,000		
		2,86,500		2,86,500

Working Notes

1) **Calculation of sacrificing ratio**

Partner	Old Share –	New Share	=	Sacrifice
A :	3/5 –	3/8	=	$\frac{24-15}{40} = \frac{9}{40}$
B :	215 –	318	=	$\frac{16-15}{40} = \frac{1}{40}$

Hence, the goodwill brought in by C, Rs. 20,000, has been credited to A and B in the ratio of 9:1.

2) **Calculation of C's Capital**

C's share is 218. Hence, the combined share of A and B is 618 i.e., 1 – 218. The combined adjusted capital of A and B is Ps. 1,74,000. Therefore, the total capital of the firm should be 1,74,000 x 8/6 or ks. 2,32,000. As C's share is 218, he should bring in Rs. 58,000, i.e., 2,32,000 x 218, as capital (proportionate to his share).

3) It is assumed that the capitals of A and B need not be proportionate to their respective shares in profits, as the question is silent about this adjustment. In case it is desired that capitals of all the partners should be in their profit sharing ratio, the capitals of A and B may have to be adjusted without affecting the total capital of the firm. In such a case, the capitals of A and B should be Rs. 87,000 each (318 of Rs. 2,32,000). Hence, A should be paid Rs. 17,600 being excess capital (1,04,600 – 87,000) and B should bring Rs. 17,600 as additional capital (87,000 – 69.4001.

8.9 CHANGE IN PROFIT SHARING RATIO

Sometimes, the partners of a firm may decide to change their existing profit sharing ratio. As a result of this arrangement, some partners will gain an additional share in the future profits of the firm while others will lose a part thereof. For example, Ram and Shyam were partners in a firm sharingprofits and losses in the ratio of 3:2. It is felt that now on Shyam will not be able to actively participate in the business of the firm. Hence, they decide that, in future, they will share profits and losses in the ratio of 3:1. In this case Ram gains 3/20th (3/4 − 3/5) share in profits which is sacrificed by Shyam in his favour. In such a situation, therefore the most important implication relates to the compensation to be given by the gaining partner to the losing partner. This can be worked out on the basis of goodwill as it was done in case of admission of a new partner. Thus, the gaining partner must pay the proportionate amount of goodwill to the losing partner or it may be adjusted by debiting the gaining partner's capital account and crediting the losing partner's capital account. Alternatively, the Goodwill Account can be raised in the books by crediting all the partners in their old profit sharing ratio.

Change in profit sharing ratio, like admission of a partner, may also involve revaluation of assets and liabilities, transfer of accumulated profits and losses to partners' capital accounts in the old ratio, and adjustment of partners' capitals so as to make them proportionate to the new profit sharing ratio.

The adjustments in accounts in respect of all these items are made in the same way as they are made on admission of a new partner.

8.10 LET US SUM UP

With a view to introduce additional capital and take advantage of managerial skill or both, the existing partners of a firm may decide to admit one or more partners in the firm. The incoming partner brings in some amount as capital and some amount as his share of goodwill called 'premium'.

Goodwill usually refers to the reputation or good name of the firm which makes it do better business and earn higher profits. This may be the result of certain advantages like good location, nature of product, import licence, etc. Goodwill is an intangible asset which is brought into books only when some new business is bought or when the firm is reconstituted. On such occasions, its value is determined by methods like certain number of years' purchase of the average profits, certain number of years' purchase of the super profits, and capitalisation of super profits.

Goodwill is used as the basis for determining the amount of premium to be brought by the new partner to compensate the old partner for the loss of their shares in future profits of the firm in his favour. This amount of premium is shared by the old partners in the ratio of their sacrifice in the future profits of the firm in favour of the new partner. If the new partner is unable to bring in his share of goodwill, then a Goodwill Account must be raised to its full value by crediting the old partners in the old profit sharing ratio.

A number of other matters may have to be dealt with at the time of admission of a new partner. These are: (i) calculation of new profit sharing ratio, (ii) revaluation of assets and liabilities, (iii) adjustment of accumulated profits or losses, and (iv) adjustment of capitals.

If nothing is specified, it is presumed that the old partners will share the remaining profit in the old ratio. But, if it is specified that the new partner purchases his share of profit from the old partners in a particular ratio, the new shares of the old partners will be calculated by deducting the proportion surrendered in favour of the new partner from the old shares.

If, at the time of admission of a new partner, some revaluation of assets and liabilities is involved, the necessary adjustment's must be made through an account called Revaluation Account (also known as Profit and Loss Adjustment Account). Similarly, if some accumulated profits (or losses) exist, they must be transferred to the capital accounts of the old partners in the old ratio.

Sometimes, it is agreed that the capitals should be in proportion to the profit sharing ratio. This may be done on the basis of the new partner's capital. Similarly, if new partner's capital is not specified, it can be ascertaine'd on the bases of the combined capital (after adjustment) of the old partners.

Sometimes, the existing partners of a firm decide to change their profit sharing ratio: This primarily involves apayment of compensation by way of premium by the gaining partner to the losing partner. Some other adjustments like revaluation of assets and liabilities, transfer of accumulated profits, and loss making capitals proportionate to the new profit sharing ratio may also have to be made. The treatment of these matters on change in the profit sharing ratio is similar to that of admission of a new partner.

8.11 KEY WORDS

Accumulated Profits: Undistributed profits appearing in the Balance Sheet in form of general reserve or credit balance of Profit & Loss Account.

Adjusted Average Profits: Average of the past few years' profits adjusted by expected changes in future in the profitability of the firm.

Capitalised Value of Business: Value of business ascertained by capitalisation of profit based on normal rate of return.

Goodwill: Value attached to the capacity of the firm to earn more than normal profits.

Net Assets: Excess of total tangible assets over the external liabilities. It is also called 'capital employed'.

Normal Profits: Amount of profits expected on the basis of the normal rate of return.

Premium: Amount paid by an incoming partner to compensate the old partners for their loss of share in future profits of the firm. It is equal to his share of goodwill.

Revaluation Account: An account prepared for ascertaining the profit or loss arising on revaluation of assets and liabilities.

Sacrificing Ratio: Ratio in which the old partners sacrifice their share of profit in favour of the new partner.

Super Profits: Excess of average expected profits over normal profits.

8.12 ANSWERS TO CHECK YOUR PROGRESS

A 3 i) 12:8:5 ii) 19:9:12
4 i) 3:2 ii) 3:4

B 3 i) True ii) False iii) True
iv) False v) False vi) True
4 Rs. 4,20,000

C 2 i) premium ii) sacrificing iii) full
iv) debited, old v) credited vi) debited.
3 i) True ii) False iii) False
iv) True v) True vi) False

8.13 TERMINAL QUESTIONS/EXERCISES

Questions

1) Explain how is goodwill brought in by an incoming partner treated in the books of account? How will you deal with the existing goodwill in the books, if any?
2) Explain how is goodwill treated when the incoming partner does not bring his share of goodwill in cash.
3) What is Revaluation Account? What journal entries are to be passed when assets and liabilities are revalued at the time of admission of a partner?
4) How will you work out the new capital of each partner if the capital is to be adjusted in the new profit sharing ratio? Give examples.

Exercises

1) A, B and C are partners sharing profits and losses in the proportions of 1/2, 1/3 and 116, respectively. They agreed to admit D into the firm as a partner for a fifth share in future profits. He brings in Rs. 30,000 towards his share of goodwill which is to be retained in business. He brings in Rs. 60,000 towards his capital of which Rs. 20,000 is in the form of cash and the balance in the form of a machine valued at Rs. 40,000.

Give the necessary journal entries in the firm's books to give effect to D's admission.

(Hint: The goodwill brought in by D should be credited to A, B and C in the old ratio).

2) C and D are partners sharing profits in the ratio of 5:3. They admit E into partnership for a fourth share on the terms that he should bring in Rs. 50,000 as capital and Rs. 20,000 towards goodwill. Half of the goodwill due to the old partners C and D was withdrawn from the business. Pass the necessary journal entries to record these transactions. The new profit sharing ratio is to be 2:1:1.

(Hint: The goodwill brought in by E should be credited to C and D equally because they suffer equally on E's admission).

3) **Red,** White and Blue are partners sharing profits and losses in the ratio of 5:3:2. They admit 'Green as a partner on the following terms:
   i) He pays in cash Rs. 30,000 for capital.
   ii) Goodwill of the firm is valued at Rs. 50,000 but Green did not pay his share for it.
   iii) He is to get 3110th share in future profits, which he acquires 2110th from Red and 1/10th from White.

   You are required to (a) record' the above transactions in the books of the firm presuming that there is no goodwill appearing in the books; and

   (b) calculate the new profit sharing ratio.

   (Answer: New profit sharing ratio = 3:2:2:3)

4) The following is the position of X and Y on 31st December, 1989:

Liabilities	Rs.	Assets	Rs.
Capitals		Building	50,000
X	60,000	Machinery	45,000
Y	30,000	Sundry Debtors	11,600
Sundry Creditors	25,000	Cash	8,400
	1,15,000		1,15,000

They admit Z into partnership for one-fourth share in future profits from 1st January, 1989. The firm's goodwill is valued at Rs. 36,000 and it has to be raised in the books. X and Y shared profits in the ratio of their capitals. Z is to bring in Rs. 25,000 towards his capital.

Pass the necessary journal entries and prepare the Balance Sheet of the new firm.

(Answer: Total of Balance Sheet Rs. 1,76,000)

5) A and B ate partners in a firm. Their Balance Sheet as on 31st December, 1989 is given below:

Liabilities	Rs.	Assets	Rs.
Sundry Creditors	30,000	Cash in hand	4,200
Bank Overdraft	23,200	Sundry Debtors	30,000
Capital Accounts:		Stock	20,000
A Rs. 45,000		Investments	24,000
B Rs. 25,000		Furniture	5,000
	70,000	Machinery	40,000
	1,23,200		1,23,200

The partners agree to admit C as a partner from 1st January, 1990 and the following terms have been agreed upon:

i) Machinery is to be depreciated by 5%.
ii) Furniture is to be taken at Rs. 4,000.
iii) Stock is to be reduced by 10%.
iv) A provision of 5% is to be raised against Sundry Debtors.
v) The Investments are to be valued at Rs. 30,000.
vi) A liability for Rs. 2,000 for goods purchased but not recorded is to be created.
vii) The new partner is to introduce Rs. 50,000 of which Rs. 10,000 is to be considered as premium for goodwill, to be withdrawn fully by the existing partners. He is to be allowed 1/3rd share in the future profits.

Record the above transactions in the books of the firm and give the Opening Balance Sheet of the new firm on completion of the above transactions.

(Answer: Loss on revaluation: Rs. 2,300; Capitals: A–Rs. 43,750, B–Rs. 23,750, C–Rs. 40,000; Total of Balance Sheet Rs. 1,62,700).

6) P, Q and R were in partnership sharing profits and losses in the proportions of 218, 318, and 318 respectively. Their position on 30th June, 1989 was as follows:

Liabilities		Rs.	Assets	Rs.
Sundry Creditors		70,500	Cash at Bank	23,150
Bills Payable		20,000	Bills Receivable	7,350
Geneial Reserve		24,000	Sundry Debtors	80,000
Capital Accounts:			Stock	52,500
P	Rs. 30,000		Furniture	23,000
Q	Rs. 40,000		Building	43,500
R	Rs.45,000			
		1,15,000		
		2,29,500		2,29,500

On 1st July, 1989, they admitted S into partnership for 114th share on the following terms:

a) S to bring Rs. 35,000 as capital.
b) A Goodwill Account to be opened in tlie books at Ks. 60,000.
c) The value of stock to be reduced by 10%.
d) Building to be appreciated by 10%.
e) Bad debts of Rs. 6,000 to be written off.
f) There being a claim for damages against the firm, a liability to the extent of Rs. 1,500 should be created.
g) An item oi Rs. 400 included in Sundry Creditors is not likely to be claimed and, hence, should be written off.
h) After S's admission, goodwill should be written off.

Prepare Revaluation Account, Partners' Capital Accounts and Balance Sheet of the new firm.

(Answer: Loss on revaluation Rs. 8,000; Capitals: P—Rs. 37,750, Q—Rs. 51,625, R—Rs. 56,625, S—Rs. 20,000; New Profit sharing ratio: 6:9:9:8; Total of Balance Sheet Rs. 2,57,600)

7) C, D and E have been working in partnership sharing profits and losses in proportions of 315,115 and 1/5. On 31st March, 1989 their Balance Sheet showed as follows:

Liabilities		Rs.	Assets		Rs.
Creditors		20,000	Cash		8,000
Capital Accounts:			Sundry Debtors	20,000	
C	Rs. 60,000		Less: Provision	2,000	18,000
D	Rs. 40,000		Stock.		80,000
E	Rs. 40,000		Fixtures and Fittings		4,000
		1,40,000	Building		50,000
		1,60,000			1,60,000

They admit F into partnership on the condition that he should take a fourth share in the business and contribute proportionate capital. He is also required to bring in Rs. 20,000 as his share of goodwill. Stock was valued at Rs. 92,000 and Building at Rs. 60,000. Provision against debtors is to be Rs. 4,000.

Give journal entries to record the above and Balance Sheet after F's admission.

(Answer: Profit on revaluation Rs. 20,000; Capitals: C—Rs. 84,000, D—Rs. 48,000; E—Rs. 48,000; F—Rs. 60,000; Total of Balance Sheet Rs. 2,60,000)

8) R and S are equal partners, and on 1st January, 1989 their Balance Sheet stood as follows:

Liabilities	Rs.	Assets	Rs.
Sundry Creditors	49,250	Cash in hand	1,000
General Reserve	5,000	Cash at Bank	14,500
Capital Accounts:		Sundry Debtors	55,500
R Rs. 40,000		Stock	40,750
S Rs. 25,000		Investments	4,500
	65,000	Fixtures and Fittings	3,000
	1,19,250		1,19,250

M was taken into partnership as from 1st January, 1989 and it was agreed between R and S to make the following adjustments:

a) To write off bad debts amounting to Rs. 1,500.
b) To write 25% off Fixtures and Fittings.
c) To depreciate Stock by Rs. 3,750.
d) To write off loss of Rs. 500 on Investments.
e) To create a Goodwill of Rs. 10,000.

M then introducks Rs. 35,000 as his third share of capital to which it has been agreed that the capitals of the other two partners shall be adjusted (actual cash to be paid off to or brought in by the old partners, as the case may. be).

Prepare Revaluation Account, Capital Accounts of the partners and the Balance Sheet of the firm immediately after M's admission.

(Answer: Loss on revaluation Rs. 6,500; R receives Rs. 9,250; S pays Rs. 5,750; Total of Balance Sheet Rs. 1,54,250)

Note: These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University for assessment. These are for your practice only.

UNIT 9 RETIREMENT OR DEATH OF A PARTNER

Structure

9.0 Objectives
9.1 Introduction'
9.2 New Profit Sharing Ratio
9.3 Gaining Ratio
9.4 Treatment of Goodwill
9.4.1 When Goodwill Does not Appear in the Books
9.4.2 When Goodwill Appears in the Books
9.5 Adjustment for Accumulated Profits/Losses
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9.7 Adjustment for Unrecorded Assets and Liabilities
9.8 Payment to the Retiring Partner
9.8.1 Payment of Full Amount Due
9.8.2 Payment of the Amount due in Equal Instalments at Fixed Intervals nnd the Unpaid Balance Earning Interest
9.8.3 Payment of the Amount due in Equal Instalments plus Interest on Outstanding Balance
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9.9 Death of a Partner : Accounting Implications
9.9.1 Ascertainment of Share of Profits (Losses) upto the Dnte of Retirement/Death
9.9.2 Settlement of Eascutor's Account
9.9.3 Joint Life Policy
9.10 Comprehensive Illustrations
9.11 Let Us Sum Up
9.12 Key Words
9.13 Answers to Check Your Progress
9.14 Terminal Questions/Exercises

9.0 OBJECTIVES

The main objective of this unit is to acquaint you with various accounting problems that arise at the time of retirement and death of a partner and to explain the procedure of recording the necessary entries in the account books of the firm.

After studying this unit you should be able to:

- ascertain the new profit sharing ratio of the remaining partners after retirement or death of a partner
- calculate the ratio of gain of the remaining partners
- ascertain the amount of goodwill due to the retiring or deceased partner and make necessary entries in the books of the firm
- determine the quantum of accumulated profit/loss due to the retiring or deceased partner and make accounting entries
- prepare Revaluation Account giving effect to the changes in the value of assets and liabilities
- make necessary entries in respect of unrecorded assets and liabilities
- determine the total amount of claim of the retiring partner against the firm and learn the modalities of settlement of such claim
- prepare the Executor's Accou' in the case of'death of a partner
- learn the modalities of settlen..nt of claim of the deceased partner

9.1 INTRODUCTION

A partner ceases to be a partner on his retirement or death and as such, the amount of claim of the retiring partner or the deceased partner has to be settled by the firm. The problems that arise at the time of retirement of a partner from the firm are: (1) Ascertainment of new profit sharing ratio, (2) Ascertainment of gaining ratio, (3) Treatment of goodwill, (4) Adjustment for revaluation of assets and liabilities, (5) Adjustment in respect of unrecorded assets and liabilities, (6) Adjustment in respect of accumulated profits/losses, (7) Methods of payment to retiring partner.

The claim of the retiring or deceased partner usually consists of his capital as on the date of retirement or death less drawings (if any) plus his share of goodwill in the firm plus his share in the accumulated profits of the firm (if any) less his share of accumulated loss (if any) plus (minus) his share in the profit (loss) on revaluation of assets and liabilities of the firm and such other things.

In contrast to admission of a partner, we have to calculate the gaining ratio of the remaining partners on retirement or death of a partner because the share of profit of the retiring or deceased partner is taken up by the remaining partners.

All these things will be discussed later in this unit.

9.2 NEW PROFIT SHARING RATIO

The new profit sharing ratio has to be calculated in the case of retirement or death, since the remaining partner/partners would gain some portion of the retiring or deceased partner's share of profit. The new profit sharing ratio of each remaining partner will be the sum total of his old share of profit in the firm and the portion of the retiring or deceased partner's share of profit which he has acquired. This can be expressed in the form of an equation as under:

New profit sharing ratio = Old share + Acquired share.

When the new profit sharing ratio of the remaining partners is given in the problem, there is nothing to calculate. But when new profit sharing ratio is not given in the problem, it has to be calculated. Sometimes the retirement of one of the partners is given in the problem but nothing else in respect of new profit sharing arrangement is indicated. In such cases we should delete the-retiring partner's share of profit. The remaining partners' profit sharing ratio *inter* se will remain unchanged. But deletion can be done only when the profit sharing arrangement is given in the ratio form and not in the fraction form. If the profit sharing arrangement is given in the fraction form, we should first convert the profit sharing arrangement from fraction form to ratio form and then only the retiring partner's share should be deleted. It will be clear from Illustration 1 and 2.

Illustration 1
A, B and *C* are partners in a firm sharing profits in the ratio of 112, 113 and 1/6 respectively. B retires from business. Calculate the new profit sharing ratio of A and C.

Solution
In the above problem the profit sharing arrangement is given in the fraction form. It should first be converted into ratio form and then the retiring partner's share should be deleted. For conversion into ratio form, we should have a common denominator of three fractions given by taking the L.C.M. of the three denominators which is 6 in the above case. Hence, the profit sharing arrangement in common denominator is 3/6, 2/6 and 1/6 respectively and on that basis it is 3:2:1 respectively in the ratio form. Now B's share can be deleted and the new profit sharing ratio of the remaining partners A and C will be 3:1 (the same as earlier between them).

Note: It must be well understood here that A and C have acquired B's share in the same proportion in which they were sharing profits i.e. in the ratio of 3:1 which can be verified by deducting the old ratio from the new one as under:

A's acquisition = 314 - 1/2 = 1/4
C's acquisition = 1/4 - 116 = 1/12

So the acquisition ratio is 1/4 : 1/12 or 3/12 : 1/12 or 3:1. In case the remaining partners decide to acquire the outgoing partner's share of profit not in their old profit sharing ratio but in some different proportion, we should add the acquired share to their respective old shares and find out the new profit sharing ratio.

Illustration 2
A, B, and C are partners sharing profits in the ratio of 112,113 and 116 respectively. B retires from business. A and *C* agree to acquire the retiring partner's share of profit in equal proportions. Calculate the new profit sharing ratio of A and C.

Solution
Each remaining partner acquires one half of the retiring partner's (B) share of profit

i.e. 1/2 of 1/3 = 1/6. Thus the new profit sharing ratio of A and C will be:

A = Old share + acquired share = 1/2 + 1/6 = 4/6 or 2/3
C = Old share + acquired share = 1/6 + 1/6 = 2/6 or 1/3

Hence, new profit sharing ratio of A and C will be 2/3:1/3 or 2:1.

9.3 GAINING RATIO

Just as we calculate the sacrificing ratio in the case of admission of a new partner, we have to calculate the gaining ratio at the time of retirement or death of a partner. The gaining ratio of each remaining partner is calculated by deducting the old share of profit from the new share of profit. This is always that portion of the share of profit of the retiring or deceased partner which has been acquired. If only the retirement or death of a partner is stated in the problem but nothing is given in respect of the new profit sharing ratio or the proportion in which the remaining partners have acquired the outgoing partner's share of profit, the new profit sharing ratio of the remaining partners will be the old ratio *inter* se and the gaining ratio will also be in the same proportion. This has already been explained in Illustration 1. Rut in case the new profit sharing ratio of the remaining partners is given, the gaining ratio should be calculated by deducting the old ratio from the new one as shown in Illustration 3.

Illustration 3
A, B and C are partners sharing profits in the ratio of 4/10, 3/10, 3/10 respectively. C retires from the business. A and B decide to share future profits equally. Calculate the gaining ratio of A and B.

Solution
Gaining Ratio of A = New Ratio − Old Ratio = 1/2 − 4/10 = 1/10
Gaining Ratio of B = New Ratio − Old Ratio = 112 − 3/10 = 2/10

Hence, gaining ratio of A and B is 1/10:2/10 or 1 : 2

Negative Gaining Ratio
So far we have discussed that the share of profit of the remaining partners gets increaged after the retirement of a partner as the remaining partners acquire the share of the outgoing partner, But sometimes it may so happen that a partner may not like to have any alteration in his share of profit in the overall profits of the firm in which case his share will remain the same. Yet in another situation the new profit-sharing arrangement agreed amongst the remaining partners may be such that the new share of one of the remaining partners in the overall profits of the firm may get reduced. This decrease in the share of profit is called Negative Gaining Ratio because the difference between the new ratio and the old ratio is minus i.e. negative, Illustration 4 will clarify this point.

Illustration 4
A, B, C, D and E are partners in a firm sharing profits in the ratio of 7:5:3:3:2, respectively. C retires from the business. The profit sharing ratio as agreed by the remaining partners A, B, D and E id 6:5:5:4, respectively.

Calculate the gaining ratio of remaining partners

Solution
The formula for calculating gaining ratio as discussed earlier is new ratio minus old ratio. We should calculate the gaining ratio of each remaining partner by deducting old ratio of each remaining partner from the respective new ratio as under:

Gaining Ratio of each continuing partner;

A = 6/20 − 7/20 = −1/20 (negative)
B = 5/20 − 5/20 = 0/20 (no change)
C = 5/20 − 3/20 = 2/20 (positive)
D = 4/20 − 2/20 = 2/20 (positive)

Thus, D and E both have gained 2/20 each while there is no change in the ratio of B but A's share is reduced by 1/20 which shows a minus or negative gaining ratio.

Check Your Progress A
1 Calculate the gaining ratio under the following circumstances:

a) A, B and C are partners in a firm sharing profits in the ratio of 3:2:1, respectively. A retires from business. The remaining partners B and C decide to share profits equally in future.

b) A, B, C and D are partners sharing profits in the ratio of 7:6:4:3 respectively. D retires from business and the remaining partners A, B and C decide to share future profits equally.

2' Calculate new profit sharing ratio and gaining ratio

a) X, Y and Z are partners sharing profits and losses in the ratio of 5:3:2. Y retires. His share has been taken by X and Z in the ratio of 2:1.

b) X, Y and Z are equal partners. Z retires and surrenders 314th of his share in favour of X and 114th in favour of Y.

9.4 TREATMENT OF GOODWILL

When a partner retires or dies he is also entitled to his share of goodwill of the firm. For this purpose, we will have to first ascertain the present value of goodwill. Then, based on this, the retiring or deceased partner's share of goodwill will be worked out. The accounting treatment shall, however, depend upon whether goodwill account. already appears in books or not. Thus, there are two possibilities:

1). When Goodwill does not appear in Books
2) When Goodwill appears in Books

9.4.1 When Goodwill Does not Appear in the Books

When goodwill does not appear in the books at all, there are various ways of giving the necessary credit to the retiring partner for his share of goodwill. These are discussed.below:

i) **If** goodwill is raised with its full value and retained in the books: The partners may decide to raise Goodwill Account with its fullvalue and to retain it in the books. In that case, Goodwill Account is debited with full value and all the Partners' Capital Accounts (including the retiring or deceased partner) are credited in the old **profit** sharing ratio as shown in Illustration 5. Only in this case, goodwill will appear in the Balance Sheet of the new firm as an asset.

Illustration 5

A, B, C and D are equal partners. The Goodwill of the firm is valued at Rs. 60,000. A retires from business. The new profit sharing ratio of B, C and D is agreed at 5:4:3 respectively.

Give the necessary journal entry assuming that goodwill account is raised and retained in the books.

Solution

Goodwill A/c	Dr.	60,000	
To A's Capital A/c			15,000
To B's Capital A/c			15,000
To C's Capital A/c			15,000
To D's Capital A/c			15,000
(Being Goodwill account raised)			

ii) "If goodwill is **raised** with its full value and immediately written **off**: After raising the Goodwill Account for giving due credit to the retiring or deceased partner, the partners may decide to write it off immediately. In that case, we shall raise the Goodwill Account by passing the necessary entry as in the first case, and then write it off by debiting remaining partners' capital account in their new profit sharing ratio and crediting Goodwill Account with full value. Continuing with Illustration 5; if partners also decide to write off the Goodwill Account, the additional journal entry will be

B's Capital A/c	Dr	25,000
C's Capital A/c	Dr.	20,000

D's Capital A/c Dr. 15,000
To Goodwill A/c 60,000

(Being goodwill account written off to remaining partners in their new profit sharing ratio).

In this case, no Goodwill will appear in the Balance Sheet of the new firm.

iii) **If** Goodwill is raised only with **the** proportionate **amount** payable to the retiring **or** deceased partner and immediately written off by the remaining partners in their gaining ratio: The partners may decide to raise Goodwill Account only with the proportionate amount payable to the retiring or deceased partner and to write it off immediately by the remaining partners in their gaining ratio. In such a case, Goodwill Account is debited and Retiring or Deceased Partners' Capital Account is credited with the proportionate amount of Goodwill. Thereafter remaining Partners' Capital Accounts arc. debited in their gaining ratio and Goodwill Account is credited to write it off. Continuing with Illustration 5, Journal entries will be:

			Dr.	Cr.
i)	Goodwill Account	Dr.	15,000	
	To A's Capital A/c			15,000
	(Being Goodwill Account raised with the proportionate amount)			
ii)	B's Capital A/c	Dr.	10,000	
	C's Capital A/c	Dr.	5,000	
	To Goodwill A/c			15,000
	(Being Goodwill Account written off to the remaining partners in gaining ratio)			

Note: Since D has not gained any share in profits, his account has not been debited in the above entry.

iv) If no goodwill is raised at all in the books of the firm: When the partners decide not to raise Goodwill Account at all in the books of the firm and to adjust it directly through their Capital Accounts, the amount due to the retiring or deceased partner's capital account is credited with the share of goodwill. Taking the same Illustration (Illustration 5), if partners decide not to raise the Goodwill Account, the journal entry will be:

		Dr.	Cr.
B's Capital A/c	Dr.	10,000	
C's Capital A/c	Dr.	5,000	
To A's Capital A/c			15,000
(Being A's share of Goodwill debited to B's and C's Capital Account).			

Gaining ratio is worked out as follows:

	New Ratio − Old Ratio	= Gaining Ratio
B	$5/12 - 1/4 = \frac{5-3}{12}$	= 2/12
C	$4/12 - 4/12 = \frac{4-3}{12}$	= 1/12
D	$3/12 - 1/4 = \frac{3-3}{12}$	= 0/12

Since D has not gained any share in profits, his account has not been debited in the. above entry.

Illustration 6

Aman, Bashir and Chetan are partners in a firm. They are sharing profits in the ratio of 4:3:2. Bashir retires and on that date goodwill is valued at Rs. 45,000. No goodwill appears in the books of the firm. Aman and Chetan decide to share profits and losses equally. Pass journal entries for goodwill if:

a) Goodwill account is raised in the books with its full value.
b) Goodwill account is raised in the books with its full value and written off immediately.

c) Goodwill account is raised with the proportionale amount and written off immediately.
d) Goodwill account is not to be raised in the'books at all.

Solution

a) If Goodwill Account is raised in the bdoks with its full value—

		Dr.	Cr.
Goodwill A/c	Dr.	45,000	
To Arnan's Capital A/c			20,000
To Bashir's Capital A/c			15,000
To Chetan's Capital A/c			10,000
(Being goodwill raised and credited to all partners in old profit sharing ratio).			

b) If Goodwill Account is raised with its full value and written off immediately:

			Dr.	Cr.
i)	Goodwill A/c	Dr.	45,000	
	To Aman's Capital A/c			20,000
	To Bashir's Capital A/c			15,000
	To Chetan's Capital A/c			10,000
	(Being Goodwill raised and credited to all the partners in old profit sharing ratio).			
ii)	Aman's Capital A/c	Dr.	22,500	
	Chetan's Capital A/c	Dr.	22,500	
	To Goodwill A/c			45,000
	(Being Goodwill written off to Aman and Chetan in new profit sharing ratio)			

c) If Goodwill Account is raised with the proportionate amount and written off immediately—

			Dr.	Cr.
i)	Goodwill A/c	Dr.	15,000	
	To Bashir's Capital A/c			15,000
	(Being Goodwill Account raised with the proportionate amount payable to Bashir).			
ii)	Aman's Capital A/c	Dr	2,500	
	Chetan's Capital A/c	Dr.	12,500	
	To Goodwill A/c			15,000
	(Being Goodwill Account written off to the remaining Partners in their gaining ratio).			

d) If Goodwill Account is not to be raised in the books at all—

		Dr.	Cr.
Aman's Capital A/c	Dr.	2,500	
Chetan's Capital A/c	Dr.	12,500	
To Bashir's Capital A/c			15,000
(Being Bashir's Share adjusted to Aman's and Chetan's Capital accounts in their gaining ratio, i.e. 1:5)			

Working Note

Gaining Ratio is calculated as follows:

	New Ratio – Old Ratio	= Gaining Ratio
Aman	$\frac{1}{2} - \frac{4}{9} = \frac{9-8}{18}$	$= \frac{1}{18}$
Chetan	$\frac{1}{2} - \frac{2}{9} = \frac{9-4}{18}$	$= \frac{5}{18}$

So Gaining Ratio of Aman and Chetan is 1:5.

9.4.2 When Goodwill Appears in the Books

It is quite possible that goodwill already appears in ,the books. In that case, the adjustment in respect of goodwill on retirement or death of a partner will be limited to the difference between the present value of goodwill and the amount of goodwill

already appearing in books (also called book value). The treatment of goodwill in accounts depends upon the comparative value.

There can be three possibilities i) if the book value of goodwill is less than the present value; ii) if the book value of goodwill is more than the present value; and iii) if the book value of goodwill remain the same.

Let us study how goodwill is adjusted in these three situation.

i) If the book value: of goodwill is less than the present value. In this case, the goodwill will be raised to its present value by debiting the Goodwill Account with the excess of present value over the book value and credited to all partners in their old profit sharing ratio. See Illustration 7.

Illustration 7

A, B and C are three partners, sharing profits and losses in the ratio of 2:1:1. The goodwill is appearing in the books at Rs. 20,000. C retires and on that date the goodwill is valued at Rs. 30,000. Pass necessary journal entry.

Solution

Goodwill A/c	Dr.	10,000	
To A's Capital A/c			5,000
To B's Capital A/c			2,500
To C's Capital A/c			2,500
(Being Goodwill Account raised from Rs. 20,000 to Rs. 30,000).			

Goodwill will appear at full value i.e. Rs. 30,000 in the Balance Sheet of the new firm.

ii) If the book value of goodwill is more than the present **value:** In **this** situation, the difference between the book value and the present value will be credited to Goodwill Account and debited to all the partners' capital accounts in their old vrofit sharing ratio.

Continuing with Illustration 6, suppose the goodwill in the books is Rs. 35,000, the journal entry will be:

A's Capital A/c	Dr.	2,500	
B's Capital A/c	Dr.	1,250	
C's Capital A/c	Dr.	1,250	
To Goodwill A/c			5,000
(Being the fall in the value of goodwill from Rs. 35,000 to Rs. 30,000 adjusted).			

In this case also goodwill will appear at Rs. 30,000 in the Balance Sheet of the new firm.

iii) If the **book** value **and the** present value of goodwill are same: If there is no difference between the book and the present value, there is no need to make any adjustment entry in respect of goodwill.

You will notice that in all the situations goodwill appears in the Balance Sheet at its present value.

If, however, it is decided by the partners to withdraw goodwill either fully or partially, the remaining partners' capital accounts will be debited in new ratio and Goodwill Account will be credited with the respective value.

Check Your Progress B

1 Calculate the net amount of goodwill to be written off to the remaining partners' capital accounts under the following situations:

a) A, B, C and D share profits in the ratio of 6:5:5:4 respectively. C retires. Goodwill is raised with the full amount of Rs. 60,000. The remaining partners decide to share profits equally in future.

b) A, B, C and D are equal partners. The goodwill of the firm is estimated to be Rs. 84,000. A retires from the business. The new profit sharing ratio of B, C and D is agreed to be 5:4:3 respectively.

2 **State whether the** following **statements are True or False**

a) At the time of retirement of a partner, when the goodwill is to be raised with full value, Goodwill Account is debited and all the partners' capital accounts are credited in their new profit-sharing ratio.

b) At the time of retirement of a partner, when goodwill is written off, all the partners' capital accounts are debited in their new profit-sharing ratio.

c) When a partner retires and no goodwill is to be raised, the remaining partners' capital accounts are debited in their gaining ratio and retiring partner's capital account is credited.

d) When book value of Goodwill is more than the present value, the Goodwill will appear at its book value in the new Balance Sheet.

9.5 ADJUSTMENT FOR ACCUMULATED PROFITS/LOSSES

Sometimes the books of a partnership firm may show some accumulated profits in the form of General Reserve and/or Profit and Loss Account credit balance. Such accumulated profits should be distributed amongst all the old partners including the retiring or deceased partner in their old profit sharing ratios. The General Reserve Account and/or Profit and Loss Account should be debited and all the partners' capital accounts including those of the retiring or deceased partner should be credited in their old profit-sharing ratios. Normally, you will find only accumulated profits in the Balance Sheet of a firm. It is very rare that accumulated losses are carried over to subsequent accounting periods in the cases of partnership firms. But academically, we cannot rule out such a situation. If any accumulated loss appears in the books of a firm, it should be divided amongst all the partners including the retiring or deceased partner in their old profit sharing ratios. It should be written off by debiting their capital account and crediting the Profit and Loss Account.

Look at Illustration 8 and study how accumulated profits and losses are adjusted at the time of retirement of a partner.

Illustration **8**

Deepak, Sushil and Umesh are the partners sharing profits and losses in the ratio of **3**:1:1. Their Balance Sheet as on December 31, 1989 is as under:

Liabilities		Amount	Assets	Amount
Capital Accounts:		Rs.		
Capital Accounts:				
Deepak	60,000		Profit & Loss A/c	20,000
Sushil	40,000		Sundry Assets	1,40,000
Umesh	30,000			
		1,30,000		
General Reserve		30,000		
		1,60,000		1,60,000

Umesh retires on January 1,1990. Pass necessary journal entries regarding accumulated profit or loss, if any.
Deepak and Sushil have decided to share profits equally in future.

Solution:

			Dr.	Cr.
1)	General Reserve A/c	Dr.	30,000	
	To Deepak's Capital A/c			18,000
	To Sushil's Capital A/c			6,000
	To Umesh's Capital A/c			6,000
	(Being general reserve transferred to Deepak's Sushil's and Umesh's Capital accounts)			
2)	Deepak's Capital A/c	Dr.	12,000	
	Sushil's Capital A/c	Dr.	4,000	

Umesh's Capital A/c Dr.

To Profit & Loss A/c 20,000

(Being loss debited to Deepak's, Sushil's and Umesh's Capital Accounts)

However, the remaining partners, may decide not to disturb General Reserve and to maintain it in the books of the firm as it is. In such a case, the retiring or deceased partner must get his share in the General Reserve which should be borne by the remaining partners in their gaining ratio. Continuing with Illustration 8, journal entry for this will be:

		Dr.	Cr.
Sushil's Capital A/c	Dr.	9,000	
To Umesh's Capital A/c			6,000
To Deepak's Capital A/c			3,000
(Umesh's share and Deepak's sacrifice in General Reserve borne by Sushil).			

Note: Sushil's Gain = Umesh's Share + Deepak's Sacrifice

or $\left(\frac{1}{2} - \frac{1}{5}\right) = \left\{\frac{1}{5} + \left(\frac{3}{5} - \frac{1}{2}\right)\right\}$

or $\frac{3}{10} = \frac{1}{5} + \frac{1}{10} = \frac{3}{10}$

$\therefore$ Sushil should bear $\frac{3}{10} \times 30{,}000 = 9{,}000$

Umesh should get $\frac{1}{5} \times 30{,}000 = 6{,}000$ and

Deepak should get $\frac{1}{10} \times 30{,}000 = 3{,}000$.

9.6 ADJUSTMENT FOR REVALUATION OF ASSETS AND LIABILITIES

As on the date of retirement or death of a partner, all assets and liabilities of the firm have to be revalued and any profit or loss arising therefrom is adjusted in all the partners' capital accounts including the retiring or cleceased partner in their old profit sharing ratio.

For the purpose of revaluation of, assets and liabilities a Revaluation Account is opened and all appreciations and depreciations in the values of assets and liabilities should be recorded in this account. If there is an increase in the value of an asset, such asset should be debited and Revaluation Account should be credited with the amount of appreciation. Conversely, if there is a decrease in the value of asset, Revaluation Account should be debited and the concerned account should be credited. Similarly, if there is an increase in the amount of a liability, Revaluation Account should be debited and the concerned liability account should be credited. And conversely, if there is a reduction in the amount of liability, the concerned liability account should be debited and Revaluation Account should be credited. If it is desired to make a provision for some probable losses in future such as provision for doubtful debts or contingent liability, Revaluation Account should be debited and the concerned provision account should be credited. Thereafter, the net gain or loss should be divided amongst all the partners in their old ratios. If there is net gain on revaluation, Revaluation Account should be debited and all the partners' capital accounts should be credited and in the case of net loss the reverse should be done. The revised values of assets and liabilities will appear in the new Balance Sheet prepared after the retirement or death of the partner.

Look at Illustration 9 and study how revaluation of assets and liabilities are treated when a partner retires.

Illustration 9

X, Y and Z are partners sharing profits and losses in ratio of 5:3:2. The Balance Sheet of the firm as on July 31, 1988 was as follows:

Liabilities	Amount	Assets		Amount
	Rs.			Rs.
Sundry Creditors	20,000	Cash at Bank		4,000
Bills Payable	6,000	Debtors	18,000	
General Reserve	14,000	Less provision for bad debts	1,000	17,000
Capital Accounts		Stock		19,000
X 50,000		Furniture		10,000
Y 40,000		Plant & Machinery		45,000
Z 30,000	1,20,000	Factory Building		65,000
	1,60,000			1,60,000

Y retires on that date. It is agreed to adjust the values of assets as follows

a) The Goodwill of the firm to be valued at Rs. 15,000
b) Plant and Machinery to be depreciated by 10%
c) Furniture to be depreciated by 15%
d) Stock to be appreciated by 15%
e) Factory building to be appreciated by 20%
f) Provision for bad debts to be increased by Rs. 1,550.

Prepare (1) Revaluation Account (2) All Partners' Capital Accounts and (3) New Balance Sheet of the firm after Y's retirement.

Revaluation Account

Dr. Cr.

	Rs.		Rs.
To Plant & Machinery A/c	4,500	By Stock A/c	2,850
To Furniture A/c	1,500	By Factory Building A/c	13,000
To Provision for Bad Debts A/c	1,550		
To Partners' Capital A/c (Share of Profit) – X – 5/10 = 4,150; Y – 3/10 = 2,490; Z – 2/10 = 1,660	8,300		
	15,850		15,850

Partners' Capital Accounts

	X	Y	Z		X	Y	Z
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
To Y's Loan A/c	—	51,190	—	By Balance b/d	50.000	40,000	30,000
				By Goodwill A/c	7,500	4,500	3,000
				By General Reserve A/c	7,000	4,200	2,800
To Balance c/d	68,650	—	37,460	By Revaluation A/c	4,150	2,490	1,660
	68,650	51,190	37,466		68,650	51,190	37,460

New Balance Sheet of the firm after Y's retirement as at July **31, 1988.**

Liabilities	Amount	Assets		Amount
	Rs.			Rs.
Sundry Creditors	20,000	Cash at Bank		44,000
Bills Payable	6,000	Debtors	18,000	
Y's Loan Account	51,190	Less Provision for Bad Debts	2,550	
Capital Accounts;–		Stock	19,000	

X – 68,650		Add Appreciation	2,850	21,850
Z – 37,460	1,06,110	Furniture	10,000	
		Less Depreciation	1,500	8,500
		Plant & Machinery	45,000	
		Less Depreciation	4,500	40,500
		Factory Building	65,000	
		Add Appreciation	13,000	78,000
		Goodwill		15,000
	1,83,300			1,83,300

9.7 ADJUSTMENT FOR UNRECORDED ASSETS AND LIABILITIES

There may be some unrecorded assets or liabilities at the time of retirement. Such unrecorded assets and liabilities must be brought into books of accounts through the Revaluation Account. If there is an unrecorded assets at the time of retirement, such asset should be debited and the Revaluation Account should be credited. Such recording will benefit all the partners of the firm as their capital accounts shall get credited through Revaluation Account. Similarly if there is an unrecorded liability, Revaluation Account should be debited and the concerned liability account should be credited. Its ultimate effect would be that the capital accounts of all the partners shall get debited through the Revaluation Account. The asset and/or liability so brought into books of accounts shall appear in the Balance Sheet.

Check Your Progress C

1 Fill in the blanks

a) To bring an unrecorded liability into books of account, the .... Account should be debited and the concerned liability should be credited.

b) Decrease in the value of assets and increase in the value of liabilities is .... in Revaluation Account.

c) Increase in the value of assets and decrease in the value of liabilities is .... in Revaluation Account.

d) Balanca of Revaluation A/c being profit or loss is transferred to .... in their old profit sharing ratio,

e) At the time of retirement of a partner, Reserve Fund Account is .... and all the partners Capital Accounts are ....

2 What is the Accounting treatment for unrecorded assets and liabilities at the time of retirement of a partner?.

....

....

....

....

....

9.8 PAYMENT TO THE RETIRING PARTNER

When a partner retires from business, his claim against the firm is determined by preparing his capital account incorporating therein all the adjustments in respect of his share of goodwill, accumulated profits or losses; profit/loss on revaluation of assets and liabilities etc. Now the settlement of the claim depends on the provisions of the partnership deed. If nothing is given in the problem to be solved in respect of settlement of claim, the amount of claim is usually transferred to the Retiring Partner's Loan Account for which the following entry is passed:

Retiring Partner's Capital A/c Dr.
To Retiring Partner's Loan A/c

Illustration 11

A, B and C are partners sharing profits in the ratio of 2:2:1 respectively. Their Balance Sheet as on December 1984 was as follows:

Balance **Sheet** as **on** 31.12.84

Liabilities		Amount	Assets	Amount
		Rs.		Rs.
Bills Payable		16,000	Cash at Bank	68,000
Sundry Creditors		42,000	Bills Receivable	10,000
Loan from A		1,00,000	Sundry Debtors	30,000
Reserve Fund		20,000	Stock	45,000
Capital Accounts	A	60,000	Furniture	10,000
	B	50,000	Machinery	60,000
	C	27.000	Buildings	80,000
			Goodwill	12,000
		3,15,000		3,15,000

C retires from business as on January 1, 1985. For the purpose of retirement of C, the assets and liabilities of the firm are revalued as follows:

Stock 20% less; Furniture at Rs. 6,000; Machinery at 75% of book value; Building at Rs. 1,60,000. A provision of 10% is to be made for doubtful debts. The goodwill of the firm is estimated to be worth Rs. 60,000. A bill for repairs of building Rs. 8,000 was unpaid and was not recorded in the books.

Ascertain the claim of C against the firm by preparing his Capital Account.

Solution

C's Capital Account

Dr.			Cr.
	Rs.		Rs.
To C's Loan A/c	48.800	By Balance	27,000
		By Revaluation A/c	8,200
		By Goodwill A/c	9,600
		By Reserve Fund	4,000
	48,800		48,800

Note: As nothing is given in the questions as regards the settlement of the claim, the amount due to C on his retirement is transferred to his Loan Account.

Working Notes:

1) For ascertaining the profit or loss on revaluation of assets and liabilities, Revaluation Account should be prepared as below:

Revaluation Account

Dr.			Cr.
	Rs.		Rs.
To Stock	9,000	By Building	80,000
To Furniture	4,000		
To Machinery	15,000		
To Provision for Doubtful Debts	3,000		
To Outstanding Repairs	8,000		
To Partner's Capital A/cs (Share of Profits) A – 2/5 16,400 B – 2/5 16,400 C – 1/5 8,200	41,000		
	80,000		80,000

2) Goodwill of the firm is estimated to be Rs. 60,000. But in the Balance Sheet of the firm there. is already Goodwill appearing at Rs. 12,000. Hence it should be increased by Rs. 48,000 which amount should be credited to all the three partners in their profit'sharing ratios. Hence C's share of goodwill is 48,000 x 115 = 9,600.

3) There is a Reserve Fund of Rs. 20,000 in the Balance Sheet which represents accumulated profits. C's share is 20,000 × 115 = 4,000.

9.8.1 Payment of Full Amount Due

If the full amount of claim is payable to the retiring partner on the date of retirement as per agreement, the amount will not be transferred to Loan Account but will be paid in cash or by cheque. The necessary entry for illustration in this respect will be:

C's Capital A/c	Dr.	48,800	
To Bank A/c			48,800

9.8.2 Payment in Equal Instalments at Fixed Intervals and the Unpaid Balance Earning Interest

If the partners agree to make payment in equal instalments at regular intervals and the unpaid balance is allowed to earn a fixed rate of interest, the total amount of claim or the amount as reduced by the amount of cash paid at the time of retirement should be transferred to the Retiring Partner's Loan Account.

Illustration 12

Supposing, in Illustration 11 above, the partners agree to pay Rs. 18,800 immediately on retirement and thereafter Rs. 10,000 at. the end of each year on December 31, allowing interest at 10% p.a. on the unpaid balance.

Show the Capital Account of C and also his Loan Account till total payment is made.

Solution

C's Capital Account

Dr.	Rs.		Cr. Rs.
To Bank	18,800	By Balance b/d	27,000
To C's Loan A/c	30,000	By Revaluation A/c	8,200
		By Goodwill A/c	9,600
		By Reserve Fund	4,000
	48,800		48,800

C's Loan Account

		Rs.			Rs.
1985			1985		
Dec. 31	To Bank	10,000	Jan. 1	By C's Capital A/c	30,000
" 31	To Balance c/d	23,000	Dec. 31	By Interest	3,000
		33,000			33,000
1986			1986		
Dec. 31	To Bank	10,000	Jan. 1	By Balance b/d	23,000
" 31	To Balance c/d	15,300	Dec. 31	By Interest	2,300
		25,300			25,300
1987			1987		
Dec. 31	To Bank	10,000	Jan. 1	By Balance b/d	15,300
" 31	To Balance c/d	6,830	Dec. 31	By Interest	1,530
		16,830			16,830
1988			1988		
Dec. 31	To Bank	7,513	Jan. 1	By Balance b/d	6,830
			Dec. 31	By Interest	683
		7,513			7,513

Working Note
The claim of the retiring partner C will be the same as calculated in the solution of Illustration 11 and hence the Capital Account of C will also be similar with the only exception that the total amount of claim will not be transferred to his Loan Account but only the unpaid balance. Thereafter the Loan Account will be prepared.

9.8.3 Payment of the Amount due in Equal Instalments Plus Interest on Unpaid Balance

Sometimes the partners decide to pay the outstanding amount of claim after initial payment in equal instalments plus interest on unpaid balance added thereto at regular intervals.

Illustration 13

Suppose in Illustration 11 above, if the partners decide to pay the outstanding amount of claim after paying Rs. 18,800 immediately on retirement in three equal instalments plus interest at 10% p.a. on unpaid balance payable at the end of each year, show the retiring partner's Loan Account.

Solution
The Capital Account of C will be similar to that prepared under 9.9.2 and only the Loan Account will differ which will be prepared as below:

C's Loan Account

Dr. Cr.

		Rs.			Rs.
1985			1985		
Dec. 31	To Bank	13,000	Jan. 1	By C's Cap. A/c	30,000
" 31	To Balance c/d	20,000	Dec. 31	By Interest	3,000
		33,000			33,000
1986			1986		
Dec. 31	To Bank	12,000	Jan. 1	By Balance b/d	20,000
" 31	To Balance c/d	10,000	Dec. 31	By Interest	2,000
		22,000			22,000
1987			1987		
Dec. 31	To Bank	11.000	Jan. 1	By Balance b/d	10,000
			Dee. 31	By Interest	1,000
		11,000			11,000

Note: The outstanding claim of C after paying Rs. 18,800 immediately on retirement Rs. 30,000 is paid in three equal instalmcnts of Rs. 10,000 each plus interest @ 10% p.a. on unpaid balance.

9.8.4 Payment of Outstanding Amount of Claim in Equal Instalments Including Interest

Sometimes the partners decide to pay the outstanding amount of claim in equal instalments including interest. In such a case the present value of future payments at regular intervals will have to be calculated first at the given rate of interest. The present value of future payments can also be ascertained from the present value tables. Thereafter, the amount of instalment will have to be calculated on the basis of the outstanding amount.

Illustration 14

Suppose, in Illustration 11 above, the partners decide to pay the outstanding amount of claim and interest in three equal instalments including interest at 10% p.a. on unpaid balance on December 31, dach year, show the Loan Account of C.

Solution
First the present value of Re. 1 payable at the end of the next three years should be calculated taking the given rate of interest 10%.

Rs. 100 will become Rs. 110 after one year @ 10% p.a.
Hence the present value of Re. 1 payable at the end of the first year will be 1001110 or 10/11.
Similarly Rs. 100 will become 100 x 1101100 x 1101100

= Rs. 121 at the end of two years @ 10% p.a. compound interest basis.
Hence the present value of Re 1 payable at the end of the second year will be 1001121.
On the same basis Rs. 100 will become 100 × 1101100 x 1101100 x 1101100 = Rs. 133.10 at the end of three years.
Hence the present value of Re. 1 payable at the end of the third year will be 1001133.10 or 100011331.
By adding the three present values we get 10/11+100/121+1000/1331 = 331011331.

Now with the help of the present value of three instalments of Re. 1 payable at the end of each of the next three years we can calculate the amount of instalments payable at the end of each of the next three years if the available amount is Rs. 30,000 by using the rule of three as shown below:

If amount available is Rs. 331011331, annual instalment is Re. 1
" " " Re.1 " " 133113310
" " " Rs. 30,000 " " 30,000 x 133113310
" " " = Rs. 12,063.44

Hence the amount of annual instalment is Rs. 12,063.44.
(say Rs. 12,063 approx.)

C's Loan Account

Dr. Cr.

		Rs.			Rs.
31.12.85	To Bank	12,063	1.1.85	By Balance b/d	30,000
"	To Balance c/d	20,937	31.12.85	By Interest	3,000
		33,000			33,000
31.12.86	To Bank	12,063	1.1.86	By Balance b/d	20,937
"	To Balance c/d	10,967	31.12.86	By Interest	2,093
		23,030			23,030
31.12.87	To Bank	12,063	1.1.87	By Balance b/d	10.967
			31.12.87	By Interest	1,096
		12,063			12,063

9.9 DEATH OF A PARTNER: ACCOUNTING IMPLICATIONS

Partnership stands dissolved on the death of a partner. The rights of the legal representatives of the deceased partner depend on the provisions of the partnership deed. The claim of the deceased partner is determined as per the provisions of the partnership deed which is normally purchased by the surviving partners and they continue to carry on the business as usual. The claim of the deceased partner is either paid immediately or transferred to Loan Account in the name of his legal representatives. The claim is usually determined on the same basis as that of a retired partner taking into account his share in the accumulated profits of the firm, goodwill, profit/loss on revaluation of assetslliabilities and so on. **The only difference is that retirement normally takes place at the end of an accounting period whereas death can occur at any time.** Hence, in the case of death of a partner his claim shall include his share in the profits of the firm upto the date of death, interest on his capital upto the date of death, share in the proceeds of joint life policy (if any) in addition to his share in the accumulated profits, goodwill etc. Section 37 of the Partnership Act provides that if the amount is not paid immediately, the executors of the deceased partner. would be entitled, at their choice, to receive interest @ *6%* p.a. from the date of death to the date of actual payment or a share in the profits of the firm earned during that period in the proportion in which the amount due to the deceased partner bears to the total capital employed, This section is also applicable in the case of retirement-of a partner.

9.9.1 Ascertainment of Share of Profits(Losses) upto the Date of Retirement/Death

A partner may retire or die on any date,-which is not the date of final accounts. Under such circumstances, the partner is entitled to share in profit(losses) of the firm

till the date of his retirement or death. Profits can be calculated on the basis of time or on the basis of sales.

a) **On** the basis **of** time

i) On the **basis of average profit of** certain **years:** Calculation of profit is based on the average annual profit for the past few years say, 3 to 5 years. Then, the profit for the proportionate period is found out. For example, X, Y and Z are partners sharing profits equally. Z dies on April 30,1988. The accounts of the firm are closed on Dec. 31. The profit for the past 3 years are:
1985 – Rs. 35,000; 1986 – Rs. 40,000 and 1987 – Rs. 60,000.
The average profit for the past three years:

$$\frac{35,000 + 40,000 + 60,000}{3} = \text{Rs. } 45,000$$

Profit for 4 months upto April 30, 1988 = 4/12 × 45,000 = Rs. 15,000
Z's share of Profit = Rs. 15,000 × 113 = Rs. 5,000

ii) **On the** basis **of** last **years profit:** Calculation of profit is based on the last year's profit. For example A, B and C are partners sharing profits and losses in the ratio of 4:3:2, B dies on March 31, 1989. The profit for the year 1988 was Rs. 72,000.
B's share of profit will be:
Profit for the year 1988 = Rs. 72,000

Since B dies on March 31, 1989, he will get **3** months profit.

Profit for **3** months = $\frac{72,000 \times 3}{12}$ = Rs. 18,000 .

B's share of Profit = 18,000 × 319 = Rs. 6,000.

b) **On the basis of** turnover
Calculation of profit is based pn turnover. For example **A,** B and *C* are partners sharing profits and losses in the ratio of 2:1:1. B dies on March 1, 1988. Sales for the year 1988 amount to Rs. 80,000, out of which Rs. 25,000 are for a period from January 1, 1988 to March 1, 1988. The profit for the year'are 'Rs. 40,000. Then

Profit upto the date of B's death

$$\frac{25,000}{80,000} \times 40,000 = \text{Rs. } 12,500$$

B's share = 12,500 × 114 = Rs. 3,125

Illustration 15
Mohan, Sohan and Shyam are equal partners. Their Balance Sheet as on December 31, 1989 was as follows.

Liabilities		Amount	Assets	Amount
		Rs.		Rs.
Creditors		6,000	Goodwill	12,000
General Reserve		9,000	Plant & Machinery	18,000
Capitals			Stock	9,000
Mohan	21,000		Sundry Debtors	16,500
Sohan	21,000		Cash at bank	12,000
Shyam	21,000	63,000	Cash in hand	10,500
		78,000		78,000

Sohan died on March 14, 1990. According to the partnership deed, executors of a deceased partner are entitled to:

a) Balance of partner's capital account
b) Interest on capital @ 5% p.a.
c) Share of goodwill on the basis of twice the average of past three years' profits, and
d) Share of profit from the closure of the last accounting till the date of death on the basis of the average of the three completed years' profits before death.

Profit for 1987, 1988 and 1989 were Rs. 21,000, Rs. 24,000 and Rs. 27,000, respectively.

Pass the necessary journal entries and prepare B's Capital Account to be rendered* to his executors.

Solution

Journal

	Debit Rs.	Credit Rs.
General Reserve A/c Dr.	3,000	
To Sohan's Capital A/c		3,000
(Being his share of reserves)		
Goodwill A/c Dr.	36,000	
To Mohan's Capital A/c		12,000
To Sohan's Capital A/c		12,000
To Shyam's Capital A/c		12,000
(Being goodwill raised to full value)		
Interest on Capital A/c Dr.	210	
To Sohan's Capital A/c		210
(Being interest on his capital till date of death)		
Profit & Loss A/c Dr.	1,600	
To Sohan's Capital A/c		1,600

Sohan's Capital Account

Dr.	Rs.	Cr.	Rs.
To Balance c/d	37,810	By Balance b/d	21,000
		By General Reserve A/c	3,000
		By Goodwill A/c	12,000
		By Interest on Capital A/c	210
		By Profit & Loss A/c	1,600
	37,810		37,810
		By Balance b/d	37,810

Working Notes

1) Goodwill

Average of last 3 years profits $= \frac{21,000 + 24,000 + 27,000}{3}$

$= \text{Rs. } 24,000$

Value of goodwill $= 24,000 \times 2$

$= \text{Rs. } 48,000$

Increase in value of goodwill $48,000 - 12,000$

$= \text{Rs. } 36,000$

2) **Sohan's share of Profit from 1-1-90** to **14-3-90**

No, of days till death = 73 days

Profits for 73 days $= \text{Average Profits} \times \frac{73}{365}$

$= 24,000 \times \frac{73}{365}$

$= \text{Rs. } 4,800$

Sohan's share of profits $= \frac{4,800}{3}$

$= \text{Rs. } 1,600$

3) **Interest** on **Sohan's Capital from** 1-1-90 to 14-3-90

$$= 21,000 \times \frac{73}{365} \times \frac{5}{100}$$

$$= \text{Rs. } 210$$

9.9.2 Settlement of Executor's Account

After the death of a partner the total amount due to him is transferred to his executor's account and paid off as per the provisions of the partnership deed immediately or in instalments together with interest on the unpaid balance. As explained earlier the amount due to the deceased partner should include the amount standing to the credit of his Capital Account, a share in the accumulated profits, goodwill, joint life policy (if any), profit on revaluation of assets/liabilities, etc. Look at Illustration 16 and see how deceased Partner's Executor's Account is prepared.

Illustration 16

A and B are in partnership sharing profits and losses in the ratio of 3:2 respectively. Their Balance Sheet on December 31, 1985 on which date A died was as fallows.

Balnnce Sheet of A and B
as on 31.12.85

Liabiiities	Amount	Assets	Amount
	Rs.		Rs.
Creditors	24,000	Cash at Bank	18,000
Reserves	15,000	Stock	40,000
A's Capital	25,000	Debtors	20,000
B's Capital	18,000	Furniture	4,000
	82,000		82,000

4's share of goodwill in the firm was agreed at Rs. 36,000

The assets and liabilities were all properly valued. Show the Executor's Account of A assuming that a sum of Rs. 10,000 is paid immediately on January 1, 1986 and the balance in three **equal** instalments payable annually on December 31, plus interest @ 12% p.a. on unpaid balance.

Solution

A's **Executor's** Account

a.					Cr.
		Rs.			Rs.
31.12.85	To Balance cld	70,000	31.12.85	By A's Capital A/c	70,000
1.1.86	To Bank	10,000			
31.12.86	To Bank	27,200	1.1.86	By Balance bld	70,000
	To Balance c/d	40,000	31.12.86	" Interest A/c	7,200
		77,200			77,200
31.12.87	To Bank	24,800	1.1.87	By Balance b/d	40,000
	To Balance c/d	20,000	31.12.87	" Interest A/c	4,800
		44,800			44,800
31.12.88	To Bank	22,400	1.1.88	By Balance b/d	20,000
			31.12.88	" Interest A/c	2,400
		22,400			22,400

Working Notes

1) **A's** share in Reserves = 3/5 x Rs. 15,000 = Rs. 9.000

2) Interest payable for 1986 = $\frac{12}{100}$ × Rs. (70,000 − 10,000) = Rs. 7,200

3) Interest payable for 1987 = $\frac{12}{100}$ × Rs. 40,000 = Rs. 4,800

4) Interest payable for 1988 = $\frac{12}{100}$ × Rs. 20,000 = Rs. 2,400

Dr.					Cr.
		Rs.			Rs.
31.12.85	To A's Executor's Account	70,000	31.12.85	By Balance b/d	25,000
				" Reserves A/c	9,000
				" Goodwill A/c	36,000
		70,000			70,000

9.9.3 Joint Life Policy

Joint Life Policy refers to an Insurance Policy taken out by the partnership firm on the joint lives of all the partners. The amount of such a policy is payable by the Insurance Company either on death of any partner or on maturity whichever is earlier. The main objective behind taking out such a policy by the partnership firm is to mobilise funds to settle the claim of the deceased partner in case of death of a partner without affecting the Working Capital of the business. If any one of the partners covered by such a policy expires, the policy gets matured immediately and with the amount recovered from Insurance Company, the claim of the deceased partner is settled. However, it is important to note here that the profit arising out of such a policy should always be distributed to all the pattners including the deceased partner in their profit-sharing ratio.

Accounting Treatment of Joint Life Policy

The premium paid by the firm on such Joint Life Policy may be treated in accounts in any one of the following three ways:

i) When premium paid is treated as business expense and charged to Profit & Loss Account.

ii) When premium paid is treated as an asset which is shown in the Balance Sheet at its present value.

iii) When premium paid is treated as an asset which is represented by a reserve called Joint Life Policy Reserve.

i) **When premium paid is treated as business expense and charged to Profit & Loss Account:** In such case, no Joint Life Policy Account will appear in the books of the firm. Accounting entries in the books of the firm will be as follows:

Every year till maturity of the Policy

1) On Payment of Premium

Premium on Joint Life Policy A/c Dr.
To Cash/Bank } with the amount of premium.

2) On transfer of Premium to Profit & Loss Account at the end of accounting period

Profit & Loss A/c Dr.
To Premium on Joint Life Policy A/c } with the amount of premium

On retirement of a partner, the policy does not mature, but the retiring partner must get his share in the surrender value of such policy as on the date of his retirement which should be borne by the remaining partners in their gaining ratio. Accounting entry for this will be

Remaining Partners' Capital A/c Dr. } Individually in the gaining ratio.
To Retiring Partners' Capital A/c } With the proportionate share

On maturity of the Policy in case of death of a partner, accounting entry will be

Cash/Bank/Insurance Co's A/c Dr. } With the Policy amount
To All Partners' Capital A/c (including the deceased partner) } Individually in their old Profit Sharing ratio

ii) **When premium paid is treated as an asset which is shown in the Balance Sheet at its present value:** In such a case, Joint Life Policy Account will appear in the books of the firm which must be shown as an asset in the Balance Sheet at its

present value i.e. surrender value. Surrender value refers to the amount receivable from the Insurance Company on surrendering the policy before it maturity and it is always lower than the amount already paid by way of premiu As such, the difference between the book value.and the surrender value of t policy must be written off against Profit & Loss Account. Accounting entrie the books of the firm will be as follows:

Every year till maturity of the Policy

1) On Payment of premium
   Joint Life Policy A/c
   To Cash/Bank A/c } With the amount of premium

2) On writing off Joint Life Policy Account against Profit & Loss Account
   Profit & Loss A/c Dr.
   To Joint Life Policy A/c } With the difference between the book va and the surrender va

On retirement: of a Partner, no adjustment is required to be made since Joint Li Policy already appears in the books at its surrender value.

On maturity of the policy in case of death of a Partner, the following entries will be required:

1) On Policy amount becoming due
   Insurance Co's A/c Dr.
   To Joint Life Policy A/c } With the Policy Amount

2) On receipt of Policy amount from Insurance Co.
   Cash/Bank A/c Dr.
   To Insurance Co's A/c } With the Policy Amount.

3) On transfer of the balance left in Joint Life Policy Account to all Partners' Capital Accounts
   Joint Life Policy A/c Dr.
   To All Partners' Capital A/cs
   (including the deceased Partner) } With the balance Individually in their c Profit sharing ratio

iii) When Premium paid is treated as an asset, which is represented by a reserve calle Joint Life Policy Reserve: In such a case, Joint Life Policy Account will appe in the books of the firm with the amount of premium paid and at the same time a Joint Life Policy Reserve Account is created out of Profits of the firm by debiting Profit & Loss Appropriation Account with the amount of premium pai At the end of every year, the Joint Life Policy Account is brought down to it surrender value by transferring Joint Life Policy Reserve Account to Joint Li Policy Account. These two accounts give identical balances. Joint Life Policy Account balance is shown on the assets side while Joint Life Policy Reserve Account balance is shown on the liabilities side of the Balance Sheet. Accountin entries in the books of the firm will be as follows:

Every year till maturity of the Policy

1. On payment of Premium:
   Joint Life Policy A/c Dr.
   To Cash/Bank A/c } With the amount of premium

2. On creation of Joint Life Policy Reserve at the end of accounting period
   Profit & Loss Appropriation Account Dr.
   To Joint Life Policy Reserve A/c } With the amount of Premium

3. On writing down Joint Life Policy Account to its Surrender Value at the en of accounting period
   Joint Life Policy Reserve A/c Dr.
   To Joint Life Policy A/c } With the difference between the book valu and the Surrender Valu

On retirement of a partner, the retiring partner must get his share in the balance of Joint Life Policy Reserve which should be borne by the remaining Partners in their gaining ratio. Accounting entry for this will be:

Remaining Partners' Capital A/cs Dr.
To Retiring Partners Capital Ah } Individually in their gain ing ratio with his share

On maturity of Policy in case of death of a Partner, the following entries will be required:

1) On Policy amount becoming due
   Insurance Co's A/c Dr. } With the Policy amount.
   To Joint Life Policy A/c
2) On receipt of Policy amount from Insurance Co.
   Cash/Bank A/c Dr. } With the Policy amount.
   To Insurance Co's A/c
3) On transfer of the balance left in Joint Life Policy Reserve Account to Joint Life Policy Account
   Joint Life Policy Reserve A/c Dr. } With the balance left
   To Joint Life Policy A/c
4) On transfer of the balance ieft in Joint Life Policy Account to all Partners' Capital Accounts
   Joint Life Policy A/c Dr. } With the balance left Individually in their old Profit Sharing ratio.
   To All Partners' Capital A/cs

It is also possible that Joint Life Policy Reserve is created only for the difference between the balance of the Joint Life Policy Account and the surrender value of the policy. In such a situation, there is no need to transfer the Joint Life Policy Reserve to Joint Life Policy Account. The Joint Life Policy Account continues to appear with full amount of premiums paid. But, while showing it in the Balance Sheet, the Joint Life Policy Reserve Account shall be deducted. It should be noted that in this case the balances of Joint Life Policy Account arid Joint Life Policy Reserve Account will not be the same.

9.10 COMPREHENSIVE ILLUSTRATIONS

Illustration 17

A, B and C are partners sharing profits in the ratio of 3:2:1 respectively. Their Balance Sheet as on December 31, 1988 stood as follows:

Balance Sheet as on 31.12.88

Liabilities	Rs.	Assets	Rs.
Sundry Creditors	50,000	Factory Building	80,000
Bank Loan	30,000	Plant & Machinery	60,000
Reserve Fund	30,000	Motor Vehicle	26,000
Capital Accounts:		Furniture	16,000
A – 60,000		Stock	56,000
B – 80,000		Sundry Debtors 40,000	
C – 40,000	1,80,000	Less Prov. for Bad Debts 2,000	38,000
		Cash in Hand	2,000
		Goodwill	12,000
	2,90,000		2,90,000

A retires on December 31, 1988. The following revaluations and adjustments are agreed upon by the partners:

a) Goodwill of the firm to be valued at Rs. 60,000.
b) Plant and Machinery and Furniture to be depreciated by 10% and Motor Vehicle by 15%.
c) Factory Building to be appreciated by 20%.
d) Stock to be valued at Rs. 52,000.
e) Provision for doubtful debts to be maintained at 10%.
f) A bill for repairs of Factory Building amounting to Rs. 1,500 is outstanding.

Pass necessary journal entries, prepare Revaluation Account, Partners' Capital Accounts and the Balance Sheet of the firm after retirement of A. No goodwill should

appear in the Balance Sheet. The future profit sharing ratio of B and C is agreed as 3:2 respectively.

Solution

Journal

		Debit Rs.	Credit Rs.
Goodwill A/c	Dr.	48,000	
To A's Capital A/c			24,000
To B's Capital A/c			16,000
To C's Capital A/c			8,000
(Being goodwill raised from Rs. 12,000 to Rs. 60,000 in the old ratio)			
B's Capital A/c	Dr.	36,000	
C's Capital A/c	Dr.	24,000	
To Goodwill A/c			60,000
(Being Goodwill written off in the new ratio)			
Reserve Fund A/c	Dr.	30,000	
To A's Capital A/c			15,000
To B's Capital A/c			10,000
To C's Capital A/c			5,000
(Being the Reserve Fund transferred to Partners' Capital Accounts)			
Revaluation A/c	Dr.	19,000	
To Plant & Machinery A/c			6,000
To Furniture A/c			1,600
To Motor Vehicle A/c			3,900
To Stock A/c			4,000
To Provision for Bad Debts A/c			2,000
To Provision for Outstanding Repairs A/c			1,500
(Being decrease in the value of assets and increase in liabilities)			
Factory Building A/c	Dr.	16,000	
To Revaluation A/c			16,000
(Being increase in the value of Factory Building)			
A's Capital A/c	Dr.	1,500	
B's Capital A/c	Dr.	1,000	
C's Capital A/c	Dr.	500	
To Revaluation A/c			3,000
(Being the loss on revaluation transferred to Partners Capital Accounts in the old ratio)			
A's Capital A/c	Dr.	97,500	
To A's Loan A/c			97,500
(Transfer of A's Capital to A's Loan oh his retirement)			

Revaluation Account

Dr.

	Rs.		
To Plant & Machinery A/c	6,000	Bv Factory Building A/c	16,

	Rs.		Rs.
To Furniture A/c	1,600	By Partners' Capital A/cs	
To Motor Vehicle A/c	3,900	(Share of Loss)—	
To Stock A/c	4,000	A – 316 = 1,500	
To Provision for Bad Debts A/c	2,000	B – 216 = 1,000	
To Provision for outstanding Repairs A/c	1,500	C – 1/6 = 500	3,000
	19,000		19,000

Partners' Capital Accounts

Dr. Cr.

	A	B	C		A	B	C
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
To Goodwill A/c	—	36,000	24,000	By Balance b/d	60,000	80,000	40,000
To Revaluation A/c	1,500	1,000	500	" Goodwill A/c	24,000	16,000	8,000
" A's Loan A/c	97,500	—	—	" Reserve Fund	15,000	10,000	5,000
" Balance c/d	—	69,000	28,500				
	99,000	1,06,000	53,000		99,000	1,06,000	53,000

Balance Sheet of B and C as nt 31st December, 1988

Liabilities	Amount	Assets	Amount
	Rs.		Rs.
Partners' Capitals —		Factory Building	96,000
B – 69,000		Plant & Machinery	54,0110
C – 28,500	97,500	Motor Vehicles	22,100
A's Loan Account	97,500	Furniture	14,400
Bank Loan	30,000	Stock	52,000
Sundry Creditors	50,000	Sundry Debtors – 40,000 Less Provision for Bad Debts 4,000	36,000
Provision for Outstanding Repairs	1,500	Cash in hand	2,000
	2,76,500		2,76,500

Notes: I Goodwill of the firm is Rs. 60,000. But in the books the goodwill is appearing at Rs. 12,000. Hence it should be rnised by Rs. 48,000 (Rs. 60,000 – Rs. 12,000) and all the partners to be credited in their old profit shoring ratio.

2 As goodwill should not appear in the books, it is written off to the remaining partners in their new profit sharing ratio.

3 Amount payable to A is transferred to his Loan' Account.

Illustration 18

A, B, C and D are partners sharing profits in the ratio of 3:3:2:2 respectively. Their Balance Sheet as on December, 31, 1988 stood as follows:

Balance Sheet as on December 31, 1988

	Rs.		Rs.
S. Creditors	80,000	Machinery	80,000
Bank Loan	40,000	Building	1,00,000
Reserve Fund	20,000	Furniture	10,000
Capital Accounts — A	60,000	Stock	60,000
B	50,000	S. Debtors	60,000
C	40,000	Bills Receivable	6,000
D	30,000	Cash in Hand	4,000
	3,20,000		3,20,000

A had decided to retire as from January 1, 1989. The following revaluation/adjustments have been agreed upon by the partners:

a) The goodwill of the firm to be valued at two years' purchase of average profits of the last four years. The profits were: 1985 — Rs. 52,000; 1986 — Rs. 58,000;

1987 — Rs. 68,000; 1988 — Rs. 82,000. The retiring partners' share of goodwill to be credited to his capital account. No goodwill account should be raised in the books.

b) Machinery to be depreciated by 25% and stock to be valued at 80% of its book value.

c) Buildings are agreed to be worth Rs. 2,00,000.

d) Provisions for doubtful debts to be created at 10% of debtors.

e) Amount due to the retiring partner to be transferred to his Loan Account.

The new profit sharing ratio of the remaining partners B, C and D has been agreed to be 5:3:2, respectively. The capital accounts of the remaining partners should be adjusted in proportion to their profit sharing ratios; any excess to be withdrawn and any shortfall to be brought in cash. But the total capital of the firm to remain unchanged. Prepare Revaluation Account, Capital Accounts of the partners and the Balance Sheet of the new firm after retirement.

Solution

Revaluation Account

Dr.	Rs.		Cr. Rs.
To Machinery A/c	20,000	By Buildings A/c	1,00,000
To Stock A/c	12,000		
To Provision for Bad Debts A/c	6,000		
To Partners' Capital A/c (share of profit)			
A – 3/10 = 18,600			
B – 3/10 = 18,600			
C – 2/10 = 12,400			
D – 2/10 = 12,400	62,000		
	1,00,000		1,00,000

Capital Accounts

Dr.	A	B	C	D		A	B	C	D Cr.
	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
To A's Capital A/c	—	26,000	13,000	—	By Balance b/d	60,000	50,000	40,000	30,000
To A's Loan A/c	1,23,600	—	—	—	By Reserve Fund	6,000	6,000	4,000	4,000
To Cash A/c	—	—	1,880	18,720	By B's Capital A/c (Goodwill)	26,000	—	—	—
					By C's Capital A/c (Goodwill)	13,000	—	—	—
					By Revaluation A/c	18,600	18,600	12,400	12,400
To Balance c/d	—	69,200	41,520	27,680	By Cash A/c	—	20,600	—	—
	1,23,600	95,200	56,400	46,400		1,23,600	95,200	56,400	46,400

Balance Sheet of B, C and D as at 1st January, 1989

Liabilities	Amount	Assets		Amount
Capital Accounts	Rs.			Rs.
B – 69,200		Buildings		2,00,000
C – 41,520		Machinery		60,000
D – 27,680	1,38,400	Furniture		10,000
A's Loan Account	1,23,600	Stock		48,000
Bank Loan	40,000	Sundry Debtors	60,000	
Sundry Creditors	80,000	Less : Provision for Bad Debts	6,000	54,000

		Bills Receivable	6.000
		Cash in hand	4,000
	3,82,000		3,82,000

Note: The combined capital of the remaining partners B, C and D before bringing in or withdrawing cash is Rs. 1,38,400 (48,600 + 43,400 + 46,400) which on the basis of new profit sharing ratio should be as under:

B – 1,38,000 × 5/10 = Rs. 69,200
C – 1,38,400 × 3/10 = Rs. 41,520
D – 1,38,400 × 2/10 = Rs. 27,680

Hence B should bring Rs. 20,600 while C and D both shall withdraw Rs. 1,880 and Rs. 18,720 respectively to make their capitals in proportion to their profit sharing ratio.

Working **Notes**

1) Goodwill of the firm on the basis of two years' purchase of the last 4 years' profits will be 2 (52,000 + 58,000 + 68,000 + 82,000) × 1/4 = Rs. 1,30,000. A's share = 3/10 × 1,30,000 = Rs. 39,000.

2) As goodwill account should not appear in the books, the amount of goodwill credited to A should be debited to the remaining partners in their gaining ratios which should be calculated as below:

   B's gaining ratio = new ratio – old ratio = 5/10–3/10 = 2/10
   C's gaining ratio = new ratio – old ratio = 3/10–2/10 = 1/10
   D's gaining ratio = new ratio – old ratio = 2/10–2/10 = 0/10

   Hence D has not gained anything. The gaining ratio of B and C *inter se* is 2:1 and the amount of goodwill credited to A will be debited to B and C in this ratio of 2:1.

9.11 LET US SUM UP

Normally the problems that arise at the time of retirement of death of a partner are: (1) Ascertainment of new profit sharing ratio, (2) Ascertainment of gaining ratio (3) Treatment of goodwill (4) Adjustment on revaluation of assets and liabilities (5) Adjustment in respect of unrecorded assets and liabilities etc. (6) Adjustment in respect of accumulated profits/losses. On retirement or death the retired or deceased partner's claim has to be settled and paid off. The new profit sharing ratio of each of the remaining partners is calculated by adding the acquired share to the old share. Acquired share is that portion of the retired or deceased partners profit which has been purchased by the remaining partners. Gaining ratio of each partner is calculated by deducting the old ratio from the new ratio. Sometimes gaining ratio may be negative which means that the partner has sacrificed a portion of his share instead of gaining.

The accounting treatment of goodwill depends upon the circumstances as follows:

Treatment of Goodwill

When Goodwill does not appear in the books

i) If Goodwill is raised with its full value and retained in the books.
ii) If Goodwill is raised with its full value and Immediately written off.
iii) If Goodwill Is raised only with the proportionate amount paymentable to the retiring or deceased partner and immediately written off by the remaining partners.
iv) If no goodwill Is raised at all in the books of the firm.

When Goodwill appears in the books

i) If the book value of Goodwill is less than the present value.
ii) If the book value of Goodwill Is mom than the present value.
iii) If the book value and the present value of Goodwill are same.

Accumulated profits and profits on revaluation are divided amongst all the partners in their old ratio. The claim of the retiring or deceased partner is transferred to his Loan Account if not paid off immediately. Sometimes the claim is paid off in instalments together with interest.

9.12 KEY WORDS

Annuity: Annual Payment of the claim of a retiring or deceased partner.

Executors: The representatives of the deceased partner who are entitled to claim a his share.

Gaining Ratio: The ratio of the continuing partners *inter se* which has been purchased by them from the retiring or deceased partner.

Joint Life Policy: An insurance policy taken by the partnership firm on the joint lives of all the partners.

Surrender Value: Amount receivable from the insurance company on surrendering the policy before maturity.

9.13 ANSWERS TO CHECK YOUR PROGRESS

A 1 a) 1:2, (b) A (–) 1/60, B+1/30, C+2/15
2 a) New Ratio 7:3, Gaining Ratio 2:1
b) New Ratio 7:5, Gaining Ratio 3:1

B 1 a) A 20,000; B 20,000; D 20,000
b) B 35,000; C 28,000; D 21,000
2 a) False; b) True; c) True; d) False

C 1 a) Revaluation
b) Debited
c) Credited
d) All Partners' Capital Accounts
a) Debited, Credited

2 If there is any uprecorded asset, then such asset should be debited and the Revaluation Account should be credited. Similarly, if there is any unrecorded liability, the Revaluation Account should be debited and the concerned liability account should be credited. Such unrecorded assets and liabilities should appear in the Balance Sheet.

9.14 TERMINAL QUESTIONS/EXERCISES

Questions

1 What is gaining ratio and how would you calculate it. Explain fully with illustrations?

2 How will you raise the goodwill accounts and write it off under the following circumstances?
a) When the partners decide that all the partners should be credited with their share of goodwill.
b) When you find that there is an unrecorded liability, how will you record it in the books of the partnership firm?

3 Why the Joint Life Policy is needed? What are the different ways of treating Joint Life Policy in accounts?

Exercises

1) A, B and C are partners in a firm sharing profits in the ratio of 3:2:1 respectively. The balance sheet of the firm as on 31.12.88 was as follows:

Balance Sheet as on 31.12.88

	Rs.			Rs
Sundry Creditors	50,000	Factory Building		1,00,000
Reserve Fund	32,000	Furniture		20,000
Bank Loan	30,000	Machinery		80,000
Capital Accounts:		Stock		50,000
A 80,000		Debtors	42,000	

B 60,000		Less: Provision for	
C 50,000		Bad Debts .000	35,000
	1,90,000	Cash in hand	17,000
	3,02,000		3,02,000

C retires on 31st December, 1988 subject to the following revaluations/adjustments:

a) A goodwill account is to be raised in the books of the firm at Rs. 48,000.

b) Machinery to be depreciated by 10% and Furniture by 5%.

c) Stock to be appreciated by 15% and Factory Building by 10%.

d) Provision for doubtful debts to be increased to Rs. 4,000. Prepare Revaluation Account, Partners' Capital Accounts and the Balance Sheet of the new firm after the retirement of C.

(Answer: Profit on Revaluation Rs. 5,500; Capital Account A—Rs. 1,22,750 and B—Rs. 88,500; C's Loan A/c Rs. 64,250; Balance Sheet Total Rs. 3,55,500).

2) A retires from business on 1st January, 1986. His total claim against the firm works out to Rs. 91,000 on that date. The partners have agreed to allow 20% interest on the unpaid balance per annum and settle his claim in three equal annual instalments including interest.
Prepare A's Loan Account.

(Answer: Annual Instalment including interest Rs. 43,200)

3) X, Y, and Z are partners in a firm sharing profits in the ratio 5:3:2 respectively. Y retires from business on 31st December, 1988, on which date the Balance Sheet of the firm was as foilows:

Balnnce Sheet of X, Y and Z as on 31.12.88

	Rs.		Rs.
Sundry Creditors	14,400	Cash in hand	4,400
Bills Payable	8,000	Bills Receivable	10,000
Bank Loan	25,000	Sundry Debtors	18,000
Reserve Fund	18,000	Stock	27,000
Capitals: X	57,000	Machinery	39,000
Y	30,000	Furniture	9,000
Z	15,000	Buildings	60,000
	1,67,400		1,67,400

On the date of retirement Buildings are estimated to be worth Rs. 1,25,000; Machinery worth Rs. 25,000; Furniture 20% less than book value; Stock Worth Rs. 22,500; a provision of 5% on debtors should be created for doubtful debts. The goodwill of the firm is estimated to be worth Rs. 90,000 based on past profits. The amount due to the retiring partner shall remain in the firm as loan carrying interest @ 15% p.a.

The new profit sharing ratio of the remaining partners X and Z has been agreed to be 3:2 respectively. Prepare Revaluation Account, Capital Accounts of the partners and the Balance Sheet of the firm after the retirement of Y.

(Answer: X's Cap. N c Rs. 78,900;
Z's Cap. A/c Rs. 9,360;
Y's Loan Rs. 75,540; B/s Total: Rs. 2,11,200)

4) A, B and C carried on a business sharing profits in the ratio of 7:5:4 respectively. The Balance Sheet of the firm on 31st December, 1988 was as under:

Balance Sheet of A, B and C as on December 31, 1988

Liabilities	Amount	Assets	Amount
	Rs.		*Rs.*
Creditors	10,900	Cash in hand	11,660

Liabilities	Rs.	Assets	Rs.
Bills Payable	4,700	Bills Receivable	1,900
Bank Loan	28,400	Stock in Trade	18,940
Capital Accounts:		Debtors	32,500
A 45,500		Furniture	4,200
B 30,500		Plant & Machinery	13,600
C 24,000	1,00,000	Buildings	61,200
	1,44,000		1,44,000

Profit for 1988 was Rs. 24,000. C died on 30th April, 1989. The partnership deed provides that (a) the assets and liabilities are to be revalued; (b) Goodwill is to be calculated on the basis of three years' purchase of the average profits of the last five years; and (c) the share of the deceased partner in the profit of the year upto the date of his death is to be calculated on the basis of profits of the year immediately preceding the date of death. Profits of the preceding four years were:

1984 Profit Rs. 90,000; 1985 Profit Rs. 60,000;

1986 Profit Rs. 40,000; 1987 Loss Rs. 4,000.

Revaluation of assets and liabilities were done as under:
Stock in trade at Rs. 20,000; Furniture at Rs. 3,200; Debtors at Rs. 32,000; Plant and Machinery Rs. 15,800 and Buildings at Rs. 70,000. A bill for machinery repairs amounting to Rs. 2,560 is still unpaid and is not recorded in books.

It was also agreed between the executors of C and the continuing partners that this revaluation should have no effect on the profits of the previous years. Prepare the Capital Account of the deceased partner and find out the amount payable to the executors. Give complete working notes:

(Answer: Amount payable Rs. 59,500)

5) A, B and C were partners in a firm. A retired from business on 31st December; 1980. His total claim against the firm on his retirement works out to be Rs. 59,500. It is agreed amongst the partners that the total amount payable to the retired partner should be transferred to his loan account carrying interest @ 12.5% p.a. It is also agreed that a sum of Rs. 9,500 be paid to the retiring partner immediately on 1st January, 1981 and balance in five equal annual instalments payable at the end of each of the next five years on 31st December, plus interest the first of such payment to be made on 31st December, 1981.
Show the Retired Partner's Loan Account for the five years from 1981 to 1985.

(Answer: Amount payable as under:
31.12.81 – Rs. 16,250; 31.12.82 – Rs. 15,000;
31.12.83 – Rs. 13,750; 31.12.84 – Rs. 12,500;
31.12.85 – Rs. 11,250

Note: These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University for assessment. These are for your practice only.

UNIT 10 DISSOLUTION OF A PARTNERSHIP FIRM

Structure

10.0 Objectives
10.1 Introduction
10.2 Meaning of Dissolution
10.2.1 Dissolution of Partnership
10.2.2 Dissolution of a Firm
10.3 Modes of Dissolution
10.4 Settlement of Accounts
10.5 Accounting Treatment
10.5.1 Simple Dissolution
10.5.2 Dissolution on Account of Insolvency of Partners
10.5.3 Dissolution on Sale to a Company
10.6 Let Us Sum Up
10.7 Key Words
10.8 Answers to Check Your Progress
10.9 Terminal Questions/Exercises

10.0 OBJECTIVES

After studying this unit you will be able to:

- explain the meaning of dissolution
- distinguish between dissolution of partnership and dissolution of a firm
- enumerate the modes of dissolution
- enlist the procedure for settlement of accounts
- make necessary entries in the books on dissolution under various circumstances and close them.

10.1 INTRODUCTION

In the previous two units you have studied that on the admission retirement or death of a partner, the partnership comes to an end but the firm may continue, if the partners so decide, with a new partnership coming into existence. But under certain circumstances, the firm has to be discontinued and closed which is known as dissolution of the firm. Hence, on dissolution of a firm the assets are to be disposed off and the external liabilities are to be paid and the claims of the partners settled. In this unit you will study the various modes and types of dissolution, the entries required to be made on disposal of the assets of the firm and on payment of the liabilities, the problems arising at the time of settlement of accounts of the partners and their resolution as per the partnership deed and the Partnership Act.

10.2 MEANING OF DISSOLUTION

Dissolution means discontinuance. When it relates to the relationship between the partners, it is called dissolution of partnership and when it relates to the business of partnership, it is called dissolution of the firm. According to the Partnership Act, 1932 "The dissolution of partnership between all the partners of a firm is called the dissolution of the firm. Therefore, the act distinguishes between the dissolution of partnership and dissolution of the firm.

Dissolution of partnership means that the relationship between the partners changes while the firm may continue its business under the same name, if the partners so decide. On the other hand, dissolution of the firm means the complete closure of the business of the firm. All the assets are disposed off and all the liabilities are discharged. Therefore, under dissolution of the firm, the partnership is automatically

dissolved. On the other hand, dissolution of partnership does not necessarily result in the dissolution of the firm.

10.2.1 Dissolution of Partnership

The partnership is deemed to have been dissolved in any of the following circumstances:

i) expiry of the period of partnership
ii) completion of the venture for which it was formed
iii) admission of a partner
iv) retirement of a partner
v) death of a partner
vi) insolvency of a partner

In all the above-mentioned cases, the old partnership comes to an end but the business may be carried on in the same name and style with a new partnership coming into existence. Technically, even in the case of a change in the profit sharing ratio of the existing partners, the old partnership is dissolved and a new one comes into existence.

10.2.2 Dissolution of a Firm

In addition to the dissolution of the partnership, there is also the dissolution of the firm under the following circumstances:

i) Where all the partners agree that the firm be dissolved.
ii) Where all the partners but one are insolvent.
iii) Where the business becomes unlawful.
iv) In the case of partnership at will when a partner gives notice of dissolution.
v) When a competent court orders dissolution.

It must be clearly understood that dissolution of the partnership is only a legal abstraction known to the insiders only, whereas dissolution of the firm is a real physical break-up and discontinuance of the business leading to the ceasation of all trading activities.

10.3 MODES OF DISSOLUTION

There are essentially two modes of dissolution of the firm and in the whole of this unit the dissolution of the firm shall be discussed. The modes of dissolution of the firm are: (a) Dissolution without the order of the court, and (b) Dissolution by the order of the court.

Dissolution without the order of the court

A firm is dissolved without the order of the court in any one of the following ways:

1) Dissolution by agreement (Sec. 40): A firm may be dissolved (i) with the consent of all the partners or (ii) in accordance with a contract between the partners.
2) Compulsory dissolution (Sec. 41): A firm is compulsorily dissolved under the following circumstances:
   i) When all the partners or all the partners but one are adjudicated insolvent. The reason is simple that an insolvent person ceases to be a partner and there cannot be a partnership firm without at least two persons.
   ii) When one of the partners is adjudicated insolvent unless there is a contract to the contrary.
   iii) When the business becomes unlawful on the happening of some event.
3) Dissolution on the happening of certain contingencies; These are as follows:
   i) the expiry of the term for which the firm was constituted
   ii) the completion of the adventure
   iii) the death of a partner
   iv) the adjudication of a partner as an insolvent already discussed under (2) (ii) above
4) Dissolution by Notice in case of partnership at will.

Dissolution by Court

Under Section 44, the court can order dissolution of the firm on the following grounds:

i) Where a partner becomes of an unsound mind
ii) Where a partner is permanently incapacitated to perform his duties
iii) Where a partner is guilty of misconduct
iv) Where a partner persistently commits breach of the partnership agreement
v) Where a partner has transferred the whole of his interest in the firm
vi) Where the business cannot be carried on except at a loss
vii) Where the court is satisfied that it is just and equitable that the firm should be dissolved.

After dissolution, the rights and obligations of all the partners continue as before in all the things necessary for the smooth winding up of the business of the firm.

10.4 SETTLEMENT OF ACCOUNTS

Normally partnership agreement governs the mode of settlement of accounts between partners after the dissolution of a firm. But in the absence of any specific agreement between the partners as to the mode of settlement of accounts between the partners after the dissolution of the firm, the relevant provisions of the Partnership Act shall apply, particularly Section 48 which states:
In settling the accounts of a firm after dissolution the following rules, subject to agreement by the partners, be observed:

a) Losses, including deficiencies of capital, shall be paid first out of profits, next out of capital, and lastly, if necessary, by the partners individually in the proportions in which they are entitled to share profits.

b) The assets of the firm, including any sums contributed by the partners to make up deficiencies of capital, shall be applied in the following manner and order:
   i) in paying the debts of the firm to third parties
   ii) in paying to each partner rateably what is due to him from the firm for advances as distinguished from capital
   iii) in paying to each partner rateably what is due to him on account of capital and
   iv) the residue, if any, shall be divided among the partners in the proportions in which they are entitled to share profits.

The overall effect of the above provisions may be summarised in simple terms as follows:

1) The assets of the firm must be first utilised in paying off the claims of third parties against the firm.

2) The balance should be applied in repaying the advances (loans) made by the partners to the firm as distinguished from the capital. If the amount is insufficient to pay off the loans, they should be paid off rateably (proportionately).

3) The balance should be utilised in paying the claims of the partners in respect of their capitals which should be after adjusting all accumulated profits or losses and also drawings and realisations profit or loss.

Private Debts of Partners and Firms' Debts
The creditors of the firm (third party liabilities) should be paid out of the assets of the firm. If there is any surplus, it will be divided among the partners as per their claims which can be utilised for paying the private liabilities of the partners. Similarly, the private creditors of partners should be first paid out of the private assets of partners and if there is any surplus, it can be utilised for paying off the partnership debts.

10.5 ACCOUNTING TREATMENT

As mentioned earlier, in case of dissolution of a firm, the trading activities of the firm come to an end. The firm is to be wound up. Therefore, all the assets have to be sold and the liabilities are to be paid off. For this purpose, a nominal account named 'Realisation Account' is opened.

All the assets except cash in hand, bank balance, debit balance of P&L A/c and the debit balances of partner's capital and current accounts are transferred to the debit

side of this account and are, thus, closed. Similarly, the accounts of all the outside liabilities are closed by transferring them to the credit side of Realisation Account. After closing these accounts, the assets are sold off and the cash is realised which is credited to the Realisation Account. With the cash so realised the liabilities are paid off by debiting the Realisation Account and crediting the Cash Account. After this the Realisation Account is balanced to work out the profit or loss on realisation.

The profit or loss is, then, divided amongst the partners in their profit sharing ratio. Look at Figure 10.1 and see the proforma of Realisation Account.

Figure 10.1 Proforma of Realisation Account

Realisation Account

Dr. Cr.

Particulars	Amount	Particulars	Amount
	Rs.		Rs.
To Assets A/cs (all the assets except Cash A/c, Bank A/c, debit balances of P&L A/c and Partners' Capital A/c)		By Liabilities A/cs (all the outside liabilities)	
To Bank A/c (cash paid to discharge the liabilities)		By Bank A/c (cash realised on sale of assets)	
To Partners' Capital A/cs (Distribution of profit, if any)		By Partners' Capital A/cs (Distribution of Loss, if any)	

There are three situations in case of dissolution, viz.,

i) Simple dissolution
ii) Dissolution on account of insolvency of partners
iii) Dissolution on sale to a Company.

Under all the three categories of dissolution of firm the account books are to be closed. Under the first two categories the assets of the firm are disposed off in the market and the liabilities are paid off whereas in the case of sale to a company, most assets and liabilities of the firm are transferred to the company and purchase consideration realised. The assets not taken over by the company are disposed off in the market and the liabilities not taken over by the company are paid off in cash and the books are closed after paying the claims of the partners. Let us now discuss these three situations one by one.

10.5.1 Simple Dissolution

By simple dissolution we mean that the partners have decided to dissolve the firm in normal course and all the partners are solvent and the firm has not been sold to a Joint Stock Company. Under simple dissolution the assets will be disposed off in the market for cash although one or two items of assets may also be taken over by a partner and the liabilities will be paid off and books closed. The journal entries required to close the books under simple dissolution are as follows:

i) All the marketable assets (whether they realise anything or not) shall be transferred to the Realisation Account at book values. Marketable assets shall include all assets except cash in hand, bank balance, debit balance of profit and loss account and debit balance of partners' capital or current accounts. Sundry debtors should be transferred at gross value and any provision for doubtful debts is to be regarded as liability. The entry will be as under:

Realisation A/c	Dr.	With the total amount
To Bills Receivable		
To Debtors (Gross Figure)		Individually, with their respective book values.
To Stock		
To Prepaid Expenses		

To Investments

To Furniture

To Plant & Machinery

To Land & Buildings

To Patents, Licences, Trade Marks, etc.

To Goodwill (it is a marketable asset and not fictitious)

ii) All the outside liabilities including the claims of relatives of the partners and the Provision for Doubtful Debts to be transferred to the credit side of Realisation Account.

Creditors A/c	Dr.	Individually, with their
Provision for Doubtful Debts A/c	Dr.	respective book figures
Outstanding Expenses A/c	Dr.	
To Realisation A/c		With the total amount

iii) For the disposal of the assets the entries may be made as follows depending on the mode of disposal:

a) If the assets are sold for cash, the amount so realised should be debited to Cash or Bank Account and Realisation Account should be credited.

Cash/Bank A/c	Dr.	With the total realised value
To Realisation A/c		of all the assets

b) If any asset is taken over by a partner at an agreed value the partner should be debited instead of cash and Realisation Account to be credited:

Partner' Capital A/c	Dr.	With the value of which
To Realisation A/c		taken over

c) If there is an unrecorded asset (like furniture completely written off in accounts but which is still in use and can be marketed), the entry for its sale will be made and no entry is required for bringing it into account books. The entry will be:

Cash A/c	Dr.	With the realised value
To Realisation A/c		

iv) For the discharge of outside liabilities Realisation A/c should be debited and the relevant account to be credited depending upon the mode of discharge:

a) If cash is paid to discharge the claim, Realisation Account is debited and Cash Account is credited:

Realisation A/c	Dr.	With the amount actually
To Cash A/c		paid

b) If a partner takes over the responsibility of discharging a liability, such partner's capital account should be credited instead of cash

Realisation A/c	Dr.	With the amount at which
To Partner's Capital A/c		taken one

c) If there is an unrecorded liability, it will also have to be paid off and the entry will be:

Realisation A/c	Dr.	With the amount actually
To Cash A/c		paid

(please note that there is no need of bringing the unrecorded liability into books and the entry for payment of such liability will suffice)

v) The realisation/winding up expenses, if any, incurred in the course of dissolution should be debited to Realisation Account and the entry will be:

Realisation A/c	Dr.	With the amount of
To Cash A/c		expenses

In case the realisation expenses are paid by the partner or the partners is entrusted with the job of winding up, the entry will be

Realisation A/c	Dr.	With the amount of
To Partner's Capital A/c		expenses

vi) The difference in the Realisation Account will be either profit or loss; if the credit side total of Realisation Account is greater, there is realisation profit, whereas on the other hand, if the debit side total is greater, there is realisation

loss which should be transferred to the capital accounts of the partners in their profit sharing ratio.
The entry will be:

a) If there is realisation profit:

Realisation A/cs	Dr.	With the amount of Profit
To Partners' Capital A/cs		Individually, in their Profit sharing ratio

b) If there is realisation loss:

Partners' Capital A/cs	Dr.	Individually, in their Profit sharing ratio
To Realisation A/c		With the amount of Loss

vii) Loans advanced by partners as distinguished from their capital accounts should be paid and the entry will be:

Parnter's Loan A/c	Dr.	With the amount of Loan
To Cash A/c		

viii) All accumulated profits (standing in the name of Reserve Fund, General Reserve, Profit and Loss Account credit balance etc.) and all accumulated losses (standing in the name of profit and loss debit balance) should be transferred to the partners' capital accounts in the profit sharing ratio as follows:

a) If there is accumulated Profit:

Reserve Fund	Dr.	As the case may be
General reserve	Dr.	
Profit and Loss A/c	Dr.	
To Partners' Capital A/cs		Individually, in their profit sharing ratio

b) If there is accumulated loss:

Partners' Capital A/cs	Dr.	Individually, in their profit sharing ratio
To Profit and Loss A/c		With the amount of Loss

ix) In the end the claims of the partners in respect of their capitals will be settled. If the capital account of a partner shows a debit balance, he will bring cash; whereas if the capital account of a partner shows a credit balance, he will be paid cash. Thus, all the accounts of the firm will be closed. The entries will be as follows:

a) When the capital account shows a debit balance:

Cash A/c	Dr.	With the amount of deficiency
To Partners' Capital A/c		

b) When the capital account shows a credit balance:

Partners' Capital A/c	Dr.	With the amount of final payment
To Cash A/c		

Note: The amount finally payable to partner/partners must exactly be equal to the amount of cash available.

Treatment of Goodwill: Goodwill is like any other saleable asset and it will be treated on the same lines as any other saleable asset is treated. If it appears in the books, it will be transferred to Realisation Account and the sale proceeds shall be debited to Cash Account and credited to Realisation Account. If it does not appear in books but something is realised for it, it will be treated as unrecorded asset and its sale proceeds shall be debited to Cash Account and credited to the Realisation Account, like any other unrecorded asset. There is nothing special in the treatment of goodwill on dissolution as such.

In case a partner agrees to buy the goodwill of the firm, his capital account shall be debited and Realisation Account shall be credited. But it should be remembered that Goodwill is a saleable asset like any other asset though intangible but not fictitious and it can be sold only at the time of dissolution and not otherwise. If the firm is earning profits, the goodwill shall command some value but if the firm is not making profits but is suffering losses, the goodwill may prove valueless but even then it would not be proper to treat it is fictitious asset. Look at Illustration 1 and see how the books of the firm are closed in case of simple dissolution.

Illustration 1

The following is the Balance Sheet of A and B who shared profits in the ratio of 3:2 respectively:

Balance Sheet of A and B as on December 31, 1988

Liabilities	Amount	Assets	Amount
	Rs.		Rs.
Sundry Creditors	76,000	Cash at bank	23,000
Bills payable	30,000	Stock in trade	12,000
Mrs. A's loan	20,000	Debtors 40,000	
Reserve Fund	10,000	Less: Provision for Bad Debts 2,000	38,000
Capital		Furniture	8,000
A 20,000		Machinery	56,000
B 16,000	36,000	Investments	20,000
		Profit & Loss A/c	15,000
	1,72,000		1,72,000

The firm was dissolved on December 31, 1988. A took over investments at an agreed value of Rs. 16,000 and agreed to pay off the loan of Mrs. A. Stock realised Rs. 10,000; Debtors Rs. 37,000; Furniture Rs. 9,000; and Machinery Rs. 50,000. The creditors were paid off at a discount of 2½%. B agreed to realise the assets and pay off the liabilities on a remuneration of Rs. 2,200. Actual expenses of realisation came to be Rs. 2,000 which were paid by the firm. Give journal entries and prepare Realisation Account, Partners' Capital Accounts and Bank Account to close the books.

Solution

Journal

Date	Particulars		Dr. Amount	Cr. Amount
			Rs.	Rs.
i)	Realisation A/c	Dr.	1,36,000	
	To Stock in trade			12,000
	To Debtors			40,000
	To Furniture			8,000
	To Machinery			56,000
	To Investments			20,000
	(Various assets transferred at book values)			
ii)	Sundry Creditors	Dr.	76,000	
	Bills Payable	Dr.	30,000	
	Mrs. A's Loan	Dr.	20,000	
	Provision for Debts	Dr.	2,000	
	To Realisation A/c			1,28,000
	(Various Liabilities and Provision for Doubtful Debts transferred)			
iii)	Bank A/c	Dr.	1,06,000	
	To Realisation A/c			1,06,000
	(total amount realised from sale of assets)			
iv)	A's Capital A/c	Dr.	16,000	
	To Realisation A/c			16,000
	(Investments taken over at Rs. 16,000)			
v)	Realisation A/c	Dr.	1,04,100	
	To Bank A/c			1,04,100
	(creditors at a discount of 2½% & B/P paid off)			

vi)	Realisation A/c	Dr.	20,000	
	To A's Capital A/c			20,000
	(Mrs. A's loan taken over)			
vii)	Realisation A/c	Dr.	2,200	
	B's Capital A/c			2,200
	(Agreed remuneration credited)			
viii)	B's Capital A/c	Dr.	2,000	
	To Bank A/c			2,000
	(Actual expenses of realisation paid on behalf of B)			
ix)	A's Capital A/c	Dr.	7,380	
	B's Capital A/c	Dr.	4,920	
	To Realisation A/c			12,300
	(loss on realisation transferred in profit ratio)			
x)	Reserve Fund	Dr.	10,000	
	To A's Capital A/c			6,000
	To B's Capital A/c			4,000
	(Reserve Fund transferred)			
xi)	A's Capital A/c	Dr.	9,000	
	B's Capital A/c	Dr.	6,000	
	To Profit and Loss A/c			15,000
	(Loss transferred)			
	A's Capital A/c	Dr.	13,620	
	B's Capital A/c	Dr.	9,280	
	To Bank A/c			22,900
	(amount finally due to the partners paid off)			

Realisation Account

Dr.	Rs.		Cr. Rs.
To Stock in trade	12,000	By Sundry Creditors	76,000
To Debtors	40,000	By Bills Payable	30,000
To Furniture	8,000	By Mrs. A's Loan	20,000
To Machinery	56,000	By Prov. for B. Debts	2,000
To Investments	20,000	By Bank	1,06,000
To Bank	1,04,100	By A's Capital A/c (investment taken over)	16,000
To A's Capital A/c (Mrs. A's loan taken over)	20,000	By A's Cap. A/c. (real. loss)	7,380
To B's Capital A/c (remuneration to B)	2,200	By B's Cap. A/c (real. loss)	4,920
	2,62,300		2,62,300

A's Capital Account

	Rs.		Rs.
To Realisation A/c	16,000	By Balance b/d	20,000
To Realisation A/c	7,380	By Realisation A/c	20,000
To Profit & Loss A/c	9,000	By Reserve Fund	6,000
To Bank A/c	13,620		
	46,000		46,000

B's Capital Account

	Rs.		Rs.
To Bank A/c	2,000	By Balance b/d	16,000
To Realisation A/c	4,920	By Realisation A/c	2,200
To Profit & Loss A/c	6,000	By Reserve Fund	4,000
To Bank A/c	9,280		
	22,200		22,200

Bank Account

	Rs.		Rs.
To Balance b/d	23,000	By Realisation A/c	1,04,100
To Realisation A/c	1,06,000	By B's Capital A/c	2,000
		By A's Capital A/c	13,620
		By B's Capital A/c	9,280
	1,29,000		1,29,000

Check Your Progress A

1 State whether each of the following would result in dissolution of partnership or dissolution of firm.

  i) A, B and C are partners sharing profit & losses in the ratio 2:2:1. On December 21, 1989 C dies.

  ii) X, Y and Z share profit & losses in the ratio of 1:2:1. Y is declared insolvent.

  iii) P,Q and R are partners sharing profits & losses in the ratio of 3:2:1. They agree on dissolution.

  iv) L, M and N share profits and losses equally. They decide to sell the firm and divide the purchase consideration equally.

  v) A, B and C join together to construct a building. The building was duly completed.

2 State whether following statements are True or False.

  i) Dissolution of a firm automatically leads to the dissolution of partnership.

  ii) The assets of the firm are first utilised in paying off the claim of the partners.

  iii) All the assets and liabilities are closed by transferring them to a nominal account called the Realisation Account.

  iv) When an unrecorded liability is paid off Cash A/c is credited and Realisation A/c is debited.

  v) When realisation expenses are paid by the partner, the partner's capital A/c is debited.

10.5.2 Dissolution on Account of Insolvency of Partners

The firm is normally dissolved when one or more partners become insolvent. The procedure for closing the books under insolvency is almost the same as under simple dissolution i.e. marketable assets and external liabilities are transferred to a newly opened Realisation Account and they are realised and paid off through the same account and the loss or profit on realisation transferred to the capital accounts of the partners. Thereafter if the capital account of a partner shows a debit balance, he should pay the amount to the firm. But in case the partner is insolvent he will not be able to pay at least the full amount. The sum not recoverable from the insolvent partner is a loss to the firm. Now the question arises in which ratio this loss should be borne by the solvent partners? Prior to the decision in Garner vs. Murray case this was also treated as normal loss and borne by the solvent partners in their profit sharing ratios. But in Garner vs. Murray case it was decided that such a loss was not a trading loss but a capital loss which should be borne by the solvent partners **in the ratio of their capitals on the date of dissolution,** for which the solvent partners should bring the realisation loss in cash so that their capital accounts may show the balance as on the date of dissolution. Although there has not been any court decision in India in this respect, it is also followed in India. You know the capital account of partners

can be kept on fixed basis or on fluctuating basis. Let us now learn how to compute the amount of deficiency of an insolvent partner to be borne by the solvent partners in case of fixed and fluctuating capitals.

Fixed and Fluctuating Capitals: If the capital accounts of the partners are kept on fixed basis, each partner will have two accounts — one capital account and the other a current account. The capital account of each partner will show a fixed balance (the same balance) year after year. All entries relating to drawings, profit or loss, interest on capital or drawings etc. will be made in the current account of each partner. The current account of a partner may show a debit balance or a credit balance but the capital account of each partner will show the same fixed credit balance year after year. Hence the deficiency of the insolvent partner will be borne by the solvent partners in the ratio of their fixed capitals. Thus it is very easy to divide the deficiency of the insolvent partner among the solvent partners if the capitals are kept on fixed basis. But if the capital accounts of partners are kept on fluctuating basis, there will be only one capital account and all entries relating to drawings, profit or loss, interest on capital or drawings are made in the capital account. Thus, the balance in the capital accounts of each partner will fluctuate every year and every time an entry is made. Under such situation, the deficiency of the insolvent partner will be borne by the solvent partners in the ratio of their capitals as on the date of insolvency. This means that all the accumulated profits or losses should first be divided among all the partners (including the insolvent one) in their profit sharing ratios which will make the capital accounts of the partners as on the date of insolvency. But no other entry need be made. That is why when realisation loss is debited to the partners the Garner vs. Murray decision requires the solvent partners to bring the realisation loss in cash so that their capital accounts may be as they were on the date of insolvency. The reason is that the realisation loss is a loss subsequent to the date of insolvency. Hence, the important thing is that the ratio of capitals should be calculated as explained whether realisation loss is brought in cash or not. But if the question asks you to solve it as per Garner vs. Murray rule, it would be advisable to show the realisation loss as brought by the solvent partners in cash, which will make their capital account balances as they were on the date of insolvency.

Dissolution on account of insolvency will be discussed under two sub-heads: (1) When one of the partners is insolvent and (2) When all the partners are insolvent. The accounting treatment in certain respects will be different under the two. Let us now take them up one by one.

When One of the Partners is Insolvent

When a partner becomes insolvent and the books are to be closed, the entries upto the preparation of Realisation Account and the transfer of realisation profit or loss to the partners capital accounts will be the same as under simple dissolution. Thereafter the debit balance in the capital account of the insolvent partner after adjusting any cash brought in by him (known as the deficiency of the insolvent partner) shall be divided among the solvent partners in the capital ratio as explained above depending on whether the capital accounts are kept on fixed basis or fluctuating basis.

Look at Illustration 2 and see how the books of account are closed when one partner becomes insolvent.

Illustration 2

A, B and C are partners sharing profits in the ratio of 2:2:1 respectively. On December 31, 1988, the date of dissolution of the firm, their Balance Sheet stood as follows:

Balance Sheet of A, B and C as on December 31, 1988

Liabilities	Rs.	Assets	Rs.
Creditors	30,000	Fixed Assets	63,000
Reserve Fund	6,000	Bank Balance	1,500
Capital Accounts		Other Current Assets	4,500
A 21,000		Current Account-C	9,000
B 9,000			
C 3,000	33,000		

Current Accounts A 6,000 B 3,000	9,000		
	78,000		78,000

Fixed assets realised Rs. 20,000 and other current assets Rs. 4,000 only. There was an unrecorded liability for outstanding repairs to machinery amounting to Rs. 1,800. C is insolvent and only Rs. 720 could be recovered from his private estate. Expenses on realisation amounted to Rs. 300. Prepare Ledger Accounts.

Solution

Realisation Account

Dr.	Rs.		Cr. Rs.
To Fixed Assets	63,000	By Creditors	30,000
To Current Assets	4,500	By Bank A/c (assets realised)	24,000
To Bank A/c (crs. and repairs)	31,800	By Capital A/cs	
To Bank A/c (real. expenses)	300	(share of loss) A 18,240 B 18,240 C 9,120	45,600
	99,600		99,600

A's Capital Account

	Rs.		Rs.
To A's Current A/c	19,080	By Balance b/d	21,000
To Bank A/c	1,920		
	21,000		21,000

A's Current Account

	Rs.		Rs.
To Realisation A/c	18,240	By Balance b/d	6,000
To C's Capital A/c	9,240	By Reserve Fund A/c	2,400
(share of deficiency)		By A's Capital A/c	19,080
	27,480		27,480

B's Capital Account

	Rs.		Rs.
To B's Current A/c	16,800	By Balance b/d	9,000
		By Bank A/c	7,800
	16,800		16,800

B's Current Account

	Rs.		Rs.
To Realisation A/c	18,240	By Balance b/d	3,000
To C's Capital A/c	3,960	By Reserve Fund A/c	2,400
(share of deficiency)		By B's Capital A/c	16,800
	22,200		22,200

C's Capital Account

	Rs.		Rs.
To C's Current A/c	16,920	By Balance b/d	3,000
		By Bank A/c	720
		By A's Current A/c	9,240
		By B's Current A/c	3,960
	16,920		16,920

C's Current Account

	Rs.		Rs.
To Balance b/d	9,000	By Reserve Fund A/c	1,200
To Realisation A/c	9,120	By C's Capital A/c	16,920
	18,120		18,120

Bank Account

	Rs.		Rs.
To Balance b/d	1,500	By Realisation A/c	31,800
To Realisation A/c	24,000	By Realisation A/c	300
To C's Capital A/c	720	By A's Capital A/c	1,920
To B's Capital A/c	7,800		
	34,020		34,020

Note: The realisation loss of Rs. 45,600 and the Reserve Fund Rs. 6,000 have been divided among the partners including the insolvent partner in their profit sharing ratio of 2:2:1 respectively. But the deficiency of the insolvent partner C Rs. 13,200 after adjusting Rs. 720 brought by him in cash is divided between the solvent partners A and B in their fixed capital ratio which is 21,000:9,000 or 7:3.

In Illustration 2 the capital accounts of the partners were kept on fixed basis and hence the deficiency of the insolvent partner was divided between the solvent partners in the ratio of their fixed capitals. But in case the capital accounts are kept on fluctuating basis, the deficiency of the insolvent partner will be divided between the solvent partners in the ratio of capitals as on the date of insolvency. Illustration 3 will help you to clarify this point better.

Illustration 3

A, B, C and D are partners sharing profits in the ratio of 3:3:2:2 respectively. The following is the Balance Sheet as on December 31, 1988 when the firm was dissolved:

Balance Sheet as on December 31, 1988

Liabilities	Rs.	Assets	Rs.
Creditors	18,000	Cash at Bank	3,000
General Reserve	20,000	Debtors	16,000
Capital Accounts		Stock	22,000
A 21,000		Furniture	7,000
B 12,000	33,000	Capital Accounts	
		C 16,000	
		D 7,000	23,000
	71,000		71,000

Debtors realised Rs. 12,000; Stock Rs. 16,000 and Furniture Rs. 5,000. Creditors were paid in full. Outstanding repairs bill for Rs. 3,500 was not recorded in the books. Partners' joint life policy for Rs. 20,000 was surrendered for Rs. 3,500. The expenses of realisation came to Rs. 500. C was insolvent but a sum of Rs. 4,200 was recovered from his estate. Write up accounts to close the books of the firm as per Garner vs. Murray rule. You are also required to give proper working notes wherever necessary.

Solution

Realisation Account

Dr.			Cr.
	Rs.		Rs.
To Debtors	16,000	By Creditors	18,000
To Stock A/c	22,000	By Bank A/c (assets realised)	33,000
To Furniture A/c	7,000	By Bank A/c (Joint life policy)	3,500
To Bank A/c (crs. and repairs)	21,500	By Capital A/cs (share of loss)	3,500

To Bank A/c (realisation exp.)	500	A 3,750 B 3,750 C 2,500 D 2,500	12,500
	67,000		67,000

A's Capital Account

	Rs.		Rs.
To Realisation (loss)	3,750	By Balance b/d	21,000
To C's Capital A/c (share of deficiency)	6,180	By General Reserve A/c	6,000
To Bank A/c	20,820	By Bank A/c (payment of realisation loss)	3,750
	30,750		30,750

B's Capital Account

	Rs.		Rs.
To Realisation (loss)	3,750	By Balance b/d	12,000
To C's Capital A/c (share of deficiency)	4,120	By General Reserve A/c	6,000
To Bank A/c	13,880	By Bank A/c (payment of realisation loss)	3,750
	21,750		21,750

C's Capital Account

	Rs.		Rs.
To Balance b/d	16,000	By General Reserve A/c	4,000
To Realisation (loss)	2,500	By Bank A/c	4,200
		By A's Capital A/c	6,180
		By B's Capital A/c	4,120
	18,500		18,500

D's Capital Account

	Rs.		Rs.
To Balance b/d	7,000	By General Reserve A/c	4,000
To Realisation (loss)	2,500	By Bank A/c	5,500
	9,500		9,500

Bank Account

	Rs.		Rs.
To Balance b/d	3,000	By Realisation A/c	21,500
To Realisation A/c	33,000	By Realisation A/c	500
To Realisation A/c	3,500	By A's Capital A/c	20,820
To A's Capital A/c	3,750	By B's Capital A/c	13,880
To B's Capital A/c	3,750		
To C's Capital A/c	4,200		
To D's Capital A/c	5,500		
	56,700		56,700

Working Notes

1) The capital accounts of the partners in the above illustration are kept on fluctuating basis. Hence, the capital ratio of the solvent partners for the purpose of sharing the deficiency of the insolvent partner shall include their capitals as well as their respective shares in the accumulated profits or losses which will be calculated as follows:

A = Capital + Share in General Reserve
= 21,000 + 6,000 = 27,000.

B = Capital + Share in General Reserve
= 12,000 + 6,000 = 18,000.
Hence Capital Ratio = 27,000:18,000
= 3:2.

Please note that although D is solvent but he will not share the deficiency of the insolvent partner C because his capital account is showing a negative balance i.e. debit balance. Thus, only A and B will share the deficiency and their ratio of capital as on the date of insolvency is required.

2) In the question it is specifically mentioned that Garner vs. Murray rule should be followed. Hence, the solvent partners should bring their share of realisation loss in cash so as to know their capitals as on the date of insolvency.

When All the Partners are Insolvent

When all the partners become insolvent, the unsecured creditors cannot be paid in full as the amount available will not be sufficient to pay them in full. Hence, the unsecured creditors should not be transferred to the Realisation Account but only the marketable creditors which can be paid in full out of the sale proceeds of the asset pledged against may be transferred to the Realisation Account. The assets shall be realised and the secured creditors paid as above through the Realisation Account and the realisation profit or loss transferred to the capital accounts of all the partners in their profit sharing ratio as usual. If anything is recovered from the private estate of any partner, it will be debited to Cash Account and credited to the partner's capital account. Thereafter, the total amount of cash available will be paid to the unsecured creditors. The unpaid balance in the unsecured creditors account shall then be transferred to a newly opened Deficiency Account. Similarly, the debit or credit balance in the partners' capital accounts shall also be transferred to the Deficiency Account. Thus all the accounts will be closed.

It may be noted here that when all the partners are insolvent, there is no solvent partner to share the deficiency of the insolvent partners. Hence, the futile exercise of dividing the debit balance of some insolvent partners among those insolvent partners whose capital accounts show credit balance is totally uncalled for. It is sufficient to open a Deficiency Account and to transfer the unpaid balance in unsecured creditors account as well as the debit or credit balance in the partners capital accounts to this account.

Illustration 4

The following is the Balance Sheet as on December 31, 1988 of A, B and C who share profits equally.

Balance Sheet of A, B and C as on December 31, 1988

Liabilities	Rs.	Assets	Rs.
Sundry Creditors	42,000	Cash in hand	2,000
Bank Loan	10,000	Stock	30,000
Capital Accounts A	8,000	Debtors	18,000
B	5,000	Furniture	5,000
		C's Capital Account	10,000
	65,000		65,000

Due to paucity of funds the firm was dissolved on January 1, 1989. Bank Loan was secured against stock which realised Rs. 22,000. The debtors realised Rs. 15,000 and Furniture Rs. 2,000. The expenses on realisation were Rs. 1,000. B and C could not pay anything from their private estates.

However, a sum of Rs. 1,200 was received from the private estate of A.

Prepare accounts to close the books of the firm.

Solution

Realisation Account

Dr.	Rs.		Cr. Rs.
To Stock A/c	30,000	By Bank Loan A/c	10,000

	Rs.		Rs.
To Debtors	18,000	By Cash A/c (assets realised)	39,000
To Furniture A/c	5,000	By Partners Capital A/cs (share of loss)	
To Cash A/c (bank loan)	10,000	A 5,000	
To Cash A/c (expenses)	1,000	B 5,000	
		C 5,000	15,000
	64,000		64,000

Cash Account

	Rs.		Rs.
To Balance b/d	2,000	By Realisation A/c	10,000
To Realisation A/c	39,000	By Realisation A/c	1,000
To A's Capital A/c	1,200	By Creditors	31,200
	42,200		42,200

Sundry Creditors Account

	Rs.		Rs.
To Cash A/c	31,200	By Balance b/d	42,000
To Deficiency A/c	10,800		
	42,000		42,000

A's Capital Account

	Rs.		Rs.
To Realisation A/c (loss)	5,000	By Balance b/d	8,000
To Deficiency A/c	4,200	By Cash A/c	1,200
	9,200		9,200

B's Capital Account

	Rs.		Rs.
To Realisation A/c (loss)	5,000	By Balance b/d	5,000

C's Capital Account

	Rs.		Rs.
To Balance b/d	10,000	By Deficiency A/c	15,000
To Realisation A/c (loss)	5,000		
	15,000		15,000

Deficiency Account

	Rs.		Rs.
To C's Capital A/c	15,000	By Creditors	10,800
		By A's Capital A/c	4,200
	15,000		15,000

Note: Bank loan is secured against stock and hence, is fully secured as the sale proceeds of stock are more than the amount of loan. Hence, it is transferred to Realisation A/c and paid off there. As all the partners are insolvent, the deficiency or surplus in their capital accounts have been transferred to Deficiency Account. Similarly, the surplus in sundry creditors account is also transferred.

10.5.3 Dissolution on Sale to a Company

Sometimes partnership business is sold to a Joint Stock Company or the partnership is converted into a Joint Stock Company. Under both the situations, the books of account of the firm have to be closed. The procedure is more or less the same as under simple dissolution. The assets taken over by the company (not all marketable

assets) are transferred to the Realisation Account which may also include cash if taken over. Similarly, liabilities taken over by the company are also transferred to Realisation Account. The purchase price commonly known as "Purchase Consideration" agreed between the parties is debited to the Purchasing Company's Account and credited to Realisation Account. The purchasing company settles the purchase price by paying cash or issuing equity shares or both. Cash Account and Equity Shares in Purchasing Company's Account will be debited and the account of the purchasing company will be credited. Assets not taken over by the company are disposed off and any profit or loss on such disposal is transferred to Realisation Account. Or alternatively even those assets not taken over by the company be transferred to the Realisation Account and realised through it, so that profit or loss shall automatically get transferred to it. Similarly, liabilities not taken over by the company will be paid off and any surplus or deficit shall be transferred to Realisation Account. Alternatively, even those liabilities not taken over by the company may be transferred to Realisation Account and paid off through it, so that the surplus or deficit on this account automatically gets transferred to it. The expenses or realisation, if any, shall be debited to Realisation Account. The balance in the Realisation A/c will be either profit or loss which shall be transferred to the capital accounts of the partners in their profit sharing ratios. The cash and shares received from the purchasing company will be divided among the partners as per agreement and books closed.

The purchase price may be given in the question as a lump sum. But very often the purchase price is not given but the student has to calculate it. There are two methods of calculating purchase consideration. (1) Net Assets Method; and (2) Net Payments Method. Under Net Assets Method, the agreed value of all the assets taken over by the company including goodwill will be totalled from which the total of all the liabilities taken over by the company shall be deducted and the resultant figure will be the amount of net assets taken over and hence, the purchase consideration. Under Net Payments Method, all the payments made by the purchasing company in the form of cash, shares and debentures shall be totalled and this will be purchase consideration. Sometimes, the purchasing company also pays the cost of winding up of the firm which should be added to the purchase consideration. Another important point to remember is the division of shares among the partners. The shares should be divided among the partners as per agreement given in the question. But if nothing is mentioned in the question in this respect, the shares may be divided in their profit sharing ratios or alternatively in the ratio of their final claim. If the shares are divided in profit sharing ratios, the balance claim will be paid in cash. But in case the shares are divided in the ratio of their final claim, cash will also be divided in the same ratio.

Illustration 5

A, B and C were carrying on business in partnership sharing profits and losses in the ratio of 5:3:2 respectively. On December 31, 1988 they agreed to sell their partnership business to a limited company. The Balance Sheet of the firm as on the date of sale was as follows:

Balance Sheet as on December 31, 1988

Liabilities	Rs.	Assets	Rs.
Bank Loan	10,000	Buildings	45,000
Creditors	20,000	Machinery	30,000
Reserve Fund	10,000	Furniture	8,000
A's Capital	50,000	Book Debts	40,000
B's Capital	38,000	Stock	32,000
C's Capital	32,000	Cash	5,000
	1,60,000		1,60,000

The Company took the following assets at the valuations shown against each asset:

Buildings	80,000
Machinery	25,000
Furniture	5,000
Book Debts	38,000
Stock	30,000
Goodwill	22,000

The Company also agreed to pay the creditors. The Company issued 12,000 shares of Rs. 10 each at par and the balance was paid in cash. The company also agreed to pay the cost of winding up which came to be Rs. 4,000.

Prepare ledger accounts to close the books of the firm.

Solution

Realisation Account

Dr.			Cr.
	Rs.		Rs.
To Building A/c	45,000	By Creditors	20,000
To Machinery A/c	30,000	By Purchasing Company's A/c (purchase consideration)	1,84,000
To Furniture A/c	8,000		
To Book Debts	40,000		
To Stock A/c	32,000		
To Cash A/c (expenses)	4,000		
To Capital A/c (Share of Profit) A 22,500, B 13,500, C 9,000	45,000		
	2,04,000		2,04,000

A's Capital Account

Dr.			Cr.
	Rs.		Rs.
To Shares in Purchasing Company A/c	60,000	By Balance b/d	50,000
		By Reserve Fund A/c	5,000
To Cash A/c	17,500	By Realisation A/c (profit)	22,500
	77,500		77,500

B's Capital Account

	Rs.		Rs.
To Shares in Purchasing Company A/c	36,000	By Balance b/d	38,000
To Cash A/c	18,500	By Reserve Fund A/c	3,000
		By Realisation A/c (profit)	13,500
	54,500		54,500

C's Capital Account

	Rs.		Rs.
To Shares in Purchasing Company A/c	24,000	By Balance b/d	32,000
To Cash A/c	19,000	By Reserve Fund A/c	2,000
		By Realisation A/c (profit)	9,000
	43,000		43,000

Purchasing Company's Account

	Rs.		Rs.
To Realisation A/c	1,84,000	By Shares in Purchasing Company A/c	1,20,000
		By Cash A/c	64,000
	1,84,000		1,84,000

Shares in Purchasing Company's Account

	Rs.		Rs.
To Purchasing Company A/c	1,20,000	By A's Capital A/c	60,000
		By B's Capital A/c	36,000
		By C's Capital A/c	24,000
	1,20,000		1,20,000

Cash Account

	Rs.		Rs.
To Balance b/d	5,000	By Realisation A/c (expenses)	4,000
To Purchasing Company's A/c	64,000	By Bank Loan A/c	10,000
		By A's Capital A/c	17,500
		By B's Capital A/c	18,500
		By C's Capital A/c	19,000
	69,000		69,000

Bank Loan Account

	Rs.		Rs.
To Cash A/c	10,000	By Balance b/d	10,000
	10,000		10,000

Reserve Fund Account

	Rs.		Rs.
To A's Capital A/c	5,000	By Balance b/d	10,000
To B's Capital A/c	3,000		
To C's Capital A/c	2,000		
	10,000		10,000

Note : Purchase consideration is settled by issuing 12,000 shares of cash fully paid at par totalling Rs. 1,20,000 and the balance paid in cash Rs. 64,000.

Working Notes

The purchase consideration will have to be calculated on the basis of net assets as follows :

Agreed value of assests taken over = 80,000 + 25,000 + 5,000 + 38,000 + 30,000 + 22,000 = Rs. 2,00,000.

Creditors taken over = Rs. 20,000.

Net Assets = Rs. 2,00,000 – Rs. 20,000 = Rs. 1,80,000.

The purchasing company has also agreed to pay the cost of winding up Rs. 4,000.

Hence, Purchase Consideration = Rs. 1,80,000 + Rs. 4,000 = Rs. 1,84,000.

Check Your Progress B

1 How do you settle the accounts of the partners in Garner vs Murray rule?

....

....

....

2 What are the different methods of calculating Purchase Consideration?

....

....

....

3 Fill in the blanks.

i) The deficiency of insolvent partner is borne by the solvent partners in the ratio of their ....

ii) The share of loss on realisation is brought in .... by the solvent partners as per Garner Vs. Murry rule.

iii) When all the partners are insolvent, the balance of Capital Accounts are transferred to .... Account.

iv) The purchase price at which the firm is sold is called ....

v) The realisation profit is divided amongst the partners in .... ratio.

10.6 LET US SUM UP

Dissolution means discontinuance. It can be dissolution of partnership or dissolution of a firm. Dissolution of partnership means discontinuing the partnership relationship whereas dissolution of a firm means discontinuing the trading activities of the firm. A firm can be dissolved with or without the order of the court. On dissolution books are to be closed and the accounts are to be settled.

All the assets are disposed off and the liabilities discharged. Liabilities are discharged in the following order :

i) Third parties
ii) Loan and advances from partners
iii) Capital of partners

Accounting treatment of dissolution can be divided into three categories :

i) Simple Dissolution
ii) Dissolution on account of insolvency of partners
iii) Dissolution on sale to a company

Under simple dissolution, all the marketable assets are closed by transfer to the debit side of an account called "Realisation Account". Similarly, all the outside liabilities are closed by transfer to the credit side of Realisation Account. Then, all the assets are disposed off and the liabilities are discharged. The balance of this account is profit or loss which is divided amongst the partners in their profit sharing ratio. Ultimately, the capital accounts of the partners are prepared and the balance is realised from or paid to the partners.

Under dissolution on account of insolvency of one partner may be insolvent or all partners may be insolvent. Realisation Account is prepared in the same manner as in case of simple dissolution. In case one partner is declared insolvent, his deficiency is borne by the remaining partners in their capital ratio keeping in view the nature of capital accounts. When all the partners are declared insolvent, firstly the secured creditors are paid and then the payment is made to unsecured creditors. Any

deficiency is transferred to Deficiency Account. Balances of Partner's Capital Account is also transferred to Deficiency Account.

In case of dissolution on sale to a company the first step is the calculation of Purchase Consideration. There are two methods for the calculation. i) Net Assets Method and ii) Net Payments Method. The purchase consideration thus calculated is shown on the credit side of Realisation Account. Purchase consideration may be received in cash or the shares of the purchasing company which are divided amongst the partners in profit sharing ratio or ratio of final claim. All the assets and liabilities taken over by the Purchasing Company are transferred to the Realisation Account. The assets and liabilities not taken over are disposed off and discharged respectively. Any loss or profit is transferred to the Realisation Account.

10.7 KEY WORDS

Deficiency of an Insolvent partner : Debit balance in the capital account of an insolvent partner who is not in a position to pay to the firm from his private estate.

Dissolution : Discontinuance or break-up.

Dissolution of firm : Break-up of the firm and ceasation of business activities and, consequently, closure of the books of accounts after settling all claims.

Dissolution of Partnership : Break-up of the partnership on admission, retirement, death or insolvency of a partner but the business continues as usual.

Garner vs. Murray Rule : The decision in Garner vs. Murray case according to which the deficiency of an insolvent partner is to be divided among the solvent partners in their capital ratio on the date of insolvency and the solvent partners are also required to bring their share of realisation loss in cash.

Insolvent Partner : A partner who is not in a position to pay off his debts in full.

Realisation Loss : Loss incurred on realising the assets of the firm and paying off the liabilities.

Winding-up Expenses : Expenses in connection with realisation of assets and paying off liabilities.

10.8 ANSWERS TO CHECK YOUR PROGRESS

A 1 i) Dissolution of partnership,
ii) Dissolution of partnership,
iii) Dissolution of firm,
iv) Dissolution of firm.
v) Dissolution of partnershiip.

2 i) True, ii) False, iii) True, iv) True v) False.

B 3 i) Capitals as on the date of dissolution
ii) Cash
iii) Deficiency
iv) Purchase consideration
v) Profit-sharing

10.9 TERMINAL QUESTIONS/EXERCISES

Questions

1) How would you distinguish between dissolution of partnership and dissolution of firm?
2) State legal provisions for adjusting losses and distributing assets on the dissolution of partnership where no agreement to the contrary exists.
3) Differentiate between fixed and fluctuating capitals.

Exercise

1) Atul, Bimal and Charu were partners sharing profits in the ratio of 2:2:1 respectively. Their Balance Sheet on December 31, 1988 is as follows :

Balance Sheet as on December 31, 1988

Liabilities		Rs.	Assets	Rs.
Creditors		20,000	Cash	5,000
Reserve Fund		12,000	Debtors	22,000
Capital Accounts :			Stock	15,000
Atul	40,000		Furniture	6,000
Bimal	20,000		Machinery	40,000
Charu	5,000	65,000	Goodwill	9,000
		97,000		97,000

They decided to dissolve the firm. The assets realised as under :

	Rs.
Debtors	16,000
Stock	10,000
Furniture	2,000
Machinery	18,000
Goodwill	nil

Creditors were paid off at a discount of 2%. Bimal was entrusted with the task of realising assets and paying of liabilities for which he was to be credited with a sum of Rs. 1,600. The actual winding up expenses were Rs. 1,200 which were paid by the firm. There was an unrecorded assets in the books which was taken over by Bimal at an agreed price of Rs. 3,400. Repairs to machinery Rs. 800 were still outstanding and were not recorded in books.
Draw up necessary account to close the books of the firm.

(**Answer :** Realisation Loss : Rs. 40,600, Atul receives Rs. 28,600. Bimal receives Rs. 5,560, Charu brings Rs. 720)

2) A, B and C were partners in a firm. On December 31, 1988 their capital accounts were A – Rs. 40,000; B – Rs. 20,000 and C – Rs. 10,000. The Profit and Loss Account on that date showed a debit balance of Rs. 30,000. The firm was dissolved on that date and the realisation loss came to be Rs. 36,000. C was insolvent and was unable to bring anything from his private estate.

Calculate the amount of deficiency of the insolvent partner C to be borne by the solvent partners A and B under the following situations :

a) If the capital accounts are kept on fixed basis
b) If the capital accounts are kept on fluctuating basis.

(**Answer :** Fixed basis : A – Rs. 8,000 and B – Rs. 4,000;
Fluctuating basis : A – Rs. 9,000 and B – Rs. 3,000)

3) X, Y and Z were partners in a firm. On December 31, 1987 their capital accounts were :

X	(credit balance)	Rs. 40,000	
Y	(credit balance)	Rs. 10,000	
Z	(debit balance)	Rs. 4,000	(Overdrawn)

Creditors amounted to Rs. 28,000 were paid in full. There was no other liability. There was no cash balance either. The assets realised Rs. 45,000 in all. Realisation expenses amounted to Rs. 1,000. Z was insolvent and only Rs. 2,000 could be recovered from his private estate.

Prepare necessary accounts to close the books of the firm.

(**Answer :** Realisation loss : Rs. 30,000; Z's deficiency borne by X – Rs. 9,600 and by Y – Rs. 2,400; X receives Rs. 20,400 while Y has to bring Rs. 2,400)

4) A, B and C were partners in a firm sharing profits and losses in the ratio of 5:3:2 respectively. On December 31, 1988 they decided to dissolve the firm when their Balance Sheet was as under :

Balance Sheet as on December 31, 1988

Liabilities	Rs.	Assets	Rs.
Creditors	24,000	Cash	2,000
B's Loan	10,000	Debtors	26,000
Capitals : A	24,000	Stock	22,000
B	16,000	Machinery	20,000
C	8,000	Investments	4,000
Current Accounts : A	10,000	Furniture	6,000
B	6,000	Current A/c : C	6,000
		Buildings	12,000
	98,000		98,000

A took over Buildings for Rs. 18,000 and B took over investments for Rs. 3,600. Debtors, Stock and Machinery realised Rs. 22,000, Rs. 16,000 and Rs. 8,000 respectively. Furniture was sold for Rs. 4,000. The creditors were paid off at a discount of 1½%. There was a contingent liability for a bill receivable for Rs. 2,400 discounted which was dishonoured by the drawee and it is estimated that nothing will be recovered. Rs. 400 written off previously as bad debt were recovered. Expenses of winding up were Rs. 800.

There was an unrecorded asset which ultimately realised Rs. 360 when sold in the market.

A bill for repairs of machinery amounting to Rs. 520 was still not paid and was also not recorded in books.

All the partners were declared insolvent.

Prepare necessary accounts to close the books of the firm.

(**Answer :** Realisation loss : Rs. 21,000; Insolvent Parnter C's deficiency borne by A – Rs. 1,200 and by B – Rs. 800; A receives Rs. 4,300 and B receives Rs. 11,300 excluding loan amount.)

5) A and B are partners in a firm sharing profits and losses in the ratio of 3:2 respectively. Their Balance Sheet as on December 31, 1988 was as follows.

Balance Sheet as on December 31, 1988

Liabilities	Rs.	Assets		Rs.
Creditors	18,000	Cash in hand		4,000
Reserve Fund	12,000	Debtors	24,000	
		Less : Prov.		
Capital A/cs A	40,000	for Bad Debts	2,000	22,000
B	30,000	Stock		20,000
Current A/cs A	14,000	Furniture		6,000
B	12,000	Machinery		28,000
		Buildings		42,000
		Goodwill		4,000
	1,26,000			1,26,000

The partners have decided to convert their business into a limited company as from January 1, 1989. For this purpose, a new company is formed which will take

over the business of the partnership firm. Current assets are taken over at book values and other assets at the values given below :

Name of the asset	Agreed Value
Furniture	4,000
Machinery	20,000
Buildings	80,000
Goodwill	40,000

The company has agreed to issue equity shares of the face value of Rs. 10 each as fully paid at par for the purchase consideration as agreed above.

Calculate purchase consideration and prepare necessary ledger accounts to close the books of the firm.

(**Answer** : Purchase Consideration : Rs. 1,72,000; Profit on Realisation : Rs. 64,000; A receives 9,960 shares and B receives 7,240 shares.

Note : These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University for assessment. These are for your practice only.

SOME USEFUL BOOKS

Maheshwari, S.N., 1998 : *Introduction to Accounting* Vikas Publishing House, New Delhi. (Chapters 1, 2, 3 & 4 Section III).

Gupta R.L. and M. Radhaswamy, 1998. *Advanced Accounting* Sultan Chand & Sons, New Delhi. (Chapters 24).

Shukla, M.C., Grewal, T.S. & S.C. Gupta, 1998 : *Advanced Accounts* S. Chand & Co. Ltd., New Delhi. (Chapter 9 & 10).

Monga J.R., Ahuja G.C. & Ashok Sehgal, 1998 : *Advanced Accounting* National Publishing House, New Delhi.

Notes

UNIT 11 GENERAL INTRODUCTION

Structure

11.0 Objectives
11.1 Introduction.
11.2 Meaning of Company
  11.2.1 Special Features of a Company
  11.2.2 Kinds of Companies
11.3 Distinction between a Company and a Partnership
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11.0 OBJECTIVES

After studying this unit you should be able to:

- explain the meaning of company as a form of organisation
- appreciate the distinction between partnership andcompany
- describe different types of companies
- explain important steps involved in the formation of a company
- describe the procedure for allotment of shares
- describe various books that are required to be maintained by companies
- distinguish between different kinds of shares and share capital
- describe various terms of issue of shares.

11.1 INTRODUCTION

In the present day business world, company form of organisation occupies a pivotal place. Major portion of manufacturing common consumer items like soaps, matches, biscuits, etc. to major industrial goods like coal, steel, computers, etc. is carried out by companies. You might come across various companies, like TISCO, SAIL, Hindustan Lever, ONGC, NTPC, BHEL, HMT, etc. Perhaps, you would have been curious to know how a company like Hindustan Lever Ltd. is distinct from a grocery stores located in your locality from the view point of organisational set up or legal status.

This unit explains in detail the basic aspects related to company form of organisation and discusses the steps involved in the formation of a company and allotment of shares.

11.2 MEANING OF COMPANY

In India, the history of company as a distinct form of organisation began with the enactment of the Joint Stock Companies Act, 1913. In India, some companies came into existence by a special act of parliament, for example, Reserve Bank of India, State Bank of India. Such type of companies are called statutory companies and not govemed by Companies Act. Presently, from formation to winding up of majority of companies, all aspects are governed by the Companies Act, 1956. Here we will deal with those companies only which are registered under Companies Ltd. According to Section 3(1) (i) of the Companies Act, a company means "A Company formed and registered under this Act or an existing

Company". An existing Company means, "A company formed and registered under any of the previous Companies Laws".

The definition given in the Companies Act is not exhaustive. A more comprehensive definition of a company would be : **a company may be viewed as an association of persons who contribute money or money's worth to a common stock and use it for a common purpose. It is a creation of law. It** is **also called an artificial person. A company has a capital divisible into transferable shares, having a corporate legal entity and a common seal.** Though a company is a creation of the members of such a company, it is distinct and sepai-ate from its members.

11.2.1 Special Features of a Company

If we analyse the definition of the term 'company' and look into the statutory provisfons under the Companies Act, we notice the following special features:

a) **Voluntary association:** Persons who would like to form a company come together **voluntarily** for carrying out a business.

b) **Separate legal entity:** A company has a **separate legal entity.** It means that the existence of the company is independent and separate from its members. Accordingly, a company can hold, purchase, and sell properties, it can open a bank account in its own name, and it cnn enter into a contract with others including its own shareholders.

c) **Limited liability:** In fact, this is the main feature of a company. A company may be limited by shares or limited by guarantee. In a company limited by shares, the liability of a member is limited to the unpaid amount of the shares held by him. In other words no member is bound to contribute any thing more than the nominal value of the shares held by him. For example, if the face value of a share in a company is Rs. 100 and a member has paid Rs. 60 per share. He is liable to contribute only Rs. 40 on the share (the difference between par value and amount actually paid).

   In a company limited by guarantee the liability of members is limited to such an amount as tlie members may undertake to contribute to the assets of the company in the case of winding up of the company.

d) **Perpetual succession:** A company is an artificial person created by law. It never dies. A company continues to exist irrespective of changes in membership of the company. The death or insolvency of individual members does not in any case affect the corporate existence of the company.

e) **Common seal:** As you know that a company is an artificial person it cannot sign its name and enter into a contract by itself. So it works with the help of a seal. A common seal is used as a substitute for its signature. Any document not having the common seal of a company is not authentive and is not binding on the company.

f) **Transferability of shares:** The **shares** of a company are freely transferable. A member can sell and buy shares in the open market. This facility providesliquidity for the investment of member of a company. This right to transfer share is an absolute right and cannot be taken away by a provision in the articles of the company. But the articles of a company can prescribe the manner in which the transfer of shares will be made.

g) **Separate property:** A company being a legal person distinct from its members. It is the owner of its assets and bound by its liabilities. It is, therefore, capable of owing, enjoying and disposing of its property in its own name. Although the capital and assets of a company are contributed by its shareholders but they are not the joint owners of its assets. So we can say that the property of the company is not the property of the shareholders, but it is the property of the company.

h) **Capacity to** sue **and be sued:** Since a company enjoys the status of an artificial person, it can sue and be sued in its own name.

11.2.2 Kinds of Companies

On the basis of liability of shareholders or members companies can be divided into three categories:

a) **Companies limited by shares:** In this case, the liability of members is limited to the

amount, if any, unpaid on the shares. The liability can be enforced during the existence on the company as well as during the winding up. If the shares are fully paid, the liability of the members holding such shares is nil.

b) **Companies limited by guarantee:** In this case, the liability of members is limited to the amount which they undertake to contribute in the event of winding up of the company. Thus, the liability shall arise only in the event of winding up.

c) **Unlimited companies:** In this case, the liability of its members is not limited at all. They have to contribute the necessary amount in order to pay off company's debts and liabilities. Such companies are not found in practice.

On the basis of number of members, a company can be divided into two categories: (a) a private company, and (b) a public company.

a) **Private Company:** The Companies Act defines a private company as a company which by its articles:
   i) restricts the right to transfer its shares, if any;
   ii) limits the number of its members to fifty (excluding its employees) ; and
   iii) prohibits any invitation to the public to subscribe for any shares in, or debentures of, the company.

   A private limited company must use the words "Private Limited" as the last words to its name.

b) **Public Company:** A public company means a company which is not a private company.

11.3 DISTINCTION BETWEEN A COMPANY AND A PARTNERSHIP

Main points of difference between a company and a partnership are as follows:

S. No.	Basis of Comparison	Company	Partnership
1	Formation	Comes into existence after registration under Companies Act, 1956	Created by agreement between partners. Registration is not compulsory under Pafinership Act
2	Regulating Act	Regulated by Companies Act, 1956	Regulated by Panriership Act, 1932
3	Legal Status	Independent legal status	No independent legal status
4	Membership	Minimum 2 and Maximum 50 in case of Private Limited Company and minimum 7 and no maximum limit in Public Limited Company	Minimum is 2, maximum in banking business 10 and 20 in others
5	Owner's liability	Limited	Unlimited
6	Basis of profit-sharing	Shared by owners in the proportion of shares held	Shared by partners as per agreement
7	Business stability	Perpetual succession, death, insolvency of members do not effect the life	Depends upon the life, insolvency, retirement of partners
8	Transferability of interest	Shares are freely transferable	Not transferable without the consent of the other partners.
9	Audit of accounts	Compulsory	Not required
10	Authority of members	Shareholder is not an agent of the company and has no power to bind the company by his acts	Partner is an agent of the firm and binds the firm and other partners by his acts done in

			the course of business
11	Restriction on powers	Restriction in the Articles of Association are effective as against the public as they are public document	Restrictions on the powers of a particular partner contained in the partnership agreement are of no avail against the outsiders
12	Winding up	Under the Act	At will
13	Insolvency	Winding up of an insolvent company does not make its members insolvent	Insolvency of partnerhsip fim means insolvency of all the partners

11.4 FORMATION OF A COMPANY

In simple terms, the person who gets an idea to form a company is known as promoter. In many cases, there could be more than one promoter. The promoters initiate the following steps for forming a company.

11.4.1 Piling of Basic Documents

The application for registration of a company should be submitted to the Registrar of the state in which the business office of the company is situated. The application shall be accompanied by the following documents.

1 Memorandum of Association.

2 Articles of Association.

3 Agreement, if any, for appointment of a managing director or manager.

4 A statement of the nominal capital where it exceeds one crore of rupees alongwith a certificate from the Controller of Capital Issues permitting the issue of capital.

5 A notice of address of the registered office of the company.

6 A list of directors and their consent to act as such duly signed by each.

7 An undertaking in writing signed by each director to take and pay for his qualification shares.

8 A statutory declaration that all the requirements of the Act have been complied with. Such declaration should be signed by an Advocate of Supreme Court or of a High Court, or by a practicing Chartered Accountant or by a person named as Secretary, director or manager of the company.

The Memorandum of Association and Articles of Association must bear the prescribed stamp duty. The promoters have also to arrange payment of registration fees and filing fees at the time of submitting the application.

11.4.2 Certificate of Incorporation

The Registrar of Companies issues a certificate of Incorporation on payment of the prescribed fees by the company concerned provided he is satisfied that all the conditions laid down under the Companies Act have been fulfilled. Companies are classified into two categories viz., Private Limited and Public Limited. In case of Private Limited Compani'es, the following restrictions apply:

a) Minimum and maximum membership are 2 and 50 respectively

b) Public participation by issuing a prospectus is prohibited.

c) Shares are not freely transferable.

As it is evident from the above para, private limited companies are not entitled to issue a prospectus. Hence, private limited company can commence business immediately after

receiving a Certificate of Incorporation, whereas a public limited company has to wait till the Registrar grants to it the certificate to commence business.

Public Ltd. Companies have to issue either a prospectus or a statement in lien of a prospectus for the purpose of inviting the public to subscribe to the shares or debentures of the company. Prospectus may be considered as the basis for contract between the company and the person who buys the shares on the strength of the prospectus.

Check Your Progress A

1 Fill in the blanks.

i) Companies in India are regulated by ....

ii) A company may be viewed as ....

iii) One who contribute money or money's worth to a .... and uses it for a .... is called a company,

iv) Continuous existznce of a company irrespective of change in membership of the same is known as..................

v) Maximum membership of a private limited company is.................

vi) Certificate of incorporation is issued by ....

11.5 ALLOTMENT OF SHARES

Allotment of the shares is the acceptance by the company of the offer to purchase shares. Allotment of shares may be considered as an appropriation by the directors of shares to a particular person. It is an appropriation out of the previously un-appropriated capital of a company. A valid allotment creates a binding contract between the company and the shareholder.

Requisites of a Valid Allotment

In brief, the following are considered as essential requisites of a valid allotment:

a) The directors of a company arc required to specify the minimum subscription amount in the prospectus. Law has very clearly laid down the principle that shares cannot be allotted unless the minimum subscription has been subscribed.

b) The entire application money, not being less than 5% of nominal capital must have been received in cash.

c) In case minimum subscripion has not been received within 120 days of the date of issue of the prospectus, the money received from the public must be repaid without any interest. However, interest @ 6% per annum becomes payable by the directors of the company if the money is not paid back to the applicants within 130 days of the issue. Interest is not payable if it could be proved that default was not due to any negligence or misconduct on their part.

d) In cases where prospectus is not issued by a company, a statement in lieu of prospectus has to be filed with the Registrar atleast three days before any allotment is made, otherwise allotment of shares shall be irregular.

e) Allotment of shares cannot be initiated until the beginning of the 5th day from the date of issue of prospectus. If the directors desire to extend the period, they can do so provided that they have clearly stated this in the prospectus.

f) With effect from 15th June, 1988, every company intending to offer shares or debentures to the public for subscription by way of prospectus, should get their shares listed on one or more recognised stock exchanges. When the fact of application made to stock exchanges is disclosed in the prospectus, if permission is not granted by any stock exchange within ten weeks from the closure of subscription list, the allotment becomes void.

g) Allotment of shares must be made by a resolution of the board of directors.

h) Allotment of shares must be communicated within a reasonable time to the concerned applicant.

i) Allotment must be absolute. It should have been made in accordance with the terms and conditions stated in the application.

11.6 STATUTORY BOOKS

The provisions of Section 209 of the Companies Act specifically requires a few books to be kept at its registered office for maintaining a record of different aspects of the company's activities. These are known as Statutory Books. Some of the important ones are the following:

i) Register of investments of the company not held in its own name.

ii) Register of mortgages and charges

iii) Register of members and index

iv) Register of debenture holders and index

v) Register of foreign members and debenture holders and their duplicates

vi) Minute Books

vii) Register of contracts, companies and firms in which directors are interested

viii) Register of directors

ix) Register of director's shareholding

x) Register of loans, guarantees etc. to or investment in shares and debentures of companies in the same group

11.7 BOOKS OF ACCOUNT

Section 209 (1) of the Companies Act requires a company to maintain at its registered office proper books account in respect of the following items:

a) all sums of money received and spent by the company and the matters in respect of which the receipts and expenditure take place;

b) all sales and purchase of goods by the company;

c) all assets and liabilities of the company; and .

d) utilisation of material or labour or other items of cost as may be prescribed by the Central Government in case the company belongs to a class of companies engaged in manufacturing, processing and mining.

Sub-section (2) of Section 209 provides that a company which has a branch office, whether in or outside India, is deemed to have complied with the conditions stated above in respect of branch offices as well if the following conditions are satisfied.

i) proper books of account relating to the transactions effected at the branch offices are kept at these offices

ii) proper summarised returns for periods of not more than 3 months each are sent by branch offices to the company at its registred office or any other place that may be approved by the Board of Directors of the company.

Sub-section (3) of Section 209 provides a very important yardstick that should be kept in view by all those connected with accounting for a company. It has been amended by the Companies (Amendment) Act, 1988 with effect from 15th June, 1988. Consequent upon the above amendment it stipulates that proper books of account are deemed to have been kept up by a company only if the following conditions are satisfied.

i) the Profit and Loss Account and the Balance Sheet of the company should give a true and fair view of financial position of the company or the branchoffice.

ii) books of accounts maintained both at the head office and branch offices; as the case may be, must explain their transactions, and

iii) such books of account must have been kept on accrual basis and have been prepared according to the double entry system of accounting.

The books of account and other books and papers shall be opened to inspection by any director during business hours.

11.8 SHARE CAPITAL

A company should have capital in order to finance its activities. Share capital means the capital raised by a company by the issue of shares. In case of a company the term 'capital' and 'share capital' means the same thing. A company limited by shares should state its amount of share capital in its memorandum of association. An unlimited company and a company limited by guarantee may not have any share capital.

11.8.1 Categories of Share Capital

From accounting point of view, there are different types of share capital. These are as follows:

1 **Authorised or Registered or Nominal Capital:** The Authorised, or Nominal or Registered capital is the amount of share capital which a company is authorised to issue by its memorandum of association. This is the maximum amount which a company is authorised to raise by the issue of shares. The amount of authorised capital of a company depends upon its business requirements. It can be increased or decreased by adopting the prescribed legal procedure.

2 **Issued Capital:** It is that part of nominal capital which is actually offered to the public for subscription. Normally a company does not issue its entire nominal capital at a time. In this case the issued capital is less than the nominal capital. The difference between issued capital and nominal capital is called "unissued capital". Issued capital can never be more than the nominal capital. It can at the most be equal to the nominal capital.

3 **Subscribed Capital:** It is that portion of the issued capital which has been actually subscribed by the public. Where the shares issued for subscription are wholly. subscribed, issued capital would be the same as the subscribed capital.

4 **Called up Capital:** It is that part of nominal value of issued capital which has been called up on the shares. For example, a share may be of Rs. 10 each. But at the time of issue the company is collecting Rs. 5 per share only. The remaining Rs 5 may be collected later on as and when needed. So called up will be Rs. 5 per share.

5 **Paid-up Capital:** It refers to that amount of the called-up capital which has actually been received from shareholders. It is quite possible that some shareholders may not pay the full amount called up. The amount not paid in respect of the allotment and calls made is known as calls in arrears. Thus the paid-up capital is equal to the called up capital minus calls in arrears. In case there are no calls in arrears, the paid-up capital will be same as called up capital.

6 **Uncalled Capital:** This is the remaining part of the issued capital which has not yet been called. The company may call this amount, any times, when it needs further capital, according to the provisions of the Articles.

Example: Haryana Pesticide Ltd. Karnal had registered its capital as Rs. 20,00,000 divided into 2,00,000 shares of Rs. 10 each. On April 1, 1991. it invited applications for 1,00,000 shares of Rs. 10 each payable Rs. 2 on application. Rs. 3 on allotment. The remaining Rs. 5 per share is to be collected later in two calls The company finalised the allotment on June 10, 1991, or 1,00,000 shares and rejected application for 50,000 shares. The applicants for 1,000 shares did not pay their call money. The Authorised capital, Issued capital, Subscribed capital Called up capital, Paid-up capital and Uncalled capital of the company shall be

Authorised or Registered or Nominal Capital	
2,00,000 shares of Rs. 10 each	20,00,000
Issued Capital	
1,00,000 shares of Rs 10 each	10,00,000
Subscribed Capital	
1,50,000 shares of Rs 10 each	15,00,000

Called up Capital	
1,00,000 shares of Rs. 10 each, Rs 5 per share called	5,00,000
Paid-up Capital = 5,00,000 - (1,000 x 5)	
= 5,00,000 - 5,000	4,95,000
Uncalled Capital	
1,00,000 shares of Rs 5 each	5,00,000

7 Reserve Capital: A Company may, by a special resolution, resolve that part of the uncalled capital shall be called only in the event of winding up of the company. This amount is called 'reserve capital' of the company. It cannot be turned into ordinary capital without the leave of the Court and cannot be charged by the company. It is available only for the creditors on winding up of the company.

The reserve capital is different from 'Capital reserve' which is created out of the capital profits of a company.

11.8.2 Classes of Shares

Total capital of the company is divided into units of small denomination. One of the units into which the capital of the company is divided is called a share. A company can raise the required capital through one class of shares or different classes of shares. As per Section 85 of the Companies Act, a public limited company can issue the following two kinds of shares: (a) Preference Shares, and (b) Equity Shares.

Preference Shares

Preference shares are shares which satisfy the following two conditions:

i) With reference to dividends, they carry a preferential right over equity shares. The preferential right of dividend as ascertained at a fixed amount per share or an amount calculated at a fixed rate.

ii) With reference to capital, on the occasion of winding up of a company or repayment of capital, they carry a preferential right to be paid back. In other words, the amount paid upon preference shares must be paid back before any thing is paid to the equity shareholders. This preference, unless there is an agreement to the contrary, exists only up to the amount paid up, or deemed to have been paid up, on the shares.

The preference shares can be of various types. These are discussed below,

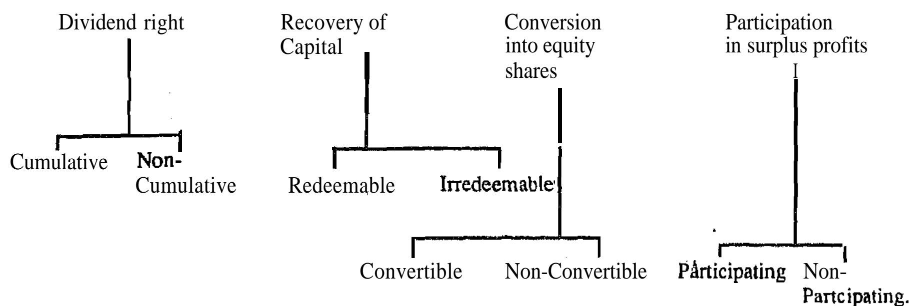
i) Cumulative and Non-Cumulative Preference Shares: Preference shares are issued with two distinctive features in respect of right to dividend based on which they are classified as cumulative and non-cumulative preference shares. In case of cumulative preference shares, if there are no sufficient profits in a year for payment of dividends at the stipulated rate, the arrears of dividend are to be carried forward and paid out of the profits of subsequent years. In case of non-cumulative preference shares, right of recovery of arrears of dividend does not exist.

ii) Redeemable and Irredeemable Preference Shares: Preference shares are also classified, based on redemption, into redeemable preference shares and irredeemable preference shares. In case of redeemable preference shares, at the end of specified period, the company pays back the amount of capital to the holders thereof. Sometimes, redemptipn may be made at premium. For example, a preference share of Rs. 100 of PQR Co. Ltd. is redeemable at a premium of Rs. 5 after ten years. After the lapse of 10 years, on redemption the holder will get Rs. 105 on each preference shares, In case of irredeemable preference shares, the amount of capital is not paid back before the winding up. According to the new Section SO-A of the Companies (Amendment) Act, 1988 all the existing irredeemable preference shares shall be compulsorily redeemed by the company within five years from the commencement of this Amendment Act.

iii) Participating and Non-participating Preference Shares: Generally, preference shares are non-participatory i.e., they are not entitled to have 'any share in surplus. But, some companies issue participating preference shares. A participating preference share is a share which carries the right of sharing profits left after paying preference and equity dividends at a fixed rate. Non-participating preference shares are those which are not entitled to share in the 'surplus profit'. They are entitled to a fixed rate of dividend.

iv) **Convertible and Non-convertible Preference Shares: A** convertible preference share is one which can be converted into equity shares. When a share cannot be converted into equity shares, then it is said to be a non-convertible preference share. From the above discussion, it is clear that there are different classes of preference shares based on different factors. Figure 11.1 will help you in recapitulation.

Figure 11.1: Types of Preference Shares



Equity Shares

They are entitled to dividend after payment of dividend on preference shares. The rate of dividend is decided by the Board of Directors and approved hy the shareholders at the Annual General Body Meeting. Shares normally enjoy right over surplus profits which are counted by a company in the form of reserves and surplus.

On the basis o- lasses of shares, company has two types of capital : (i) preference share capital and (ii) equity share capital.

Preference Share Capital: Reference share capital means, in case of a company limited by share, that part of share oapital which carries a preferential right as to the payment of the dividend at a fixed rate and also a preferential right to the repayment of the paid-up capital.

Equity Share Capital: Equity share capital means all share capital which is not preference hare capital.

Check Your Progress B

1 State below any two clauses forming part of Memorandum of Association.

....

....

2 State the essential requisites of a valid allotment.

....

....

....

3 State below four kinds of books which are considered as Statutory Books.

....

....

....

....

....

4. What do you understand by redeemable preference shares?

....

....

....

....

....

11.9 LET US SUM UP

Company form of organisation has its beginning in England. A 'company' map be viewed as an association of persons who contribute money or money's worth to a common stock and use it for a common purpose.

Special features of companv form of organisation are (i) voluntary association (ii) separate legal entity (iii) limited liability (iv) perpetual succession (v) transferability of shares (vi) common seal.

Memorandum of Association and Articles of Association are the basic documents governing the setting up and administration of a company. Public limited companies are required to issue either a prospectus or a statement in lieu of prospectus for the purpose of inviting the public to subscribe for the shares/debentures. Equity shares and preference shares are the two classes of shares. Preference shares enjoy preference over equity shares with reference to dividends in normal course, and capital in case of winding up or capital reduction.

11.10 KEY WORDS

Articles of Association: These are the rules, regulations and by-laws for the internal management of the company.

Authorised **Capital:** Total amount of capital authorised by the Government which can be raised by a company.

Company: An association of persons who contribute money or money's worth to a common stock and use it for a common purpose.

Issued Capital: The amount of capital that is issued by a company to public.

Memorandum of Association: The most important document of a company which has to be filed with the Registrar of Companies at the time of incorporation of a company.

Perpetual Succession: A company continues to exist irrespective of changes in membership of the company

Preference Shares: Shares which carry preferencial rights with reference to dividend in normal course and to capital, at the time of winding up or reduction of capital:

Share: A unit into which the capital of the company is divided, is called a share.

Subscribed **Capital:** Total amount of capital subscribed by public.

11.11 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

A i) Indian Companies Act, 1956 ii) Association of persons iii) Common Stock, Common purpose iv) Perpetual succession v) 50 vi) Registrar of Companies.

B 1 a) Object Clause
b) Name Clause

2 a) Minimum subscription amount must have been received.
b) Entire application money not being less than 5% of nominal capital must have been received in cash.

3 a) Register of mortgages and charges.
b) Register of members and index.
c) Minute Books
d) Register of Directors.

4 Redeemable preference shares are those where the company pays back the amount of capital to the holders thereof.

11.12 TERMINAL QUESTIONS

1. Briefly discuss special features of a company.
2. Distinguish between partnership and company forms of organisations.
3. Discuss basic steps involved in formation of a company.
4. Specify various statutory books to be maintained by companies.
5. What are the different classes of preference shares? Explain.

Note: These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University for assessment. These are for your practice only.

UNIT 12 RECORD OF SHARE CAPITAL TRANSACTIONS

Structure

12.0 Objectives
12.1 Introduction
12.2 Procedure and Accounting Entries for Issue of Shares
 12.2.1 Procedure for Issue of Shares
 12.2.2 Basic Accounting Entries for Issue of Shares
12.3 Issue of Shares for Consideration other than Cash
12.4 Issue of Shares for Cash
 12.4.1 Issue of Shares for Cash at Par
 12.4.2 Issue of Shares for Cash at a Premium
 12.4.3 Issue of Shares for Cash at a Discount
12.5 Oversubscription of Shares
 12.5.1 Full Allotment
 12.5.2 Pro-rata Allotment
12.6 Calls in Arrears
12.7 Calls in Advance
12.8 Forfeiture of Shares
12.9 Reissue of Forfeited Shares
12.10 Issue and Redemption of Preference Shares
 12.10.1 Issue of Preference Shares
 12.10.2 Redemption of Preference Shares
12.11 Let Us Sum Up
12.12 Key Words
12.13 Answers to Check Your Progress
12.14 Terminal Questions/Exercises

12.0 OBJECTIVES

After studying this unit you should be able to:

- make accounting records for issue of shares (equity and preference) for cash as well as for consideration other than cash
- explain the legal provisions for the issue of shares at a premium and the accounting entries involved
- explain the legal requirements for the issue of shares at a discount and the accounting entries involved
- describe the implications and make necessary entries in case the issue is oversubscribed
- make necessary entries for calls in arrears and calls in advance
- describe the procedure, implications and accounting treatment of forfeiture and reissue of shares
- explain the rules for redemption of preference shares and make necessary journal entries.

12.1 INTRODUCTION

Every business concern requires sufficient financial resources for the successful operation of its business activities. A sole trader introduces capital out of his own pocket. Similarly, the partners of a firm bring their shares of capital into the firm. But, in the case of corporate body, the capital is raised through the issue of shares. A private limited company cannot issue shares to the public, But a public limited company collects funds by issuing shares to the public. For this purpose every public limited company after incorporation, issues prospectus inviting the public to subscribe to its shares. Every person desiring to subscribe to the shares will have to apply on the company's application form. On receipt of such applications, the directors allot shares to the various applicants and thus money is raised.

In Unit 11 you learnt about the various types of shares and the rules relating to their allotment, In this unit we shall discuss the process of issuing the shares and the accounting entries involved, We shall also discuss the rules for redemption of preference shares and the accounting thereof.

12.2 PROCEDURE AND ACCOUNTING ENTRIES FOR ISSUE OF SHARES

You know that a company mostly issues two types of sh'ares: (i) equity shares, and (ii) preference shares. In each case, the company can either collect full amount of the issue price of the share along with application itself or collect it in easy instalments over a period of time. **In practice, the companies usually collect the amount in instalments as it ensures better response from the investors.**

The first instalment is collected along with application and is thus known as 'application money'. The remaining instalments are termed as first call, second call and so on. The word 'final' is suffixed to the last instalment. For example, a company issues equity shares of Rs. 10 each collecting Rs. 2 on application. Rs. 3 on allotment. Rs. 3 on first call and Rs. 2 on second call. The second call will be termed as 'second and final call'. If the company were to collect Rs. 5 on first call itself, the first call will be termed as 'first and final call'

12.2.1 *Procedure for Issue* of *Shares*

The procedure followed for the issue of the shares is as follows.

1 **Issue of Prospectus:** First of all, the company issues a prospectus which provides complete information about the company to the prospective investors. It also mentions the manner in which the amount on shares is to be collected.

2 **Receipt of Applications:** The company makes its application forms available to the public through its brokers and banks. Applications are received through a Scheduled bank for at least four days from the date of opening the subscription to the issue.

3 **Allotment of Shares:** After the closure of the subscription list, the shares have to be allotted within 120 days of the issue of prospectus provided 'minimum subscription' has been received. Minimum subscription is the amount which in the opinion of directors, must be raised to meet the basic needs of the business operations of the company. If the same is hot received, the company cannot proceed with the allotment of **shares and the application money must be refunded to the applicants within 130 days of the issue of the prospectus.**

If the minimum subscription has been received, the directors after completion of certain legal formalities, send the allotment letters to the successful subscribers. The letters of regret and the refund orders are sent to those to whom no allotment has been made.

12.2.2 *Basic Accounting Entries for Issue of* Shares

The procedure for accounting for the issue of both equity and preference shares is the same. However, the words 'equity share' or 'preference share' is prefixed to the instalments in order to differentiate between the two. The amount of money paid with various instalments represents thecontributions to share capital and should ultimately be credited to Share Capital Account. However, for the sake of convenience, individual accounts are opened for each instalment. All money received alongwith applications are deposited with a scheduled bank for which a' separate account has to be opened. In fact, all applications are received through banks which collect the money and credit it to the company's public issue account opened for the purpose. The company, in its books, passes the following entry for the application money received.

Bank A/c Dr,
  To Share Application A/c
(Application money for .... Shares @ Rs................. per share received)

The money received with applications represent contributions towards sliare capital. This will have to be transferred to the Share Capital Account. The next entry, therefore, will be as follows:

Share Application A/c Dr.
  To Share Capital A/c
(Application money on............... Shares at Rs......................per share allotted as per directors' resolution no.................. dated............. transferred to share capital)

After this, the sequence of entries will change. Allotment money on first and/or second call money will fall due for payment as soon as allotment is done or calls are made. Hence, the entry for the amount due will have to be made first and the entry for the actual cash received will be made later. Thus, the relevant entries will be as follows:

Share Allotment A/c Dr.
To Share Capital A/c
(Money due on allotment of ....shares @ Rs................per share as per Directors' Resolution no .... dated ....)

Bank A/c Dr.
To Share Allotment A/c
(Money received on .... shares allotted)

Share 1st Call A/c Dr.
To Share Capital A/c
(Money due on ....Shares @ Rs............. per share on 1st call made as per Directors' 'Resolution no.................dated ....)

Bank A/c Dr.
To Share 1st Call A/c
(Money received on .... Shares in respect of 1st call)

Share 2nd & Final Call' A/c Dr.
To Share Capital A/c
(Money due on .... shares @ Rs............... per share on 2nd & final call made as per Directors' Resolution no .... dated ....)

Bank A/c Dr.
To Share 2nd & Final Call A/c
(Money received on .... shares in respect of 2nd & final call)

It must be noted that the application money should be at least 5% of the face value of the share as per legal provisions. It is the minimum limit and the company is empowered to demand any amount between 5% and the full face value of the share. The calls are to be made as per the provisions of the Articles of Association and in the absence of such Articles the provisions of Table A will apply which are: (1) a period of one month must elapse before another call is mde; (2) the amount of the call should not exceed 25% of the face value of the share; (3) fourteen days' notice is given to the shareholders'to pay the amount; and (4) calls must be made on a uniform basis on all shares within the same class.

1.2.3 ISSUE OF SHARES FOR CONSIDERATION OTHER THAN CASH

A company can issue its shares for cash or for consideration other than cash such as against purchase of land and buildings, plant and machinery, etc. The purchase of an asset against the issue of shares comprises two distinct transactions: (1)the purchase of an asset (on credit), and (2) the issue of shares,
Hence two separate entries can be made as follows:

I Asset A/c Dr,
To Vendors
(Asset purchased from the Vendors)

2 Vendors Dr.
To Share Capital A/c
(Allotment of............ shares of Rs ....each fully paid to Vendors)

Sometimes, a company rewards its promoters for their services by issuing shares to them without any payment. Such an issue of shares also comes under the issue of shares for

consideration other than cash. The full amount of the shares issued to the promoters for their services is regarded as the cost of goodwill and the entry shall be just the same as the purchase of any other asset. Some conservative accountants prefer to consider the issue of such shares as 'incorporation costs' arid so debit this amount to Incorporation Costs Account. The entry thus will be:

Goodwill/Incorporation Costs A/c Dr.
To Share Capital A/c
(Issue of .... Shares of Rs ....
each as fully paid to the Promoters
as per Directors' Resolution no. ....
dated ....)

12.4 ISSUE OF SHARES FOR CASH

The issue of shares for cash can he at par or at a premium or at a discount. Let us now discuss these three situations in detail.

12.4.1 Issue of Shares for Cash at Par

When the shares are issued for cash at par, the applicants will be required to pay the face value of the share in one lump sum or in instalments as explained earlier in this unit under Section 12.2. The basic entries have also been discussed there. The same are being explained here with the help of Illustration 1.

Illustration 1
Alok Ltd., offered for subscription to the public 10,000 equity shares of Rs. 10 each payable Ks. 5 on application; Rs. 3 on allotment and the balance on 1st and final call. Applications were received for 10,000 equity shares. The directors made the allotment to the applicants in full. All amounts due on allotment and first and final call were duly received,

Give journal entries in the books of the company.

Solution

Journal Entries in the Books of Alok Lid,

		Rs.	Rs.
Bank A/c To Equity Share Application A/c (Application money on 10,000 shares @ Rs. 5 per share received)	Dr.	50,000	50,000
Equity Shore Application A/c To Equity Share Capital A/c (Application money on 10,000 Equity shares allotted as per Directors'. Resolution No .... dated .... transferred to Share Capital A/c)	Dr.	50,000	50,000
Equity Share Allotment A/c To Equity Share Capital A/c (Money due on allotment of 10,000 equity shares @ Rs. 3 per share as per Directors' Resolution No .... dated ....)	Dr.	30,000	30,000
Bank A/c To Equity Share Allotment A/c (Money received on 10,000 shares @ Rs. 3 per share on allotment)	Dr.	30,000	30,000
Equity Share 1st & Final %ell A/c To Equity Share Capital A/c (Money due on 10,000 shares @ Rs. 2 per share on 1st & final call as per Directors' Resolution No .... dated ....)	Dr.	20,000	20,000
Bank A/c To Equity Share 1st & Final Call A/c (Money received on 10,000 equity shares @ Rs. 2 per share in respect of 1st and final call)	Dr.	20,000	20,000

After the shares have been allotted and the money received, the Balance Sheet of the company will show the Share Capital Account on the liability side and Bank Account on the asset side. It should be noted that the total of both sides of the Balance Sheet at any point of time will be equal. Let us prepare the Balance Sheet of Alok Ltd. as per the solution of Illustration 1.

Balance Sheet of Alok Ltd.

	Rs.		Rs.
Share Capital	10,000	Bank	10,000

12.4.2 Issue of Shares for Cash at a Premium

When a company offers to issue shares for more than the face value of shares, the excess amount is known as premium. A company can issue shares at premium subject to the sanction by the Controller of Capital Issues. The amount of premium is decided by the Controller of Capital Issues after taking into consideration the market value of the shares, the accumulated profits, and the net worth of the company etc. The premium can be any amount approved by the Controller. The amount of premium received is credited to a separate account known as 'Share Premium Account'. It is shown on the liability side of the Balance Sheet as a separate item.

According to the Section 78 of the Companies Act, the amount of share premium received can be utilised for the following purposes.

i) issuing fully paid bonus shares to the members;

ii) writing off the preliminary expenses of the company;

iii) writing off the expenses of, or the commission pair or discount allowed on, any issue of shares or debentures of the company; or

iv) providing for the premium payable on the redemption of any redeemable preference shares or any debentures of the company.

If the company wants to utilise the premium for any other purpose, it will have to obtain the consent of the Court. Thus it should be clear that there are no restrictions on the issue of shares at premium or the quantum of premium subject to the approval of the Controller of Capital Issues but there are restrictions on the utilisation of share premium.

The amount of premium may be demanded with application, allotment or any one of the calls or may be spread over any two or more of the above instalments. Thus the amount demanded and received will include share premium in addition to contributions towards share capital and the two should be bifurcated and credited to their respective accounts. The bifurcation should always be done at the time of making transfer entry and not at the time of making entry for cash receipt. Look at the Illustration 2 and see how the Journal entries are passed in case the shares are issued at premium.

Illusfration 2

Ajanta Ltd. offered for public subscription 10,000 equity shares of Rs. 10 each at a premium of Rs. 2 per share payable Rs. 4 on application, Rs. 4 (including premium) on allotment and the balance in two equal instalrnents of Rs. 2 each. The issue was fully subscribed, All the money was duly received.

Give journal entries to record the above transactions and also show the Balance Sheet.

Solution

Journal Entries in the Books of Ajanta Ltd.

		Rs.	Rs.
Bank A/c To Equity Share Application A/c (Application money for 10,000 shares @Rs. 4 per share received.).	Dr.	40,000	40,000
Equity Share Application A/c To Equity Share Capital A/c (Application money @ Rs. 4 per share on 10,000 shares allotted as per Directors' Resolution no........... dated .... transferred)	Dr.	40,000	40,000

		Dr. (Rs.)	Cr. (Rs.)
Equity Share Allotment A/c To Equity Share Capital A/c To Share Premium A/c (Amount due on 10,000 shares on allotment Rs. 2 per share on capital account and Rs. 2 per share on premium account as per Directors Resolution No............dated........	Dr.	40,000	 20,000 20,000
Bank A/c To Equity Share Allotment-Nc (Money received on 10,000 shares @ Rs. 4 per share on allotment)	Dr.	40,000	 40,000
Equity Share 1st Call A/c To Equity Share Capital A/c (Money due on. 10,000 shares @ Rs. 2 per share on 1st call made as per Directors' Resolution No............, dated..........)	Dr.	20,000	 20,000
Bank A/c To Equity Share 1st Call A/c (Money received on 10,000 shares @ Rs. 2 per share on 1st call)	Dr.	20,000	 20,000
Equity Share 2nd & Final Call A/c To Equity Share Capital A/c (Money due on 10,000 Shares @ Rs. 2 per share on 2nd & final call made as per Directors' Resolution no............. dated..........)		20,000	 20,000
Bank A/c To Equity Share 2nd & Final Call A/c (Money received on 10,000 shares @ Rs. 2 per share on 2nd & final call)	Dr.	20,000	 20,000

Balance Sheet of Ajanta Ltd.

Liabilities	Rs.	Assets	Rs.
Share Capital Share Premium	1,00,000 20,000	Bank	1,20,000
	1,20,000		1,20,000

12.4.3 Issue of Shares for Cash at a Discount

When a company issues shares at a price less than the face value of the share, it is known as 'issue of shares at a discount'. Shares are ordinarily not issued at a discount by companies because the discount allowed is a loss to the company which no company would like to incur in normal circumstances. A company can issue shares at a discount subject to the conditions laid down in Section 79 of the Companies Act.

The conditions laid down in Section 79 of the Companies Act are as follows:

i) The issue of shares at a discount is authorised by a resolurion passed by the company in general meeting and the sanction by the Company Law Board.

ii) The resolution specifies the maximum rate of discount at which the shares are to be issued. (The rate of discount must not exceed 10% unless the Company Law Board is of the opinion that a higher percentage of discount may be allowed in the special circumstances of the case.)

iii) Not less than one year has, at the date of issue, elapsed since the date on which the company was entitled to commence business.

iv) The shares are of a class which has already been issued.

v) The shares are issued within two months of the date on which the issue is sanctioned by the Company Law Board or within such extended time as the Board may allow.

Thus, it is clear that a newly formed company cannot issue shares at a discount nor a new class of shares can be issued at a discount. The loss on such issue is to be debited to 'Discount on Issue of Shares Account' which will be written off out of the profits in subsequent years or may be set off against share premium or other capital profits. The

atnount of discount will be shown on the assets side of Balance Sheet till it is completely written off.

The entry for discount should be passed at the time of allotment alongwith the transfer entry for allotment because the loss on account of discount is incurred as soon as the shares have been allotted. Illustration 3 will help you to understand the issue of shares at a discount.

Illustration 3

Ankur Ltd. invited applications from the public for subscribing for 10,000 equity shares of Rs. 10 each at a discount of 10 per cent payable. Rs. 4 on application, Rs. 3 on allotment and the balance on 1st and final call. The issue was fully subscribed and all the money was duly received.

Give journal entries for the above in the books of the company and show the Balance Sheet.

Solution

Journal Entries in the Books of Ankur Ltd.

		Rs.	Rs.
Bank A/c To Equity Share Application A/c (Application money received on 10,000 shares @ Rs. 4 per share).	Dr.	40,000	40,000
Equity Shore Application A/c To Equity Share Capital A/c (Application money @ Rs. 4 per share on 10,000 shares allotted as per Directors' Resolution No.........dated........... transferred)	Dr.	40,000	40,000
Equity Share Allotment A/c Discount on Issue of Shares A/c To Equity Share Capital A/c (Amount due @ Rs. 3 per share on allotment and Re. 1 per share discount on 10,000 shares allotted).	Dr. Dr.	30,000 10,000	40,000
Bank A/c To Equity Share Allotment A/c (Allotment money received on 10,000 shares)	Dr.	30,000	30,000
Equity Share 1st & Final Call A/c To Equity Share Capital A/c (Amount due @ Rs. 2 per share on 10,000 shares on 1st & final call)	Dr.	20,000	20,000
Bank A/c To Equity Share 1st & Final Call A/c (Amount received on 10,000 shares @ Rs. 2 per shore on 1st & final call)	Dr.	20,000	20,000

Balance Sheet of Ankur Ltd.

Liabilities	Rs.	Assets	Rs.
Share Capital	1,00,000	Bank Discount on Issue of Shares	90,000 10,000
	1,00,000		1,00,000

12.5 OVERSUBSCRIPTION OF SHARES

When the number of shares applied for is more than the number of shares the company has offered to the public, it is known as 'Oversubscription'. Even in the case of oversubscription, the company cannot issue and allot more than the number of shares it had offered to the public for subscription. But, in the recent years there has been a trend amongst the companies entering the capital market to clearly mention their intention to retain a certain percentage (not more than 15 per cent) of the number of shares offered out of over-subscription in which case the number of shares to be issued by the company will be the number offered plus the retention percentage. In the case of oversubscription there may be

three possibilities: (1) some applicants may be allotted the full number of shares they have applied for which is known as 'full allotment', (2) some applicants may not be allotted any shares in which case their applications are treated as 'rejected', and (3) some applicants may be allotted less number of shares than they have applied for. In the first case, there is no excess money received. In the second case of rejection, the whole amount will have to be refunded to the applicants. In the third case of partial allotment, the excess amount received on application may be utilised towards the money due on allotment by transferring the excess amount from the Share Application Account to the Share Allotment Account. Let us discuss these possibilities in detail.

12.5.1 Full Allotment

As already mentioned, whenever there is oversubscription one of the alternatives available to the director is to allot full shares to a few applicants and reject the remaining applications., In this case, the application money for the rejected applications will be returned. Hence, there will be no application money left for adjustment ngainst the allotment money due. Illustration 4 will help you to understand it better.

Illustration 4

Ajay Ltd. offered for public subscription 10,000 equity shares of Rs. 10 each at par payable Rs. 3 on application; Rs. 4 on allotment and the balance of Rs. 3 on 1st and final call. The company received applications for 15,000 shares. The directors allotted to the applicants of 10,000 shares in full; Applications of 5,000 shares were rejected, and application money refunded. All the money was duly received.

Give journal entries in the books of the company and the Balance Sheet of the company.

Solution

Journal of Ajay Ltd.

		Rs.	Rs.
Bank A/c To Equity Share Application A/c (Application money on 15,000 shares @ Rs. 3 per share received)	Dr.	45,000	45,000
Equity Share Application A/c To Equity Share Capital A/c To Bank A/c (Application money on 10,000 shares allotted transferred to share capital on 5,000 shares returned)	Dr.	45,000	30,000 15,000
Equity Share Allotment A/c To Equity Share Capital A/c (Allotment money due on 10,000 shares @ Rs. 4 per share as per Directors Resolution no ....dated ....)	Dr.	40,000	40,000
Bank A/c To Equity Share Allotment A/c (Allotment money received)	Dr.	40,000	40,000
Equity Share 1st & Final Call A/c To Equity Share Capital A/c (Amount due on 1st & final call Directors' Resolution no........ dated ....)	Dr.	30,000	30,000
Bank A/c To Equity Share 1st & Final Call A/c (Amount received on 1st and final call)	Dr.	30,000	30,000

Balance Sheet of Ajay Ltd.

	Rs.		Rs.
Share Capital	1,00,000	Bank	1,00,000

12.5.2 Pro-rata Allotment

When a company allot shares rateably to all the applicants it is known as **pro-rata allotment.** Alternatively, it can reject certain applications and refund the application money; allot full shares to some applicants and make pro-rata allotment to others. All these will be done by draw of lots and not arbitrarily. Now the main problem is what to do with the excess amount received on application in case of pro-rata allotment. It would be quite foolish to refund the excess money first and then ask the allottees to pay the allotment money. Hence, usually the excess amount received on application is transferred and adjusted towards money-due on allotment.

Now in case ofgro-rata allotment, the amount of money received on application from an applicant is bifurcated into two parts: (1) amount adjusted on the shares allotted in respect of application money, and (2) excess amount transferred and adjusted towards the share allotment money due being the application money received on shares not allotted. Look at Illustration 5 and study how money received on application is adjusted when pro-rat. allotment is made.

Illustration 5

Arctica Ltd. invited applications from the public for the issue of 20,000 equity shares of Rs. 10 each at a premium of 30% payable Rs. 3 on application; Rs. 6 on allotment including premium and the balance in two calls of an equal amount. Applications for 25,000 equity shares were received. The directors allotted 20,000 shares to all the applicants pro-rata adjusting the excess application money towards allotment. All money due onallotment and calls were received.

'Give journal entries to record the above transactions in the books of the company. Also show the Balance Sheet.

Solution

Journal Entries in the Books of Arctica Ltd.

		Rs.	Rs.
Bank A/c To Equity Share Application A/c (Application money on 25,000 shares @ Rs. 3 each received)	Dr.	75,000	75,000
Equity Share Application A/c To Equity Share Capital A/c To Equity Share Allotment A/c (Applicetion money @ Rs. 3 per share on 20,000 shares allotted transferred to Share Capital A/c and the excess amount adjusted towards allotment)	Dr.	75,000	60,000 15,000
Equity Share Allotment A/c To Equity Share Capital A/c To Share Premium A/c (Amount due on allotment of 20,000 shares @ Rs. 6 per share as per Directors' Resolution No.............. dated ....)	Dr.	1,20,000	60,000 60,000
Bank A/c To Equity Share Allotment A/c (Allotment money received on 20,000 shares after adjusting excess money received on application)	Dr.	1,05,000	1,05,000
Equity Share 1st Call A/c To Equity Share Capital A/c (Amount due on 1st call @ Rs. 2 per share on 20,000 shares as per Directors' Resolution no .... dated ....)	Dr.	40,000	40,000
Bank A/c To Equity Share 1st Call A/c (Amount received on 1st call)	Dr.	40,000	40,000
Equity Share 2nd & Final Call A/c To Equity Share Capital A/c (Amount due on 2nd & final call @ Rs. 2 per share on 20,000 shares as per Directors' Resolution no .... dated ....)	Dr.	40,000	40,000

		Rs.	Rs.
Bank A/c To Equity Share 2nd & Final Call A/c (Amount received on 2nd & final call)	Dr.	40,000	40,000

Balance Sheet of Arctica Ltd.

	Rs.		Rs.
Share Capital	2,00,000	Bank	2,60,000
Share Premium	60,000		
	2,60,000		2,60,000

Working Notes: Table for calculation of excess money received on application and adjusted towards allotment money due.

Application Received (1)	Money received on Application (2)	Applications Invited (3)	Money on applications to be transferred to share capital (4)	Excess money to be adjusted towards allotment money (5)	Allotment money due (6)	Allotment money to be received (7)
	(1) × 3		(3) × 3	(2) – (4)	(3) × 6	(6) – (5)
25,000	Rs. 75,000	Rs. 20,000	Rs. 60,000	Rs. 15,000	Rs. 1,20,000	Rs. 1,05,000

Illustration 6

Autolitc Ltd. invited applications from the public for the issue of 10,000 equity shares of Rs. 10 each at a premium of Rs. 3 per share payable Rs. 5 on application, Rs. 6 on allotment (including premium) and the balance on 1st and final call. The company received applications for 15,000 shares. The directors allotted to the applicants of 8,000 shares in full; to the applicants of 4,000 shares 2,000 shares adjusting the excess application inoney towards allotment and the remaining applications were rejected and the money refunded. All monies were duly received.

Give journal entries for the above transactions in the books of the company.

Solution

Journal Entries in the books of Autolite Ltd.

		Rs.	Rs.
Bank A/c To Equity Share Application A/c (Application money @ Rs. 5 per share on 15,000 shares received.)	Dr.	75,000	75,000
Equity Share Application A/c To Equity Share Capital A/c To Equity Share Allotment A/c To Bank A/c (Application money on 10,000 shares allotted transferred to share capital on 2,000 shares transferred to share allotment and on 3,000 shares refunded as per Director's Resolution No .... dated ....)	Dr.	75,000	50,000 10,000 15,000
Equity Share Allotment A/c To Equity Share Capital A/c To Share Premium A/c (Amount due on allotment of 10,000 shares @ Rs. 6 per share as per Directors' Resolution no .... dated ....)	Dr. Dr.	60,000	30,000 30,000
Bank A/c To Equity Share Allotment A/c (Allotment money after adjusting excess money, received)	Dr.	50,000	50,000

Equity Share 1st & Final Cali A/c To Equity Share Capital A/c (Amount due on 1st & final call on 10.000 shares @ Rs. 2 per share as per Directors' Resolution no .... dated ....)	Dr.	20,000	20,000
Bank A/c To Equity Share 1st & Final Call A/c (First and final call on 10,000 shares received @ Rs. 2 per share)	Dr.	20,000	20,000

Balance **Sheet of Autolite Ltd.**

Liabilities	Rs.	Assets	Rs.
Share Capital	1,00,000	Bank	1,30,000
Share Premium	30,000		
	1,30,000		1,30,000

Working Note: Table for calculation of excess money received on application and adjusted towards allotment money due.

(1) Application received	(2) Money received on application Rs.	(3) Shares issued	(4) Application money to he transferred to share capital Rs.	(5) Excess money to be adjusted towards allotment Rs.	(6) Money to be returned Rs.
	(1) x 5		(3) x 5	(2) - (4)	
8,000	40,000	8.000	40,000	-	-
4,000	20.000	2.000	10.000	10,000	-
3,000	15,000	-	-	-	15,000
	75,000		50,000	10,000	15.000

12.6 CALLS IN ARREARS

When any allottee fails to pay the amount due on allotment or any of the calls in respect of shares allotted to him, such amount is known as 'Calls in Arrears'. When full amount is not received, the Share Allotment and Calls accounts will show some balance representing the unpaid amounts on allotment and calls.

The unpaid amounts on allotment and calls may be kept in their respective accounts as balance not received or may be transferred to a new account opened for the purpose known as 'Calls in Arrears Account'. The Calls in Arrears Account shows a debit balance which is shown as a deduction from the paid up share capital on liabilities side of the Balance Sheet. The company can charge interest on calls in arrears for the period for which such amount remains unpaid at the rate given in the Articles of Association of the company. In case the company does not the Articles of Association of its own, Table 'A' of the Companies Act will apply. In that case, the rate of interest shall not exceed 5 per cent per annum. On receipl of the call together with interest, the interest portion shall be credited to Interest Account while call money shall be credited to the respective call account or to call in Arrears Account as the case may be. Look at Illustration 7 and see how calls in arrears are treated in the books of the company.

illustration 7

Singh & Co, Ltd. invited application for 2,500 equity shares of Rs. 100 each, payable Rs. 25 on application, Rs. 50 on allotment and the balance on 1st & Final call. Applications were received for 3,000 shares and pro-rata allotment was made to all. All the money was duly received except 1st call, on 250 shares. Record the above transactions in the books of the company and show its Balance Sheet.

Solution

Journal Entries in the Books of Singh & Co. Ltd.

		Rs.	Rs.
Bank A/c To Equity Share Application A/c (Application money received on 3,000 shares)	Dr.	75,000	75,000
Equity Share Application A/c To Equity Share Capital A/c To Equity Share Allotment A/c (Application money on 2,500 shares transferred to Equity Share Capital Account and excess money adjusted towards allotment)	Dr.	75,000	62,500 12,500
Equity Share Allotment A/c To Equity Share Capital A/c (Allotment money due)	Dr.	1,25,000	1,25,000
Bank A/c To Equity Share Allotment A/c (Being allotment money received after adjusting the excess money received on application).	Dr.	1,12,500	1,12,500
Equity Share 1st & Final Call A/c To Equity Share Capital A/c (1st & final call due).	Dr.	62,500	62,500
Bank A/c Call in Arrears A/c To Equity Share 1st & Final Call A/c (1st & final call received on 2,250 shares).	Dr. Dr.	56,250 6,250	62,500

Balance Sheet of Singh & Co. Ltd

		Rs.		Rs.
Share Capital	2,50,000		Bank	2,43,750
Less Calls in Arrears	6,250	2,43,750		
		2,43,750		2,43,750

Note: Entry for the receipt of 1st & final call can also be passed as follows:

Bank A/c	Dr.	56,250	
To Equity Share 1st & Final Call A/c			56,250

In this case the Call Account is not closed.

Working Notes

(1)

Application received	Application money received	Application invited	Application money to be transferred to share capital	Excess money on share application	Amount due on allotment	Amount to be received on allotment
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(1) x 25		(3) × 25	(2) − (4)	(3) x 50	(6) − (5)
3.000	75,000	2,500	62,500	12,500	1,25,000	1,12,500

(2) Calls in Arrears = Number of shares on which 1st call is not received x 1st call money
$= 250 \times 25 =$ Rs. 6,250.

11.7 CALLS IN ADVANCE

When a company accepts money paid by some allottee in respect of calls not yet due, such amount is known as 'Calls in Advance'. It may also happen in case of partial allotment of shares when the full amount of application money paid by an applicant is not adjusted to allotment and if the company decides to retain such excess amount, it is called 'Calls in Advance'. It is a liability of the company and should be transferred to 'Calls in Advance' Account. It will be adjusted when the respective call is made.

But till then it will be shown as liability in the Balance Sheet. The company must pay interest on the amount of calls in advance at a rate stipulated in its Articles of Association. In the absence of any Articles of Association of its own, the company will have to follow the piovision of Table 'A' of the Companies Act according to which the rate of interest to be allowed on calls in advance should not exceed 6 per cent per annum. Look iit Illustration 8 and see how calls in advance are treated in the books of the company.

Illustration 8

A limited company invited applications for 10,000 equity shares of Rs. 25 each payable Rs. 10 on application, Rs. 5 on allotment and the balance on 1st & final call. Ram, a holder of 100 shares did not pay the 1st call. Another person Shyam, a holder of 150 shares, made the full payment at the time of application. Record the above transactions in the books of the company.

Solution

Journal

		Rs.	Rs.
Bank A/c To Equity Share Application A/c To Calls in Advance A/c (Application money received on 10,000 shares and full payment received on 150 shares.)	Dr.	1,02,250	 1,00,000 2,250
Equity Share Application A/c To Equity Share Capital A/c (Application money transferred to share capital.)	Dr.	1,00,000	 1,00,000
Equity Shnrc Allotment A/c To Equity Share Capital A/c (Allotment money on 10,000 shares due)	Dr.	50,000	 50,000
Bank A/c Calls in Advance A/c To Equity Share Allotment A/c (Allotment money on 9,850 shares received and allotment money on 150 shares received in advance adjusted.)	Dr. Dr.	49,250 750	 50,000
Equity Share 1st & Final A/c To Equity Share Capital A/c (1st & final call due)	Dr.	1,00,000	 1,00,000
Bank A/c Calls in Advance A/c Calls in Arrears A/c To Equity Share 1st & Final Call A/c (1st call on 9,750 shares received, on 150 shares received in advance adjusted and on 100 not received.)	Dr. Dr Dr.	97,500 1,500 1.000	 1,00,000

Balance Sheet

Liabilities	Rs.	Assets	Rs.
Equity Share Capital 2,50,000 Less: Call in Arrears 1,000	2,49,000	Bunk	2,49,000
	2,49,000		2,49,000

Note: All the entries of bank transactions can be directly passed in the Cash Book

Check Your Prqgress **A**

I State whether the following statements are True or False.

a) A public limited company can issue its equity shares only against cash.

b) A company can charge any amount of premium with the permission of Controller of Capital Issues.

c) Share premium can be utilised for writing off goodwill.

d) A public company can issue shares at a discount immediately after its incorporation.

e) Preliminary expenses can be written off against share premium.

f) A company can charge any rate of interest on calls in arrears if prescribed in its Articles of Association.

g) Discount on issue of shares cannot be written off against share premium.

h) A company can issue any class of shares at a discount after its incorporation.

2 Fill in the blanks.

a) Application money on shares to be issued by a company to the public must be at least........ per cent of the nominal value of the share.

b) Table 'A' provides that at least a period of .... must elapse before another call is made.

c) In the absence of its own Articles of Association a company can charge interest on calls in arrears at a rate not exceeding..... per cent per annum.

d) According to Table 'A' the amount of call should not exceed....... per cent of the face value of the share.

e) A company can pay interest on calls in advance at a rate not exceeding .... per cent per annum as per the provisions of Table 'A'.

f) ....can be utilised for issuing fully paid bonus shares.

3 Answer the following:

a) A company issued 10,000 equity shares of Rs. 10 each at par payable Rs. 3 on application; Rs. 3 on allotment; Rs. 2 on 1st call and Rs. 2 on 2nd and final call. The allotment money was payable on or before 1st May, 1988; first call money on or before 1st August, 1988 and the final call on or before 1st October, 1988. A to whom 500 shares were allotted did not pay the allotment and the call moneys; B, an allottee of 300 shares did not pay the two calls and C to whom 400 shares were allotted, did not pay the final call. Calculate the amount of calls in arrears in respect of allotment, 1st call and final call and also the total amount of calls in arrears.

b) In question (a) above, if B pays the total amount of calls in arrears together with interest on 1st January, 1989, calculate the amount of interest as per the provisions of Table 'A'.

c) Alpine Ltd. issued 20.000 equity shares of Rs. 10 each for cash at par payable Rs. 3 on application; Rs. 2 on allotment and the balance in two equal calls. The allotment money was payable on or before 31st March, 1989; the first call money on or before 30th June, 1989; and the final call money on or before 31st August. 1989. X to whom 600 shares were allotted, paid the entire remaining face value of shares allotted to him on allotment and the company accepted the payment.

Calculate the amount of interest payable by the company.

12.8 FORFEITURE OF SHARES

In case a shareholder does not pay the calls made on him, the directors can forfeit the shares held by him, remove his name from the Register of Members and treat the amount already paid by him forfeited to the company, if authorised by its Articles of Association. Table A authorises the directors to forfeit shares for non-payment of calls made. But they have to strictly follow the procedure laid down in this regard. The directors must give clear 14 days' notice to the defaulting shareholder asking him to pay the amount due from him in respect of the calls not paid by him, together with interest at the applicable rate on or before a certain date expressly mentioned in the notice. The notice must also state that if the shareholder fails to pay the amount by the appointed date, the shares will be forfeited. If payment is not received by the company up to the appointed date, the directors can pass a resolution in their meeting forfeiting the shares held by the defaulting shareholder and remove his name from the Register of Members.

When shares are forfeited, we shall debit the share Capital Account with the amount called (including application money) up to the date of forfeiture in respect of shares forfeited and

credit (i) Share Forfeiture Account with the amount already received, and (ii) the respective unpaid calls' accounts (or Calls in Arrears Account if unpaid calls have already ken transferred to Calls in Arrears Account) in respect of such shares. It should be noted that the Share Capital Account should be debited only with the amount called in respect of'such shares and not with their total nominal value unless full amount per share has been called. Thus, the journal entry for forfeiture of shares will be

Share Capital A/c	Dr.		
To Share Forfeiture A/c			
To Calls in Arrears A/c			

Let us take an example. 500 snares of Rs. 10 each are to be forfeited for non-payment of the first call and the amounts payable were: Rs. 3 on application, Rs. 3 on allotment, Rs. 2 on 1st call and the balance on 2nd & final call. The entry for forfeiture of these shares will he as follows:

Share Capital A/c	Dr.	4,000	
To Share Forfeiture A/c			3,000
To Calls in Arrears A/c			1,000

When shares were issued at a premium: Where the forfeited share had originally been issued at a premium, the question arises as to whether, while passing the journal entry for forfeiture of shares, the Premium on Shares Account should also be debited. This depends upon whether the amount of premium on forfeited shares has already been received or not. **If** the premium on such share has-already been received, the premium on Shares Account **will** not be debited because law does not permit the premium on shares once collected to be refunded or cancelled. (As per Section 75 it can be utilised only for the specified purposes.) But, if the premium on shares has not been received because it formed part of the instalment which remained unpaid, then premium on Share Account will also be debited. Thus, the journal entry for forfeiture of such shares will be

Share Capital A/c	Dr.		
Share Premium A/c	Dr.		
To Calls in Arrears A/c			

It should be noted that the premium is usually collected alongwith allotment money. Hence, where premium on shares is involved, the premium on Shares Account will be debited when there is default in respect of the allotment money. Let us take an example to clarify this point: Atul Ltd. issued equity shares of Rs. 10 each at a premium of Rs. **3** per share payable Rs. 3 on application, Rs. 5 on allotment (including premium) and the balance in two calls of equal amount. A who was allotted 400 shares, did not pay the allotment money and the first call. His shares were forfeited after the first call. B who was allotted 200 shares, did not pay the two calls. **His** shares were forfeited after the 2nd & final call. The journal entries for the forfeiture of shares allotted to A and B will be as follows.

Share Capital A/c	Dr.	3,000	
Share Premium A/c	Dr.	1,200	
To Share Allotment A/c			2,000
To Share Ist Call A/c			1,000
To Share Forfeiture A/c			1,200
(400 shares of A forfeited as per Directors' Resolution no............. dated................)			
Share Capital A/c	Dr.	2,000	
To Share Ist Call A/c			500
To Share 2nd Call A/c			500
To Share Forfeiture A/c			1,000
(200 shares of B forfeited as per Directors! Resolution no .... dated ....)			

When the shares were issued at a discount: Where the forfeited shares had been originally issued at a discount, the Discount on Issue of Shares Account should also be credited while passing the journal entry for forfeiture of shares. In that case, the Share Forfeiture Account will simply show the actual cash rereived from the defaulting shareholders in respect of the

shares forfeited. Thus, the entry for forfeiture in case the shares had been issued at discount will be as follows.

Share Capital A/c	Dr.		
To Share Forfeiture A/c			
To Calls in Arrears A/c			
To Discount on Issue of Shares A/c			

Let us take an example and clarify this point. Auto Ltd. issued equity shares of Rs. 10 each to the public at a discount of 10% payable Rs. 3 on applications, Rs. 2 on allotment, Rs. 2 on 1st call and the balance on 2nd and final call. A who was allotted 400 shares, paid only the application money and B, who was allotted 200 shares, did not pay the two calls. A's shares were forfeited after the 1st call and B's shares were forfeited alter the 2nd and final call. The journal entries in the books of the company in respect of the forfeiture of shares will be:

Equity Share Capital A/c	Dr.	3,200	
To Equity Share Allotment A/c			800
To Equity Share 1st Call A/c			800
To Discount on Issue of Shares A/c			400
To Share forfeiture A/c			1,200
(400 shares of A forfeited after 1st call as per Directors' Resolution no ....dated ....)			
Equity Share Capital A/c	Dr.	2,000	
To Equity Share 1st Call A/c			400
To Equity Share 2nd & Final Call A/c			400
To Discount on Issue of Shares A/c			200
To Share Forfeiture A/c			1,000
(200 shares of B forfeited after 2nd call as per Directors' Resolution no. .... dated ....)			

In Illustration 9 we will see the entries which are passed from application stage up to the forfeiture stage.

Illustration 9

XYZ Ltd. issued 1,50,000 equity shares of Rs. 10 each at a premium of Rs. 2 per share payable Rs. 3 on application, Rs. 5 on allotment (including premium) and balance in two calls of equal amount.

Applications were received for 2,00,000 shares and pro-rata allotment was made to all the applicants. The excess application money was adjusted towards allotment, Mahesh who was allotted 400 shares failed to pay 1st and 2nd Call and his shares were forfeited after the second call. Pass the necessary journal entries in the books of XYZ Ltd. and also show the Balance Sheet.

Solution

Journal Entries in the books of XYZ Ltd.

		Rs.	Rs.
Bank A/c	Dr.	6,00,000	
To Equity Share Application A/c			6,00,000
(Being application money received on 2,00,000 shares)			
Equity Share Application A/c	Dr.	6,00,000	
To Equity Share Capital A/c			4,50,000
To Equity Share Allotment A/c			1,50,000
(Being Application money in respect of 1,50,000 shares transferred to Share Capital A/c and the remaining money adjusted towards allotment.)			
Equity Share Allotment A/c	Dr.	7,50,000	
To Equity Share Capital A/c			4,50,000
To Share Premium A/c			3,00,000
(Being allotment money due)			

Particulars		Dr. (Rs.)	Cr. (Rs.)
Bank A/c	Dr.	6,00,000	
To Equity Share Allotment A/c			6,00,000
(Being allotment money received after adjusting the excess money received with application)			
Equity Share 1st Call A/c	Dr.	3,00,000	
To Equity Share Capital A/c			3,00,000
(Being 1st call due)			
Bank A/c	Dr.	2,99,200	
To Equity Share 1st Call A/c			2,99,200
(Being 1st call received on 1,49,600 shares)			
Equity Share 2nd & Final Call A/c	Dr.	3,00,000	
To Equity Share Capital A/c			3,00,000
(Being 2nd call due)			
Bank A/c	Dr.	2,99,200	
To Equity Share 2nd & Final Call A/c			2,99,200
(Being 2nd call received on 1,49,600 shares)			
Equity Share Capital A/c	Dr.	4,000	
To Equity Share 1st Call A/c			800
To Equity Share 2nd & Final Call A/c			800
To Share Forfeiture A/c			2,400
(Being 400 shares forfeited)			

Balance Sheet

Liabilities	Rs.	Assets	Rs.
Share Capital	14,96,000	Bank	17,98,400
Share Premium	3,00,000		
Share Forfeiture	2,400		
	17,98,400		17,98,400

12.9 REISSUE OF FORFEITED SHARES

The directors can either cancel or reissue the forfeit sliares. In most cases, however, they decide to reissue these shares which may be at par, at a premium or at a discount.

The forfeited shares are usually reissued as fully paid and that too at a discount. In this connection it should be noted that the amount of discount allowed on reissue should not exceed the amount which bas already been received (the amount forfeited) in respect of these shares on their original issue and the same should be debited to the Share Forfeited Account. For example, 200 shares of Rs. 10 each were forfeited because the 1st and final call of Rs. 6 per share had not been received in respect of these shares. When these shares are reissued, the discount allowed to the new allottee should not exceed Rs. 4, the amount which had actually been received on their original allotment. Assuming these shares are reissued at Rs. 7 fully paid up, the journal entry will be as follows.

Bank A/c	Dr.	700 (cash)	
Share Forfeiture A/c	Dr.	300 (discount)	
To Share Capital A/c			1,000 (face value)
(200 forfeitures reissued at Rs. 7 fully paid)			

After the shares have been reissued, the balance of the Share Forfeiture Account (the difference between the amount forfeited and the amount of discount allowed on reissue) is treated as capital profit and therefore transferred to Capital Reserve Account. Thus, the following additional entry will also have to be passed at the time of the reissue of forfeited shares.

Share Forfeiture A/c	Dr.
To Capital Reserve A/c	
(Profit on forfeited shares reissued transferred to capital reserve)	

If, however, all the forfeited shares are not reissued **at** the **same time, fhe whole balance of the Share Forfeiture Account cannot be transferred to capital reserve**

because the capital profit arises only in respect of the shares reissued and not all forfeited shares. Hence it becomes necessary to first ascertain the amount forfeited on shares which have not been reissued. This amount will not be transferred to capital reserve. It will remain as a balance in Share Forfeiture Account to be utilised for allowing discount as and when such shares are reissued. You should, therefore, note that the amount to be transferred to capital reserve will have to be worked out carefully. This will be calculated by subtracting the amount of discount allowed on the reissue of shares from the amount forfeited on shares reissued. Look at Illustrations 10 and 11 and study how necessary journal entries are passed when forfeited shares are reissued.

Illustration 10

A who holds 100 shares of Rs. 10 each paid application money of Rs. 2 per share. The amount called on allotment was Rs. 3 per share. B who holds 150 shares of Rs. 10 each failed to pay 1st call of Rs. 3 each and 2nd and final call of Rs. 2 each.

All the above shares were forfeited after the second call and were subsequently reissued for Rs. 7 fully paid up. Pass the necessary journal entries.

Solution

Journal Entries in the books of........

		Rs.	Rs.
Share Capital A/c	Dr.	2,500	
To Sharp Forfeiture A/c			950
To Share Allotment A/c			300
To Share 1st Call A/c			750
To Share 2nd Call A/c			500
(100 shares of A and 150 shares of B forfeited)			
Bank A/c	Dr.	1,750	
Share Forfeiture A/c		750	
To Share Capital A/c			2,500
(250 forfeited shares reissued)			
Share Forfeiture A/c	Dr.	200	
To Capital Reserve A/c			200
(Balance of Share Forfeiture A/c transferred)			

Illustration 11

Ajanta Ltd. issued a prospectus inviting applications for 40,000 shares of Rs. 20 each payable Rs. 4 on application, Rs. 6 on allotment, Rs. 6 on first call and Rs. 4 on second and final call.

Applications were received for 60,000 shares and allotment was made pro-rata to the applicants of 48,000 shares. Money overpaid on application was utilised towards sums due on allotment.

Mohan to whom 800 shares were allotted failed to pay the allotment. On his subsequent failure to pay the 1st call his shares were forfeited. Sohan, a holder of 600 shares, failed to pay the two calls. So, his shares were forfeited after the second call.

Of the shares forfeited, 1,000 shares were reissued for Rs. 18 fully paid up, the whole of Mohan's share being included. Pass journal entries in the books of the Company and also show the Balance Sheet.

Solution

Journal Entries in the books of Ajanta Ltd.

			Rs.	Rs:
1	Bank A/c	Dr.	2,40,000	
	To Share Application A/c			2,40,000
	(Being application money received)			
	Share Application A/c	Dr.	2,40,000	
	To Share Capital A/c			1,60,000
	To Share Allotment A/c			32,000
	To Bank A/c			48,000
	(Being application money for 40,000 shares transferred to share capital, for 12,000 shares returned and for 8,000 shares adjusted towards allotment.)			

			Dr. (Rs.)	Cr. (Rs.)
3	Share Allotment A/c To Share Capital A/c (Being allotment money due)	Dr.	2,40,000	2,40,000
4	Bank A/c To Share Allotment A/c (Being application money received on 39,200 shares after adjusting the money received with application)	Dr.	2,03,840	2,03,840
5	Share First Call A/c To Share Capital A/c (Being first call due)	Dr.	2,40,000	2,40,000
6	Bank A/c To Share First Call A/c (Being first call received on 38,600 shares).	Dr.	2,31,600	2,31,600
7	Share Capital A/c To Share Allotment A/c To Share First Call A/c To Share Forfeiture A/c (Being Mohan's shares forfeited.)	Dr.	12,800	 4,160 4,800 3,840
8	Share 2nd & Final Call A/c To Share Capital A/c (Being 2nd and final call due on 39,200 shares.)	Dr.	1,56,800	1,56,800
9	Bank A/c To Share 2nd & Final Call A/c	Dr.	1,54,400	1,54,400
10	Share Capital A/c To Share 1st Call A/c To Share 2nd & Final Call A/c To Share Forfeiture A/c (Being 600 shares forfeited).	Dr.	12,000	 3,600 2,400 6,000
11	Bank A/c Share Forfeiture A/c To Share Capital A/c (Being 1,000 share reissued @ Rs. 18 per share)	Dr. Dr.	18,000 2,000	 20,000
12	Share Forreiture A/c To Capital Reserve A/c (Being balance in Share Forfeiture A/c for Mohan's shares and 200 of Sohan's shares transferred to Capital Reserve)	Dr.	3,840	3,840

Working Notes

1 Amounts received on applications to be adjusted and refunded are worked out as follows.

Applications received for shares	Money on application recd.	Applications invited for shares	Money to be transferred to share capital	Excess money to be adjusted towards allotment	Money refunded
	Rs.		Rs.	Rs.	Rs.
48,000	1,92,000	40,000	1,60,000	32,000	0.........
12,000	48,000	0	0	0	48,000

2 **Calculation** of allotment **money not received**

For 48,000 applications 48,000 shares were issued (for every **6** applied 5 shares were issued). Mohan was allotted 800 shares. He would have applied for **800** x 6/5 =960 shares.

			Rs.
Cash received from Mohan on application	= **960 x** 4	=	**3,840**
Application money on **800** shares	= 800 x **4**	=	**3,200**
Excess money to be adjusted towards allotment		=	**640**
Allotment due on 800 shares	= **800 x 6**	=	**4,800**

Allotment money already received with application	640
Allotment money not received	4,160

3 Second call is made on 39,200 shares because 800 shares have already been forfeited.

3 Money transferred to Capital Reserve: 1,000 share reissued include 800 of Mohan and 200 of Sohan.

a) Share Forfeiture Account for 800 shares of Mohan is Rs. 3,840 (see above)

Amount of discount allowed on reissue is (800 × 2)	Rs 1,600
Amount transferred to Capital Reserve	Rs. 2,240

b) Share Forfeiture A/c for 600 shares of Sohan is Rs. 6,000. But only 200 shales have been reissued out of 600. Therefore forfeiture amount for 200 shares will be

$\frac{200}{600} \times 6{,}000$	=	Rs. 2,000
Amount adjusted for reissue is (200 × 3)	–	Rs. 400
Amount transferred to Capital Reserve	=	Rs. 1,600

Total amount transferred to Capital Reserve is:
2,240 + 1,600 = Rs. 3,840.
The balance of Share Forfeiture Account in respect of 400 shares not reissued 400/600 × 6,000 = Rs. 4,000 which will remain in Share Forfeiture Account, and will be shown on the liabilities side of Balance Sheet.

It should be noted that in actual practice all transactions relating to the issue, forfeiture and reissue are not recorded through journal entries. The **transactions which involve payments are recorded in the Cash Book and the journal entries are made only for the remaining transactions.** For example, in case of Illustration 11, the entries no. 1,4 and 6 will be fully recorded in Cash Book, entries no. 2 and 10 will be partly recorded in Cash Rook and partly in Journal, and entries no. 3, 5, 7, 8 and 9 will be recorded fully in Journal. Thus, when you are asked to record the transactions in the Cash Book and Journal, you have to adopt the above practice viz., record the transactions involving payments in the Cash Book and the remaining transactions in the Journal.

Check Your Progress B

1 State, whether the following statements are true or false:

a) A company has inherent right to forfeit shares for non-payment of calls even if there is no provision in the Articles of Association.

b) The discount allowed on original issue of shares must be reversed if such shares are forfeited.

c) Profit on reissue of forfeited shares can be utilised for writing off goodwill.

d) At the time of forfeiture Share Capital Account should be debited with the full face value of shares forfeited even when shares are partly paid up.

e) At the time of forfeiture, Share Premium Account should be debited with the amount of premium not received on the shares to be forfeited.

2 Select the correct answer from the following:

a) Profit on reissue of forfeited shares is credited to:
i) Profit and Loss Account
ii) General Reserve
iii) Capital Reserve

b) At the time of forfeiture Share Capital Account should be debited with:
i) Full face value of shares ,

ii) Called up value of shares
iii) Amount paid by the allottee

3 a) A company forfeited 400 equity shares of Rs. 10 each issued at a discount of 10% for non-payment of two calls of Rs. 2 each. Calculate the amount forfeited by the company. Also calculate the capital profit if half of the forfeited shares are reissued at Rs. 7 per share.

b) A company forfeited 500 equity shares of Rs. 10 each issued at a premium of 30% for non-payment of final call of Rs. 5 including premium. Calculate the final profit if these shares are reissued at Rs. 8 per share.

12.10 ISSUE AND REDEMPTION OF PREFERENCE SHARES

A company can also issue preference shares to raise its capital. As you learnt in Unit 11, the preference shares can be of various types. They can be cumulative or non-cumulative, participating or non-participating, convertible or non-convertible, and redeemable or irredeemable. You have studied in detail about all these preference shares in sub-section 11.8.2. Now let us discuss the accounting entries for their issue and redemption.

12.10.1 Issue of Preference Shares

When subscription is invited for the preference shares, their terms are clearly mentioned in the prospectus issued to the public. As for the accounting for the issue of preference shares. the treatment is similar to that of equity shares. The Cash Book and Journal entries for the application money, allotment money and the call money are made in the same manner. The only difference is that you have to prefix the nature of the preference share issued to the name of the concerned accounts. For example, if the company issues 10% cumulative redeemable preference shares, the name of the capital account will be written as 10% Cumulative Redeemable Preference Share Capital Account. Thus, when application money in respect of these shares is received, the journal entry will be

Bank A/c Dr.
To 10% Cum. Red. Pref. Sh. App. A/c

Similarly, when these shares are allotted, the journal entries will be as follows.

10% Cum. Red. Pref. Sh. App. A/c Dr.
To 10% Cum. Red. Pref. Sh. Capital A/c

10% Cum. Red. Pref. Sh. All. A/c Dr.
To 10% Cum. Red. Pref. Sh. Capital A/c

Bank A/c
To 10% Cum. Red. Pref. Sh. All. A/c Dr.

The same thing is done in respect of the call monies,

When equity and preference shares are issued simultaneously, entries will be made for both of them separately at each stage. The same thing is done in respect of the allotment money and the calls made.

12.10.2 Redemption of Preference Shares

You know that a company cannot redeem its equity shards. But, preference shares can be redeemed provided it is authorised by its Articles of Association and the terms of redemption are clarified in the prospectus issued at the time of inviting subscription to such shares. The redemption of the redeemable preference shares is governed by the provisions of Section 80 of the Companies Act. These provisions are as follows:

a) No such shares shall be redeemed except out of profits of the company which would otherwise be available for dividend, or out of the proceeds of a fresh issue of shares made for the purposes of the redemption;

b) No such shares shall be redeemed unless they are fully paid;

c) The premium, if any, payable on redemption shall be provided out of the profits of the

company or out of the company's share premium account, before the shares are redeemed; **and**

d) **Where** the preference shares are redeemed out of profits, an amount equivalent to the nominal value of the preference shares redeemed must be transferred to 'Capital Redemption Reserve Account'. This **amount** is utilised for issuing fully paid up bonus shares.

The provisions of Section 80 so far as they relate to the accounting entries and procedure, may be discussed and explained as follows.

Only fully paid up preference shares can be redeemed. This means that if a shareholder has **not** paid one or more calls, his shares will not be redeemed but they will appear as share capital in the books of the company till either he pays the calls in arrears or the shares are forfeited. There may be another situation when the company may not have made the final **call** and thus the shares are not fully paid. Under such a situation, the company should first make the final call and receive the amount of the final call assuming that all the shareholders have paid the final call.

The redemption can be made out of profits if the company has sufficient profits which can be utilised for declaring dividends in which case the company need not **issue** fresh shares. But, if the company has no profits available for [illegible] sue fresh shares equal to the total nominal value of preference shares to be redeemed. It should be noted that if the new shares are issued at a premium, the total nominal value of the new shares to be issued should be equal to the total nominal value of preference shares to be redeemed. Thus the amount of premium is ignored. But if the new shares are to be issued at a discount, the actual cash received should be equal to the nominal value of preference shares to be redeemed.

The company can redeem its preference shares partly out of profits otherwise available for dividend purposes and partly out of fresh issue of shares if the company does not have sufficient profits. So much of the profits as is utilised for redemption purposes should be transferred to an account known as 'Capital Redemption Reserve Account'. The capital redemption reserve account **cannot** be utilised for any other purposes except for issuing fully paid bonus shares. This is to ensure that there is no reduction-of share capital.

If the preference shares are to be redeemed at a premium, such premium should be written off against the profits of the company or against share premium, if any.

The Journal entries to be passed in the books of the Company when it redeems its redeemable preference shares are as follows:

i) **For making partly paid up shares fully paid up**

a) **When final call is made**

Redeemable Preference Share Final Call A/c Dr.
    To Redeemable Preference Share Capital A/c

b) **When Cash is received**

Bank A/c Dr.
    To Redeemable Preference Share Final Call A/c

ii) **For redeeming out of profits**

Profit & Loss A/c/General Reserve A/c Dr.
    To Capital Redemption Reserve A/c

iii) **For a fresh issue of shares**

When issued at par

Bank A/c Dr.
    To Share Capital A/c

When issued at premium

Bank A/c Dr.
    To Share Capital A/c
    To Share Premium A/c

When issued at discount

Bank A/c Dr.
Discount on Issue of Shares Dr.
    To Share Capital A/c

iv) **For making provision for payment of premium, if any, on redemption of preference shares.**
Share Premium A/c/Profit & Loss A/c/General Reserve A/c Dr.
To Premium on Redemption of Preference Shares A/c

v) **For Money due to redeemable preference shareholders**
Redeemable Preference Share Capital A/c Dr.
Premium on Redemption of Reference Shares A/c Dr.
To Redeemable Preference Shareholders

vi) **For amount actually paid on redemption**
Redeemable Preference Shareholders Dr.
To Bank A/c

Illustration 12 will help you to understand the accounting entries for the redemption of redeemable preference shares.

Illustration 12

Balance Sheet of Anisha Ltd. as on 31.12.89

		Rs.		Rs.
5000 Equity Shares of Rs. 100 each fully paid		5,00,000	Fixed Assets	8,00,000
3000 10% Pref. Shares of Rs. 100 each Rs. 80 per share paid		2,40,000	Investments	1,20,000
			Bank	2,80,000
2000 12% Pref. Shares of Rs. 100 each	Rs. 2,00,000		Other current assets	5,00,000
Less Final Call on 20 shares unpaid	Rs. 4,000	1,96,000		
Share Premium		80,000		
General Reserve		2,60,000		
Creditors		4,24,000		
		17,00,000		17,00,000

Both the preference shares have become due for redemption on January 1, 1990, which are to be redeemed at a premium of 10%. In order to provide funds for redemption, the investments were realised for Rs. 1,08,000 net. The directors also decided to issue new equity shares of Rs. 3,00,000 at a premium of Rs. 10 each. The redemption was duly carried out.

Give journal entries in the books of the company for the above and prepare the Balance Sheet of the company after redemption.

Solution

Journal of Anisha Ltd.

		Rs.	Rs.
10% Pref. Share Final Call A/c To 10% Pref. Share Capital A/c (Final call of Rs. 20 on 3000 Pref. shares made)	Dr.	60,000	60,000
Bank A/c To 10% Pref. Share Capital A/c (Final call money received)	Dr.	60,000	60,000
Bank A/c General Reserve A/c To Investments A/c (Investments realised and loss transferred to General Reserve)	Dr. Dr.	1,08,000 12,000	1,20,000
Bank A/c To Equity Share Application A/c (Application money received on 3,000 equity shares @ Rs. 110)	Dr.	3,30,000	3,30,000

Particulars		Dr. (Rs.)	Cr. (Rs.)
Equity Share Application A/c To Equity Share Capital A/c To Share Premium A/c (Application money on 3000 shares transferred to share capital and share premium on allotment as per Directors' Resolution No........... dated...........)	Dr.	3,30,000	 3,00,000 30,000
General Reserve A/c To Capital Redemption Reserve A/c (Amount transferred to Capital Redemption Reserve Account as per law)	Dr.	1,80,000	 1,80,000
Share Premium A/c To Premium on Redemption of Shares A/c (Premium on redemption written off against share premium)	Dr.	48,000	 48,000
10% Pref. Share Capital A/c Premium on Redemption of Share A/c To 10% Pref. Shareholders (Amount due to pref. shareholders on redemption.)	Dr. Dr.	3,00,000 30,000	 3,30,000
12% Pref. Share Capital A/c Premium on Redemption of Shares A/c To 12% Pref. Shareholders (Amount due to 12% pref. shareholders on redemption)	Dr. Dr.	1,80,000 18,000	 1,98,000
10% Pref. Shareholders To Bank A/c (Payment made to 10% preference shareholders)	Dr.	3,30,000	 3,30,000
12% Pref. Shareholders To Bank A/c (Payment made to 12% preference shareholders)	Dr.	1,98,000	 1,98,000

Balance Sheet of Anisha Ltd. as on 1.1.80
(after redemption)

Liabilities		Rs.	Assets	Rs.
Share Capital: 8,000 Equity Share of Rs. 100 each fully paid		8,00,000	Fixed Assets Bank Balance	8,00,000 2,50,000
200 12% Pref. Shares of Rs. 100 each	20,000		Other Current Assets	5,00,000
Less Calls in arrears	4,000	16,000		
Capital Redemption Reserve		1,80,000		
Share Premium		62,000		
General Reserve		68,000		
Creditors		4,24,000		
		15,50,000		15,50,000

Working Notes

1 Rs. 4,000 are calls in arrears @ Rs. 20 per share in respect of 12% Pref. Shares. The number of shares on which there are arrears are Rs. 4,000 ÷ 20 = 200. Total no. of 12% Pref. Shares are 2,000. Hence only 2,000 – 200 = 1,800 are fully paid. So only 1800 12% Preference Shares could be redeemed. The Preference Shares on which there were calls in arrears could not be redeemed as per law.

2 Nominal value of Preference Shares redeemed is Rs. 4,80,000 (Rs. 3,00,000 + Rs. 1,80,000). New equity shares issued for redemption purposes are 3,000 of Rs. 100 each i.e., Rs. 3,00,000. Hence, profit required for Capital Redemptibn Reserve Account is Rs. 4,80,000 – Rs. 3,00,000 = Rs. 1,80,000 which is debited to General Reserve Account and credited to Capital Redemption Reserve Account,

3 Premium on redemption of preference shares is written off against share premium.

4 Loss on sale of investments is charged to General Reserve.

Check **Your** Progress C

1 What are Redeemable Preference Shares?

....

....

....

2 What amount is transferred to Capital Redemption Reserve Account?

....

....

....

12.11 LET US SUM UP

A public limited company can invite public for subscription to its shares which can be either equity or preference or both. For this it has to follow the procedure laid down in the Companies Act. The share can be issued either for cash or' as consideration for the purchase of asset, payment for services, etc.

The company can issue shares at par, at a premium or at a discount. The share money is usually collected in instalments which may be in the form of application money, allotment money and a few calls. Many times, the number of applications received are more than the shares to be issued (oversubscription). In such a situation, the company can decide the basis of allotment in consultation with the stock exchange authorities. Accordingly, it can give full allotment to some, reject the applications of some, and give pro-rata allotment to some applicants. When the shares are allotted, some shareholders pay for the calls which are not yet due. These are termed as calls in advance. On the other hand, some shareholders fail to pay the amount due. These are termed as calls in arrears. If, on proper intimation and notice the shareholders do not pay the arrears, the directors can forfeit such shares when shares are forfeited, the amount already received on such shares is credited to Share forfeiture Account.

The forfeited share can be reissued by the directors, who may allow some discount to the new allottees. Such discount should not exceed the amount forfeited in respect of such shares. It is debited to share Forfeiture Account and not the Discount on issue of shares Account. The difference between the amount forfeited and the discount allowed on the reissue of such shares is transferred to capital reserve.

The accounting entries for all transactions relating to the issue, forfeiture and reissue of shares are usually made in the Journal. The entries should be separately made for issue of equity and preference shares.

Preference shares can be redeemed under the provisions of Section 80 of the Companies Act. They can be redeemed either out of the proceeds of the new issue of shares made for the purpose or out of the profits which are otherwise available for the distribution of dividends. To the extent the preference shires are redeemed out of profits, the amount should be transferred to Capital Redemption Reserve Account. This Account can be used only for the issue of bonus shares.

12.12 KEY WORDS

Bonus Shares: Shares issued to the existing equity shareholder free of cost.

Calls **in Advance:** The amount paid by an allottee in respect of calls not yet made.

Calls **in** Arrears: The amount not paid by the allottees in respect of **the** calls made on the shares allotted.

Forfeiture of **Shares:** When the directors cancel the name of the person from the register of members on non-payment of any call clue.

Issue of Shares at a Discount: When shares are issued to the public at a price lower than the face value.

Issue of Shares at a Premium: When shares are issued to the public at a price higher than the face value.

Oversubscription: When the number of shares applied for exceeds the number offered for subscription.

Pro-rata allotment: Proportionate allotment of shares in case of oversubscription.

12.13 ANSWERS TO CHECK YOUR PROGRESS

A 1 a) False
b) True
c) False
d) False
e) True
f) True
g) False
h) False

2 a) 5
b) A period of one month
c) 5
d) 25
e) *6*
f) Share Premium

3 a) Rs. 1,500; Rs. 1,600; Rs. 2,400: Rs. 5,500
b) Rs. 20
c) Rs. 60

B 1 a) False b) True c) True d) False e) True
2 a) i (b) ii)
3 a) Rs. 2,400, Rs. 500
b) Rs. 1,500

12.14 TERMINAL QUESTIONS/EXERCISES

Questions

1 What is share premium? Is there any limit on the amount of premium to be charged? Explain the legal provisions relating to the utilisation of share premium.

2 Can a company issue shares at a discount? If so, explain legal provisions relating to issue of shares at a discount under Section 79 of the Companies Act.

3 Can a company forfeit shares for non-payment of calls' If so, explain the procedure of share forfeiture.

4 Can the forfeited shares be reissued at a discount? Is it the same as issue of shares at discount under Section 79 of the Companies Act? How much discount can be allowed on reissue of shares at a discount?

Exercises

1 Bittoo Ltd. offered for public subscription 10,000 equity shares of Rs. 10 each payable Rs. 2.50 on applications;.Rs. 2.50 on allotment and the balance on two calls of equal amount. The issue was fully subscribed. All the money was duly received.
Pass Journal entries in the books of the Company and also show,the Balance Sheet.

2 Auto Ltd. issued 50,000 equity shares of Rs. 25 each at a premium of Rs. 5 per share, payable Rs, 10 on application, Rs. 10 on allotment including premium, Rs. 7.50 on first call and the balance on 2nd and final call. All the money was duly received.
Pass journal entries in the books of the company and also show the Balance Sheet.

3 A newly incorporated limited company made an issue of 1.5 lac shares of Rs. 10 each

payable Rs. 3 on application; Rs. 5 on allotment and the balance of Rs. 2 on 1st and final call. Application for 4,66,000 shares were received. Due to heavy over-subscription the directors made allotment as under: Applicants for 1,07,500 shares (in respect of applications for 1,000 shares or more) were allotted 51,000 shares. Applicants for 2,53,000 shares (in respect of applications for 500 shares or more but less than 1,000 shares) were allotted 63,000 shares. Applicants for the remaining 1,05,500 shares (in respect of applications for less than 500 shares) were allotted 36,000 shares. Cash received on application was, after satisfying the amount due on application, applied towards allotment and call moneys and any balance was then returned. All moneys due on allotment and call were received.

Give journal entries for the above transactions and prepare the Balance Sheet.

(Ans. Application money returned Rs. 1,29,000; Application money used towards allotment Rs. 6,64,500; and application money used towards call Rs. 1,54,500; cash received on allotment Rs. 85,500 and on 1st call Rs. 1,45,500.)

4 A limited company which had issued equity shares of Rs. 20 each at a discount of 10%, forfeits 500 shares for non-payment of final call of Rs. 4 per share.
200 of the forfeited shares are reissued at Rs. 12 per share out of the remaining shares 150 shares are reissued at Rs. 20 per share.

Give journal entries for the forfeiture and reissue of shares and show the amount transferred to Capital Reserve and the balance in Share Forfeiture Account.

(**Ans.** Capital Reserve Rs. 4,000; Share Forfeiture A/c Rs. 2,100)

5 Anita Ltd., having a nominal capital of Rs. 3,00,000 divided into shares of Rs. 10 each, offered for public subscription 20,000 shares at par payable Rs. 2 on application; Rs. 3 on allotment and the balance in two calls of Rs. 2.50 each. Applications were received by the company for 24,000 shares. Applications for 20,000 shares were accepted in full and the shares allotted. Applications for the remaining shares were rejected and the application money refunded.

All moneys due were received with the exception of the final call on 500 shares which were forfeited after legal formalities were fulfilled. 300 of the forfeited shares were reissued at Rs. 9 per share.

Pass necessary journal entries and prepare the Balance Sheet showing the amount transferred to Capital Reserve and the balance in Share Forfeiture Account.

(**Ans.** Capital Reserve Rs. 1,950; Share Forfeiture Rs. 1,500.)

6 Apple Ltd. offered for public subscription 20,000 equity shares of Rs. 10 each at a premium of 10% payable Rs. 2 on application; Rs. 4 on allotment including premium; Rs. 3 on 1st call and Rs. 2 on 2nd and final call. Applications for 26,000 shares were received. Applications for 4,000 shares were rejected, Pro-rata allotment was made to the remaining applicants. Both the calls were made-and all the moneys were received except the final call on 500 shares which were forfeited. 300 of the forfeited shares were later reissued as fully paid at Rs. 8.50 per share.

Give journal entries and prepare Balance Sheet.

(**Ans.** Capital Reserve Rs. 1,950; Shtue Forfeiture A/c Rs. 1,600)

7 Anupama Ltd. was incorporated with an authorised capital of Rs. 5 lacs divided into shares of Rs. 10 each, The company offered for public subscription 20,000 shares at a premium Rs. 2 per share, payable Rs. 2 on application; Rs. 5 on allotment including premium and the balance in two calls of Rs. 2.50 each. Applications for 30,000 shares were received by the company. The directors made the allotment as follows:

No allotment was made to the applicants of 6,000 shares and the application money refunded. Allotment was made to the remaining applicants pro-rata, money paid in excess on application being adjusted towards allotment. All the allottees except the one mentioned below, paid the amount of calls on the due dates. Mohammed, a shareholder, to whom 500 shares were allotted, failed to pay the allotment money and on his subsequent failure to pay the first call money, his shares were forfeited.

300 of the forfeited shares were reissued as fully paid after the second call at Rs. 11 per share. Give journal entries to record the above transactions and prepare the Balance Sheet.

(**Ans.** Capital Reserve Rs. 420; Share Forfeiture A/c Rs. 480)

8 Young India Ltd. decided to redeem all the preference shares on December 31, 1989 when their Balance Sheet was as follows:

Balance Sheet as on 31.12.1989

	Rs.		Rs.
Share Capital:		Fixed Assets	12,00,000
6,000 Equity share of		Other Current Assets	6,50,000
Rs. 100 each fully paid	6,00,000	Cash at Bank	5,50,000
12,000 10% Redeemable			
Preference Shares of			
Rs. 50 each Rs. 25 paid	3,00,000		
6,000 12% Redeemable			
Preference Shares of			
Rs. 100 each fully paid	6,00,000		
Share Premium	30,000		
General Reserve	3,30,000		
Creditors	5,40,000		
	24,00,000		24,00,000

The redemption is to be made at a premium of 5%. The company has decided to issue minimum number of new equity shares at a discount of 10 per cent sufficient for redemption as per law. The redemption was duly carried out after issuing new equity shares. Calculate the number of new equity shares to be issued by the company. Show journal entries for the above and prepare the Balance Sheet of the company after redemption.

(Ans. : Number of new equity shares to be issued is 10,000.
Transfer to Capital/Redemption Reserve Rs. 3,00,000
Bank Balance Rs. 4,90,000, B/S. Total Rs. 24,40,000)

Note: These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University for assessment. These are for your practice only.

UNIT 13 ISSUE AND REDEMPTION OF DEBENTURES

Structure

13.0 Objectives
13.1 Introduction
13.2 What is a Debenture?
13.3 Difference between Shares and Debentures
13.4 Types of Debentures
13.5 Issue of Debentures
- 13.5.1 When Debentures are Issued for Consideration other than Cash
- 13.5.2 When Debentures are Issued for Cash
- 13.5.3 Issue of Debentures as a Collateral Security
- 13.5.4 Debentures Issued at Different Terms
- 13.5.5 Writing off Loss on Issue of Dehentures

13.6 Redemption of Debentures
- 13.6.1 Redemption on Maturity
- 13.6.2 Redemption in Instalments
- 13.6.3 Redemption by Purchase from the Market
- 13.6.4 Redemption by Conversion

13.7 Let Us Sum Up
13.8 Key Words
13.9 Answers to Clieck Your Progress
13.10 Terminal Questions/Exercises

13.0 OBJECTIVES

After studying this unit you should be able to:

- define a debenture
- distinguish between a share and a debenture
- describe various types of debentures a company can issue
- explain the accounting entries required for issue ofdebentures
- write off the loss on issue of debentures in an appropriate manner
- describe various ways of redeeming the debentures and make necessary accounting entries therefor,

13.1 INTRODUCTION

You know that there are two main methods of raising long-term finance for a company viz., shares and debentures. In Units 11 and 12 you learnt about the various types of shares, the procedure for their issue, forfeiture and reissue, and the accounting entries made at each stage. You also studied the rules regarding redemption of preference shares and the accounting entries made at the time of their redemption. In this unit you will learn about various types of debentures that are issued by a company and study the accounting entries made for their issue and redemption.

13.2 WHAT IS A DEBENTURE?

Issue of debentures is a method of raising loan from the public. Thus, a debenture may be defined as an instrument acknowledging a debt by a company to some person or persons which may or may not be secured by a charge on its assets. According to Mr. Topham "A debenture is a document given by a company as evidence of a debt to the holder usually arising out of a loan and most commonly secured by a charge". Section 2(12) of the Indian Companies Act states, "Debenture includes debenture stock, bonds and any other securities of the compariy whether constituting a charge on the company's assets or not".

According to the above definitions the main features of a debentures are as follows.

1 A debenture is in the form of a certificate like a share certificate.

2 It is issued under the common seal of the company.

3 This certificate'is an acknowledgement of debt by the company to its holder.

4 A debenture usually provides for the repayment of a specified principal sum on a specified date. However, there is no restriction on issue of irredeemable debentures.

5 It usually provides for the payment of interest at regular intervals at fixed dates until the principal sum is completely paid back.

6 It is normally secured by a floating charge on the assets of the company.

13.3 DIFFERENCE BETWEEN SHARES AND DEBENTURES

1 A share repregents a portion of the capital of a company whereas a debenture represents a portion of debt of a company.

2 A shareholder is a member of the company whereas a debentureholder is a creditor of the company.

3 A shareholder enjoys the rights of proprietorship of a company whereas a debenture-holder can enjoy the,rights of a lender only.

4 A shareholder has a right of control over the working of the company by attending and voting in the general meeting which is the supreme authority of the company whereas a debentureholder has no such right.

5 A shareholder can get dividend only when there are profits whereas a debentureholder is entitled to interest which the company must pay whether or not there are profits to the company.

6 A debentureholder gets a fixed rate of interest per annum payable on fixed dates whereas a shareholder gets a dividend far higher if the company earns good profits.

7 A shareholder has a claim on the accumulated profits of the company and is normally rewarded with bonus shares whereas a debentureholder has no claims whatsoever after he has been paid the interest amount.

8 Debentures are normally issued for a specified period'after which they are repaid but no such repayment is possible in case of shares.

9 A company cannot purchase its own shares from the market whereas it can purchase its own debentures and cancel them or re-issue them.

10 In liquidation, debentureholders being secured creditors normally, get priority in payment whereas shareholders are the last to get payment after all other claims have been satisfied.

1134 TYPES OF DEBENTURES

A'company can issue various types of debentures which can be classified on the basis of security, permanence, convertibility and records.

Let us now explain all of them one by one.

1 **Redeemable and Irredeemable Debentures:** Redeeinable Debentures are issued for a specified period after which the company must repay the amount of debentures on a specified date or after notice or by periodical drawings. Irredeemable Debentures, on the other hand are those debentures for which no fixed date is specified for repayment and the holders of which cannot demand payment as long as the company is functioning and does not make default in interest payment. **Normally companies issue redeemable debentures.**

2 **Registered and Bearer Debentures:** Registered debentures are those which are registered in the name of the holder by the company in the Register of Debenture-holders. Such debentures are made out in the name of the holder which appears in the debenture certificate. Such debentures are transferable in the same manner as shares by

transfer deeds. Interest on such debentures is payable to the person whose name is registered with the company in the register of Debentureholders. Bearer debentures are those which are transferable by mere delivery. Interest on such debenture is payable on the basis of coupons attached with the debenture certificate.

3 **Secured and Unsecured Debentures:** Secured debentures are those debentures which are secured either by the mortgage of a particular asset of the company known as Fixed Charge or by the mortgage of general assets of the company known as Floating Charge. Secured debentures are also known as Mortgaged Debenture's. Unsecured'debentures, on the other hand are those debentures which are not secured by any charge or mortgage on any property of the company. Unsecured debentures are also known as 'Naked Debentures'. Only good companies of strong financial standing can issue such naked debentures.

4 **Convertible and Non-convertible Debentures:** Convertible debentures are those debentures wherein the debentureholder is given an option to exchange a part or whole of the debenture amount for equity shares in the company on the expuy of a specified period. Some companies issue convertible debentures wherein a part or whole of the debenture amount, after the specified period, is compulsorily converted into equity shares of the company. Where only a part of the debenture amount is convertible into equity shares such debentures are known as 'Partly Convertible Debentures' but when the full amount of the debenture is convertible into equity shares such debentures are known as 'Fully Convertible Debentures'. Non-convertible debentures, on the other hand, are those debentures for which the debentureholder does not have any right for conversion into equity shares.

13.5 ISSUE OF DEBENTURES

The procedure and accounting entries for the issue of debenture are, more or less, the same as those for the issue of shares. Like shares, the money on debentures may be collected in instalments and they can be issued at par, at a premium or at a discount. They can also be issued for consideration other than cash. Let us now study the accounting entries passed in different situations.

13.5.1 When Debentures are Issued for Consideration other than Cash

When debentures are issued for consideration other than cash say, for payinent to vendors for purchase of some fixed assets, they will be fully paid up arid the journal entry passed is as follows.

Vendors Dr.
  To Debentures A/c
(.............. debentures of Rs....... per deb. issued to vendors)

13.5.2 When Debentures are Issued for Cash

When debentures are issued for cash, they may be issued at par, at a premium or at a discount, and the money may be collected in instalments. **In practice, however, the debentures are usually issued at par and money is collected in two instalments** i.e., on application and on allotment. Hence, the journal entries made are as follows.

1 Bank A/c Dr.
  To Debenture Application A/c
(Application money received on .... debentures at Rs............ per debt.)

2 Debenture Application A/c Dr.
  To Debentures A/c
(....... Debentures allotted as per Board's Resolution no..... dated..... and application money adjusted)

3 Debenture Allotment A/c Dr.
  To Debentures A/c
(Allotment money due on allotment of ..... debentures @ Rs........ per debenture)

4	Bank A/c To Debenture Allotment A/c (Allotment money received on ...... debentures @ Rs........ pen*debenture)	Dr.		

When debentures are issued at a premium or at discount, the necessary adjustment is made in the transfer entry for application money at the time of allotment or/and in the journal entry passed for the allotment account due. Let us take an example and clarify this point, A company issued 2,000 6% debentures of Rs. 100 each at a discount of Rs. 5 per debenture, payable Rs. 50 on application and Rs.45 on allotment (including discount).The journal entries passed will be as follows:

			Rs.	Rs.
1	Bank A/c	Dr.	1,00,000	
	To Debenture Application A/c			1,00,000
	(Application money received on 2,000 debentures at Rs. 5 per deb.)			
2	Debenture Application A/c	Dr.	1,00,000	
	To Debentures A/c			1,00,000
	(2,000 debentures allotted as per Board's Resolution no ...... dated..........)			
3	Debentures Allotment A/c	Dr.	90,000	
	Discount on Issue of Deb. A/c	Dr.	10,000	
	To Debentures A/c			1,00,000
4	Bank A/c	Dr.	90,000	
	To Debenture Allotnrent A/c			90,000

Somctirnes, the whole amount is collected in one instalment. In that case, the entries may be passed through a combined Application and Allotment Account; or simply one journal entry may be passed as follows:

If issued at par

Hank A/c	Dr.
To Debentures A/c	

If issued at premium

Bonk A/c	Dr.
To Debentures A/c	
To Ptem. on Issne of Debentures A/c	
(...... debentures of Rs...... issued at a premium of Rs...... per debenture)	

If issued at a discount

Bank A/c	Dr.
Discount on Issue of Debentures A/c	Dr.
To Debentures A/c	
(...... debentures of Rs......... issued at a discount of Rs......... per debentures)	

It should be noted that rate of interest payable on debentures, and so also its nature, should be prefixed with the Debenture Account. For example, if Redeemable Secured Debentures are issued carrying 12% interest, the Debentures Account will be termed as 12% Red. Secured Debentures Account. The Debentures are shown on the liabilities side of tlrc Balance Sheet under the head 'Secured Loans'.

Look at Illustration 1 and see how the entries are passed when the debentures are issued.

Illustration 1

On January 1, 1988, Akash Ltd. offered 2,000 Debentures of Rs. 1,000 each at a discount of Rs 50 per debenture. The amount was paid Rs, 200 on application, Rs. 400 on allotment and the balance on 1st and final call on May 30, 1988. Interest was payable half yearly @ 6% p.a. The first coupon payable on June 30, 1988 being for 2%. The issue was fully taken up.

Journalise the above transactions in the book of Akash Ltd.

Solution

Journal of Akash Ltd.

Date	Particular		Debit Amount	Credit Amount
			Rs.	Rs.
1989 Jan. 1	Bank A/c To 6% Debenture Application A/c (Being money received on application of 2,000 6% debentures @ Rs. 200 each)	Dr.	4,00,000	4,00,000
" 1	6% Debenture Application A/c To 6% Debentures A/c (Being transfer of application money to Debenture Account)	Dr.	4,00,000	4,00,000
" 1	6% Debenture Allotment A/c Discount on Issue of Debentures A/c To Debentures A/c (Being allotment money due on 2,000 debentures at Rs. 400 per deb. at 10% discount)	Dr. Dr.	8,00,000 1,00,000	9,00,000
" 1	Bank A/c To 6% Debenture Allotment A/c (Being money received on allotment)	Dr.	8,00,000	8,00,000
May 30	Debenture First & Final Call A/c To 6% Debenture A/c (Being 1st call due @ Rs. 350 per debenture)	Dr.	7,00,000	7,00,000
" 30	Bank A/c To Debenture First & Final Call A/c (Being 1st call received)	Dr.	7,00,000	7,00,000
June 30	Debenture Interest A/c To Bank A/c (Being interest paid at 2% on Rs. 20,00,000)	Dr.	40,000	40,000
Dec. 31	Debenture Interest A/c To Bank A/c (Being interest paid @ 6% on Rs. 20,00,000 for 6 months)	Dr.	60,000	60,000
" 31	Profit & Loss A/c To Debenture Interest A/c (Being transfer of debenture Interest to Profit & Loss A/c)	Dr.	1,00,000	1,00,000

Note: Since the money on debentures was received on different dates, the interest on June 30 is calculated for first six months at a flat rate of 2% as given and not on different amounts received on different dates.

13.5.3 Issue of Debentures as a Collateral Security

Issue of debentures as a collateral security means the issue of debentures as secondary security against some loan taken by the company. If the loan is paid back, those debentures are returned to the company. If the lender's claim is not fully satisfied by the sale proceeds of the principal security, the lender will claim the remaining balance of his claim against these debentures issued as collateral security. There are two methods of recording the issue of debentures'as a collateral security. Under the first method, no entry is made for such issue but only a note is given in the Balance Sheet regarding debentures issued as collateral security. Under the second method, an accounting entry is made for the issue by debiting the Debentures Suspense Account and crediting the Debentures Account. Look at illustration 2 and see how debentures issued as a, collateral security are recorded in the books of account under these two methods.

Illustration 2

A Company had issued 4,000 14% Debentures of Rs. 100 each to the public for cash at par. It had also deposited with the State Bank of India 5,000 14% Debentures of Rs. 100 each as a collateral security against a loan of Rs. 5,00,000 advanced by the bank. Show how would you record the above in the books of the company.

Solution

First Method: Under this method no journal entry will be made for the debentures issued as a collateral security. But the fact will be exhibited in the Balance Sheet of the company as a foot note under the Bank Loan as under:

Secured Loans:	
4,000 14% Debentures of Rs. 100 each	4,00,000
Loan from State Bank of India (Secured by the issue of 5,000 15% Debentures of Rs. 100 each issued as a collateral security)	5,00,000

Second Method: Under this method, a journal entry **for the issue of debentures as collateral security** will be made as follows:

Debenture Suspense A/c	Dr.	5,00,000	
To 14% Debentures			5,00,000
(Issue of 5,000 14% Debentures of Rs. 100 each as a collateral security against a loan of Rs. 5 lakh by the State Bank of India)			

Note: The above entry is only for the issue of debenture as a collateral security. The entries for the bank loan and the issue of debentures to the public will be separately made as usual.

These items will appear in the Balance Sheet as follows.

Balance Sheet

Liabilities	Rs.	Assets	Rs.
Secured Loans: 9,000 **14% Debentures** of Rs. 100 each	9,00,000	Bank	9,00,000
Loan from SBI	5,00,000	Debenture Suspense A/c	5,00,000

13.5.4 Debentures Issued at Different Terms

A company may issue debentures at different terms. These terms may not only relate to the issue of debentures but also to their redemption. For example, just as the issue can be made at par, at a premium or at a discount, the redemption can also be stipulated at par, at a premium or at a discount. In practice, however, the redemption is never made at a discount. Thus, combining such terms of issue and redemption of debentures, the following five possibilities are commonly found in practice.

a) Debentures issued at par and redeemable at par
b) Debentures issued at a premium and redeemable at par.
c) Debentures issued at a discount and redeemable at par
d) Debentures issued at par and redeemable at a premium
e) Debentures issued at a discount and redeemable at a premium

Let us now see how journal entries are passed at the time of the issue in these five situations.

a) **Issued at par, redeemable at par**

Bank A/c	Dr.
To Debentures A/c	

b) **Issued at a premium, redeemable at par**

Bank A/c	Dr.
To Debentures A/c	
To Premium on Issue of Debentures A/c	

c) Issued at a **discount, redeemable at par**
Bank A/c Dr.
Discount on Issue of Deb. A/c Dr.
To Debentures A/c

d) Issued at **par, redeemable** at a **premium**
Bank A/c Dr.
Loss on Issue of debentures A/c Dr.
To Debentures A/c
To Premium on Redemption of Deb. A/c

e) Issued at a discount, **redeemable at premium**
Bank A/c Dr.
Loss on Issue of Debentures A/c Dr.
To Debenture A/c
To Premium on Redemption of Deb. A/c

Note: Loss on Issue of Debentures in the last entry includes the amount of discount on issue of the debentures as well as premium on redemption.

You will notice that when debentures are issued at a premium, its amount has been debited to 'Loss on Issue of Debentures Account' and credited to 'Premium on Redemption of Debentures Account'. This provides for the additional liability for premium payable on redemption which will actually be a loss to the company. The provision for such loss is made right at the time of issue so that, like discount on debentures, it can also be written off over the period during which money raised through debentures is to be utilized. The 'Premium on Redemption is shown on the liabilities side of the Balance Sheet till the debentures are redeemed and the Loss on Issue of Debentures on its assets side under the head 'Miscellaneous Expenses and Losses not written off' until the whole amount is written off.

Look at Illustration 3 and see how journal entries are passed at the time of issue of redeemable debentures.

Illustration **3**
Journalise the following transactions
A company issues the following debentures.

a) 500 5% Debentures of Rs. 1,000 each at par, redeemable at par.

b) 1,000 *6%* Debentures of Rs. 100 each at a premium of Rs 10 per debenture, redeemable at par.

c) 1,500 7% Debentures of Rs. 200 each at a discount of Rs. 20 per debenture, redeemable at par.

d) 2,000 8% Debentures of Rs. 250 each at par, redeemable at a premium of 10%

e) 2,500 9% Debentures of Rs. 500 each at a **discount of 10%** redeemable at a premium of 10%.

Solution

Journal

			Ra.	Rs.
a)	Bank A/c	Dr.	5,00,000	
	To 5 % Debentures A/c			5,00,000
	(Being issue of 500 debentures of Rs. 1,000 each at par, redeemable at par)			
b)	Bank A/c	Dr.	1,10,000	
	To 6% Debentures A/c			1,00,000
	To Premium on Issue of Debentures A/c			10,000
	(Being issue of 1,000 debentures of Rs. 100 each at premium, redeemable at par)			

	Particulars		Dr. Amount	Cr. Amount
c)	Bank A/c	Dr.	2,70,000	
	Discount on Issue of Deb. A/c	Dr.	30,000	
	To 7% Debentures A/c			3,00,000
	(Being issue of 1,500 debentures of Rs. 200 each at discount redeemable at par)			
d)	Bank A/c	Dr.	5,00,000	
	Loss on Issue of Debentures A/c	Dr.	50,000	
	To 8% Debentures A/c			5,00,000
	To Premium on Redemption of Debentures A/c			50,000
	(Being issue of 200 8% debentures of Rs. 250 each redeemable at a premium of 10%)			
e)	Bank A/c	Dr.	8,75,000	
	Loss on Issue of Debenture A/c	Dr.	2,50,000	
	To 9% Debentures A/c			10,00,000
	To Premium on Redemption of Debenture A/c			1,25,000
	(Being issue of 2500 debentures @ Rs. 500 each at discount, redeemable at premium)			

13.5.5 Writing off Loss on Issue of Debentures

The loss on issue of debentures (both discount on issue and premium on redemption) is a fictitious asset shown on the asset side on the Balance Sheet. This must be written off as soon as possible, against the capital profits or by debiting the Profit & Loss Account. The Journal entry for writing off tlie loss is as follows.

Capital Reserve/Profit and Loss A/c Dr.
To Loss on Issue of Debentures A/c

The amount to be written off depends on how the debentures are redeemed. The debentures can be redeemed either after a fixed period or in instalments. Let us now see how their atnount is calculated in both the situations.

i) **When the debentures are redeemed after a fixed period:** In this case the total amount of loss is calculated and written off evenly over.the years. If, for example, the loss on issue of debentures is Rs. 5,000 and the debenlures are to be redeemed after ten years then the amount to be written off every year will be Rs. 500 $\left(\frac{5000}{10}\right)$

ii) **When the debentures are redeemed in instalments:** In this case the amount to be written off each year should be in proportion to the amount of debentures outstanding in the beginning of the year. Suppose a company issues 2,000 debentures of Rs. 100 each at a discount of 5% and the debentures are to be repaid by equal instalments of Rs. 40,000 at the end of year.

In this case the amount of discount Rs. 12,000 $\left(\frac{6}{100} \times 2,00,000\right)$ will be written off as follows:

Beginning	Amount Outstanding	Ratio			Amount of discount to be written off.
I Year	2,00,000	20	OR	5	4,000
II Year	1,60,000	16		4	3,200
III Year	1,20,000	12		3	2,400
IV Year	80,000	8		2	1,600
V Year	40,000	4		1	800
				15	12,000

Look at Illustration 4 and see how loss on issue of debentures is written off.

Illustration 4.

Asea Ltd. issued 5,000 14% Debentures of Rs. 100 each at a discount of 6% on January 1, 1986. The entire amount is payable on application. These debentures are redeemable at a premium of 5%.The interest on debentures is payable annually on December 31 each year and any loss on their issue is to he written off in three years.

Give Journal entries for the above in the books of the Company.

Solution

Date	Particulars		Dr. (Rs.)	Cr. (Rs.)
1986 Jan, 1	Bank A/c To Debenture Application A/c (Amount received on 5.000 debentures @ Rs. 94 per debenture)	Dr.	4,70,000	4,70,000
" 1	Debenture Application A/c Loss on Issue of Debentures A/c To 14% Debentures A/c To Premium on Redemption of Deb. A/c (Allotment of 5.000 debentures)	Dr. Dr.	4,70,000 55,000	5,00,000 25,000
Dec. 31	Debenture Interest A/c To Bank A/c (Interest on Debentures paid @ 14%)	Dr.	70,000	70,000
" 31	Profit and Loss A/c To Debenture Interest A/c To Loss on Issue of Debentures A/c (Debenture interest and proportionate one third loss on their issue written off)	Dr.	88,333	70.000 18,333
1987 Dec. 31	Debenture Interest A/c To Bank A/c (Interest on debentures paid @ 14%)	Dr.	70.000	70,000
" 31	Profit and Loss A/c To Debenture Interest A/c To Loss on Issue of Debentures A/c (Debenture interest and proportionate loss on issue written of0	Dr.	88.333	70,000 18,333
1988 Dec. 31	Debenture Interest A/c To Bank A/c (Interest paid @ 14%)	Dr.	70,000	70,000
" 31	Profit and Loss A/c To Debenture Interest A/c To Loss on Issue of Debentures A/c (Debenture interest and proportionate loss on issue written of0	Dr.	'88,334	70,000 18,334

Check Your Progress A

1 i) A company issued 3,000 12% Debentures of Rs. 200 each at a discount of 6% on January 1, 1984. These debentures are to be redeemed in four equal instalments of Rs. 1,50,000 each annually from the end of the third year.
Calculate the amount of discount to be written off each year till they are wholly redeemed.

....

....

....

ii) On January 1, 1988 a company issues 1,000 debentures of Rs. 100 each at par,.to redeemed at 5% premium. Journalise the above transaction.

....

....

....

iii) A company issued 100 debentures of Rs. 200 each to Mohan for the machinery purchased him. Journalise the above transaction.

....

....

....

2 Fill in the blanks.

i) A debenture is the .... capital of the company.

ii) A shareholder is the .... of the company and debentureholder is .... of the company.

iii) When the debentures are secured by mortgaging a particular asset it is called a .... charge.

iv) When the full amount of debentures is convertible into shares, they are called .... debentures.

v) When the entry is passed for debentures issued as a collateral security .... a/c is debited.

13.6 REDEMPTION OF DEBENTURES

The money raised through the issue of debentures is a loan to the company and must be repaid on the specified date and in the specified manner. Normally the time and mode of repayment is indicated in the prospectus at the time of issue of debentures by the company. The repayment of the amount of debentures is calledredemption of debentures. There are a number of ways by which the debentures can be redeemed. These are as follows:

1 Redemption on maturity
2 Redemption in instalments
3 Redemption by purchase in the open market
4 Redemption by conversion

Let us discuss each one of them in detail.

13.6.1 Redemption on Maturity

As mentioned earlier, the debentures are issued for a specified period of time. After the expiry of that period, the amount of debenture is to be paid back. The debentures may be redeemed at par or at a premium. The entries are as follows:

a) **When redeemed at par**

Debentures A/c Dr.
To Bank A/c

b) **When redeemed at a premium**

Debentures A/c Dr.
Premium on Redemption of Deb. A/c. Dr.
To Bank A/c

Taking the information given in illustration 4, and assuming that the debentures are redeemed after 5 years, the entry for redemption will be

Date	Particulars		Dr.	Cr.
1990 Dec. 31	14% Debentures A/c	Dr.	5,00,000	
	Premium on Redemption of Deb. A/c	Dr.	25,000	
	To Debentureholders			5,25,000
	(Being redemption of debentures at a premium)			
" 31	Debenturcholders	Dr.	5,25,000	
	To Bunk A/c			5,25,000
	(Being amount due to debenture-holders paid)			

As per the latest provision in the Company Law, the companies must create debenture redemption reserve for redeeming the debentures, Debenture redemption reserve-is created by transferring certain amount from Profits and Losses Appropriation Account from year to year till it equals the total amount to be redeemed. The journal entry for the transfer will be:

Profit & Loss Appropriation A/c Dr.
To Debenture Redemption Reserve A/c

After the debentures are redeemed, the balance of Debenture Redemption Reserve shall be transferred to General Reserve by passing the following entry.

Debenture Redemption Reserve A/c Dr.
To General Reserve

Sinking Fund Method

Sinking iund methcd is another method by which the debenture can be redeemed on maturity. Under this method a fixed arnount worked out with the help of sinking fund table is taken from Profit & Loss Appropriation Account and a sinking fund is created. This amount is then invested in certain government securities. The amount YO set aside earns a certain amount of interest, which is reinvested together with fixed amount in the subsequent years. In the last year, the interest and the appropriated amount are not invested. On the other hand, all investments are sold and tlie amount so obtained is used for redeeming the debentures. The balance in Sinking Fund Investment Account represents the profit or less which will be transferred to Sinking Fund Account. Then after, the Sinking Fund Account is transferred to General Reserve. Journal entries will be as follows:

'At the end sf 1st year

i) **When the amout is set aside**
Profit & Loss Appropriation A/c Dr.
To Sinking Fund A/c

ii) **When the amount is invested**
Sinking Fund Investment A/c Dr.
To Bank A/c

At the end of 2nd and **subsequent years**

i) **When the interest is received**
Bank A/c Dr.
To Interest on Sinking Fund Inv. A/c

ii) **When the interest is transferred**
Interest on Sinking Fund Inv. A/c Dr.
To Sinking Fund A/c

Instead of passing entry (i) and (ii), only one entry can be passed
Sank A/c Dr.
To Sinking Fund A/c

iii) **When the amount is set aside**
Profit & Loss Appropriation A/c Dr.
To Sinking Fund A/c

iv) **When the amount appropriated plus interest is invested**
Sinking Fund Investment A/c Dr.
To Bank A/c

At the end of last year

i) **When the interest is received**
Bank A/c Dr.
To Interest on Sinking Fund Investment A/c

ii) **When the interest is transferred**
Interest on Sinking Fund Inv. A/c Dr.
To Sinking Fund A/c

iii) **When the amount is set aside**
Profit & Loss Appropriation A/c Dr.
To Sinking Fund A/c

iv) There will be no investment in the last year and the investments in hand will be sold.
When the instalments are sold:
Bank A/c Dr.
To Sinking Fund Investment A/c

After this'entry Sinking Fund Investment A/c is prepared to know profit or loss on sale 'of investments.

v) **When profit or loss is transferred to Sinking Fund Account**

In case of profit

Sinking Fund Investment A/c Dr.
To Sinking Fund A/c

In case of loss

Sinking Fund A/c Dr.
To Sinking Fund Investment A/c

vi) **When the debentures are redeemed**

Debentures A/c Dr.
To Bank A/c

vii) **When Sinking Fund Account is closed**

Sinking Fund A/c Dr.
To General Reserve A/c

In case a part of debentures are redeemed then the amount equivalent to the nominal value of debentures redeemed will be transferred to General Reserve.

The sinking fund created to redeem debentures should be tenned as 'Debenture Redemption Fund' (DRF) and accordingly the sinking fund investment as 'Debenture Redemption Fund Investment' (DRFI).

Illustrations 5 and 6 will help you to understand the redemption of debentures by creating a sinking fund.

Illustration 5

Anupam Ltd. issued 1,000 Debentures of Rs. 100 each at par on January 1,1986, redeemable after 4 years. A sinking fund was created for the purpose. It was expected that investments would earn 5 per cent per annum net. Sinking Fund Tables show that Re. 0.232012 invested annually amounts to Re. 1 at the end of four years at 5% p.a. on compound interest basis. Investments realised Rs. 77,400 at the end of four years. The balance at bank on that date was Rs. 30,000. The debentures were duly redeemed on December 31, 1989.

Show how the amount to be set aside will be calculated and also prepare Ledger Accounts.

Solution:

Calculation of the amount to be set aside every year

To get Re. 1 at the end of 4 years the amount to be invested every year at 5% is: Re. 0.232012

To get Rs. 1,00,000 at the end of 4 years the amount to be invested every year at 5% = 0.232012 × 1,00,000 = Rs. 23201 approx.

Journal of Anupam Ltd.

Date	Particulars		Rs.	Rs.
1986 Jan. 1	Bank A/c To Debenture Application A/c (Application money @ Rs. 100 on 1,000 debentures received)	Dr.	1,00,000	1,00,000
" 1	Debenture Application A/c To Debenture A/c (1,000 debentures allotted as per Directors' Resolution no ....dated ....)	Dr.	1,00,000	1,00,000
	DRF Inv. A/c To Bank A/c (Annual contribution invested)	Dr.	23,201	23,201
Dec. 31	P & L Appropriation A/c To DRF A/c (Annual contribution to DRF)	Dr.	23,201	23,201
1987 Dec. 31	Bank A/c To DRF A/c (Interest received on DRFI)	Dr.	1,160	1,160

Date	Particulars		Dr. (Rs.)	Cr. (Rs.)
" 31	P & L Appropriation A/c To DRF A/c (Annual contribution)	Dr.	23,201	23,201
" 31	DRF Inv. A/c To Bank A/c (Annual contribution and interest received invested)	Dr.	24,361	24,361
1988 Dec. 31	Bank A/c To DRF A/c (Interest received on DRFI)	Dr.	2,378	2,378
" 31	P & L Appropriation A/c To DRF A/c (Annual contribution)	Dr.	23,201	23,201
" 31	DRF Inv. A/c To Bank A/c (Annual contribution and interest received invested)		25,579	25,579
1989 Dec. 31	Bank A/c To DRF A/c (Interest received on DRFI)	Dr.	3,657	3,657
" 31	P & L Appropriation A/c To DRF A/c (Annual contribution to Sinking Fund)	Dr.	23,201	23,201
" 31	Bank A/c To DRF Inv. A/c (Sale of DRFI)	Dr.	77,400	77,400
" 31	DRF Inv. A/c To DRF A/c (Profit on sale of DRF investments transferred)	Dr.	4,258	4,258
" 31	DRF A/c To General Reserve A/c (Balance of Deb. Red. Fund A/c representing accumulated profits transferred)	Dr.	1,00,000	1,00,000
" 31	Debentures A/c To Bank A/c (Amount paid to debentureholders and debentures redeemed)	Dr.	1,00,000	1,00,000

Debenture Redemption Fund A/c

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
1986 Dec. 31	To Balance c/d	23,201	1986 Dec. 31	By P&L Appropriation A/c	23,201
1987 Dec. 31	To Balance c/d	47,562	1987 Jan. 1 Dec. 31 Dec. 31	By Balance b/d By Bank A/c (Int.) By P & L Appropriation A/c	23,201 1,160 23,201
		47,562			47,562
1988 Dec. 31	To Balance c/d	73,141	1988 Jan. 1 Dec. 31 Dec. 31	By Balance b/d By Bank A/c (Int.) By P & L Appropriation A/c	47,562 2,378 23,201
		73,141			73,141
1889 Dec. 31	To Gen. Res. A/c	1,04,258	1989 Jan. 1 Dec. 31 Dec. 31 Dec. 31	Dy Balance b/d By Bank A/c (Int.) By DRFI A/c By P & L Appropriation A/c	73,141 3,658 4,258 23,201
		1,04,258			1,04,258

Debenture Redemption Fund Investment Account

		Rs.			Rs.
1986 Dec. 31	To Bank A/c	23,201	1986 Dec. 31	By Balance c/d	23,201
1987 Jan. 1	To Balance b/d	23,201	1987 Dec. 31	By Balance c/d	47,562
Dec. 31	To Bank A/c	24,361			
		47,562			47,562
1988 Jan. 1	To Balance b/d	47,562	1988 Dec. 31	By Balance c/d	73,141
Dec. 31	To Bank A/c	25,579			
		73,141			73,141
1989 Jan. 1	To Balance b/d	73,141	1989 Dec. 31	By Bank A/c	77,400
Dec. 31	To DRF A/c (Profit)	4,259			
		77,400			77,400

Debentures Account

		Rs.			Rs.
1986 Dec. 31	To Balance c/d	1,00,000	1986 Jan. 1	By Debenture Application A/c	1,00,000
1987 Dec. 31	To Balance c/d	1,00,000	1987 Jan. 1	By Balance b/d	1,00,000
1988 Dec. 31	To Balance c/d	1,00,000	1988 Jan. 1	By Balance b/d	1,00,000
1989 Dec. 31	To Bank/Deb. holders	1,00,000	1989 Jan. 1	By Balance b/d	1,00,000

It should be noted that when the debentures are to be redeemed at a premium, the sinking fund instalment should be calculated on the basis of the total amount payable (nominal value plus premium). Suppose, the debentures in Illustration 5 were to be redeemed at a premium of 10%, the annual contribution (sinking fund instalment) shall be calculated as follows:

Amount required at the time of redemption = 1,00,000 + 10,000
= Rs. 1,10,000

Amount of Annual Contribution = Rs. 1,10,000 x 0.232012
= Rs. 25,213

Insurance Policy

Some companies create a sinking fund for the redemption of debentures but investment is not made in securities earning fixed rate of interest but instead an insurance policy is taken for the amount required for redemption of debentures paying premium to the Insurance Company. It is on the same lines as Sinking Fund with the only exception that no interest is received under Insurance Policy Method.

13.6.2 Redemption in Instalments

You have studied in sub-section 13.7.1 about the accounting treatment of redemption of debentures on maturity. Sometimes the terms of issue provide that beginning from a particular year, a fixed amount of debentures will be redeemed annually. For example, a company issues 1,000 debentures of Rs. 100 each. The prospectus provides that beginning with the 4th year, 200 debentures will be redeemed every year. This means that Rs. 20,000 debentures will be redeemed at the end of 4th, 5th, 6th, 7th and the 8th year. As far the debentureholders whose money is to be returned, they can be selected either (i) by drawing lots, or (ii) by serial number of the debentures.

The debentures, in such a situation, can either be redeemed out of profits or out of capital. The entries are:

i) If redeemed out of profit

a) **When amout is taken out of profits**

Profit & Loss Appropriation A/c Dr.
 To Debenture Redemption Reserve A/c

b) **When the debentures are redeemed**

Debentures A/c Dr.
 To Bank A/c

ii) If redeemed out of capital

Debentures A/c Dr.
 To Bank A/c

Look at Illustration 6 and see how debentures are redeemed by instalments.

Illustration 6

Anamica Ltd. issued 1,000 14% Debentures of Rs. 300 each at a discount of 5% on January 1, 1985. Interest on these debentures is payable annually on 31st December each year. The debentures are redeemable at par in three equal instalments at the end of the third, fourth and fifth year. Prepare 14% Debentures Account, Discount on Issue of Debentures Account and Debenture Interest Account in the books of the company.

Solution

14% Debentures Account

Dr.					Cr.
1985		Rs.	1985		Rs.
Dec. 31	To Balance c/d	3,00,000	Jan. 1	By Debenture Application A/c	2,85,000
			Dec. 31	By Discount on Issue of Debentures A/c	15,000
		3,00,000			3,00,000
1986			1986		
Dec. 31	To Balance c/d	3,00,000	Jan. 1	By Balance b/d	3,00,000
1987			1987		
Dec. 31	To Bank A/c	1,00,000	Jan. 1	By Balance b/d	3,00,000
" 31	To Balance c/d	2,00,000			
		3,00,000			3,00,000
1988			1988		
Dec. 31	To Bank A/c	1,00,000	Jan. 1	By Balance b/d	2,00,000
" 31	To Balance c/d	1,00,000			
		2,00,000			2,00,000
1989			1989		
Dec. 31	To Bank A/c	1,00,000	Jan. 1	By Balance b/d	1,00,000

Debenture Interest Account

		Rs.			Rs.
1985 Dec. 31	To Bank A/c	42,000	1985 Dec. 31	By P & L A/c	42,000
1986 Dec. 31	To Bank A/c	42,000	1986 Dec. 31	By P & L A/c	42,000
1987 Dec. 31	To Bank A/c	42,000	1987 Dec. 31	By P & L A/c	42,000
1988 Dec. 31	To Bank A/c	28,000	1988 Dec. 31	By P & L A/c	28,000
1989 Dec. 31	To Bank A/c	14,000	1989 Dec. 31	By P & L A/c	14,000

Discount on Issue of Debentures A/c

		Rs.			Rs.
1985			**1985**		
Jan.	To 14% Debenture	15,000	Dec. 31	By P & L A/c	3,750
			Dec. 31	By Balance c/d	11,250
		15,000			15,000
1986			**1986**		
Jan. 1	To Balance b/d	11,250	Dec. 31	By P & L A/c	3,750
			Dec. 31	By Balance c/d	7,500
		11,250			11,250
1987			1987		
Jan.	To Balance b/d	7.500	Dec. 31	By P & L A/c	3,750
			Dec. 31	By Balance c/d	3.750
		7.500			7.500
1988			**1988**		
Jan. 1	To Balance b/d	3.750	Dec. 31	By P & L A/c	2,500
			Dec. 71	By Balance c/d	1,250
		3.750			3.750
1989			**1989**		
Jan. 1	To Balance b/d	1,250	Dec. 31	By P & L A/c	1,250

Working Notes

1. Debenture interest is calculated @ 14% on the amount of debentures outstanding in the beginning of each year. The amount of debentures outstanding on January 1. each year is

	Debenture Outstanding
	Rs.
Beginning of 1985	3,00,000
Beginning of 1986	3,00,000
Beginning of 1987	3,00,000
Beginning of 1988	2,00,000
Beginning of 1989	1,00,000

2. Discount on Issue of Debentures is written off in the ratio of the amount of debentures outstanding in the beginning of each year. The ratio is 3:3:3:2:1

   So amount of discount to be written off will be

Year		Amount
		Rs.
1985	$15{,}000 \times \frac{3}{12}$	3,750
1986	$15{,}000 \times \frac{3}{12}$	3,750
1987	$15{,}000 \times \frac{3}{12}$	3,750
1988	$15{,}000 \times \frac{2}{12}$	2,500
1989	$15{,}000 \times \frac{1}{12}$	1,250

13.6.3 Redemption by Purchase from the Market

The Company can also redeem its debentures by purchase in the open market. It can be done only if the Article of Association of the company so permits. By purchasing its debentures in the open market, the company is able to redeem its debentures as well as use its surplus funds. The company usually purchases its own debentures from' the market when they are available at a price which is less than its par value. In such a situation, the company saves (i) the difference between the par value and the market price of the debenture, (ii) premium promised at the time of redemption, if any, and (iii) the annual interest from the date of

purchase to the date of actual redemption.

When the company purchases its own debentures in the open market, it may have to pay a higher or a lower price than the face value of its debentures. The difference between the face value of debentures and the price at which they are purchased, will be the profit or loss on their cancellation. Hence, when own debentures are purchased for cancellation, the entry should also account for such prqfit or loss. Thus, the journal entry will be as follows.

In case of profit

Debentures A/c	Dr.	(Nominal Value)
To Bank A/c		(Price Paid)
To Profit on Redemption of Debenture A/c		(Profit)

In case of loss

Debentures A/c	Dr.	(Nominal Value)
Loss on Redemption of Debentures A/c	Dr.	(Loss)
To Bank A/c		(Price Paid)

The profit or loss on redemption of debentures is of capital nature. Hence, if there is profit, the same should be transferred to capital reserve and if there is loss, it should be written off against capital reserve or any capital profit. The following additional entry will be made for the purpose.

In case of profit

Profit on Redemption of Debentures A/c	Dr.
To Capital Reserve A/c	

In case of loss

Capital Reserve A/c (if available)	Dr.
Premium on Shares A/c (if available)	Dr.
To Loss on Redemption of Debentures A/c	

Payment of Interest on Debentures: When the company purchases its own debentures in the open market and cancels them, it reduces the debenture interest payable. It is because the interest in that case is payable only on the outstanding debentures. Hence, while making the entries for payment of interest, we should ensure that Debenture Interest Account is debited only in respect of the outstanding debentures and not the total debentures. Loot at Illustration 7 and see how entries are passed when debentures are purchased for immediate cancellation and how debenture interest is accounted for.

Illustration 7

A company has 1,000 12% Debentures of Rs. 100 each outstanding on January 1, 1989. The company pays interest on June 30 and December 31 every year. On March 1, 1989, it purchased 200 own debentures for immediate cancellation at Rs. 97 per debenture. Journalise the above transactions.

Solution

Journal

1989			Rs.	Rs.
March 1	12% Debentures A/c To Bank A/c To Profit on Red. of Deb. A/c (Purchase of 2W debenturcs at Rs. 97 for immediate cancellation)	Dr.	20.000	 19,400 600
June 30	Debenture Interest A/c To Bank A/c (Interest on 800 debentures paid for 6 months)	Dr.	4,800	 4,800
Dec. 31	Debenture Interest A/c To Bank A/c (Interest on 800 debentures paid for 6 months)	Dr.	4,800	 4,800
" 31	Profit on Red. of Deb. A/c To Capital Reserve A/c (Profit on redemption of 200 debenturcs transferred)	Dr.	600	 600

" 31	Profit & Loss A/c To Debenture Interest A/c (Interest on 800 Deb. for the year transferred)	Dr.	9,600	9.600

Note: The cum-interest and ex-interest aspects have been ignored.

13.6.4 Redemption by Conversion

Debentures can also be redeemed by converting them into new debentures or shares.

If it is decided to redeem the existing debentures by conversion into new debentures, the company has to follow the prescribed procedure for tlie purpose and give the necessary option to the debentureholders who will take their own decision. It cannot be made compulsory unless the terms of the issue had provided for such conversion. In case of debentures for which the option for such conversion has been exercised, the entry will be as follows.

Debentures (old) A/c Dr.
To Debentures (new) A/c

As for redemption by conversion into shares, it can be done only in case of convertible debentures. Non-convertible debentures cannot be converted into shares as per the latest rules prescribed by the Controller of Capital Issues. The conversion into shares may be optional or compulsory depending npon the terms at which convertible debentures had been issued. It may also involve premium on shares which was indicated at the time of issue or as approved by the Controller of Capital Issues at the time of conversion. The entries for conversion of debentures into equity shares are as follows:

When shares are issued at **par**
Debentures A/c Dr.
Td Equity Share Capital A/c

When Shares are issued at a **Premium**
Debentures A/c Dr.
To Equity Share Capital A/c
To Share Premium A/c

Look at Illustration 8 and see how entries are made for redemption of debentures into equity shares.

Illustration 8

Ajanta Ltd. issued and allotted 2,000 12% fully Convertible Debentures of Rs. 200 each on January 1, 1988. Interest on these debentures was payable half-yearly on June 30 and December 31 each year. 25% of the face value of each debenture is lo be converted into two equity shares of 10 each at a premium of Rs. 15 per share on the expiry of six months after allotment and tlie balance into 6 equity shares of Rs. 10 eacli at a premium of Rs. 15 per share after 18 months of allotment.

Give Journal entries for the above in the books of the Company assuming that the conversions were duly made.

Solution

Journal

1988 Jan. 1	Bank A/c To 12% FC Debenture Application A/c (Application money @ Rs. 200 on 2,000 debentures received)	Dr.	4,00,000	4,00,000
" 1	Debenture Application A/c To 12% FC Debenture A/c (2,000 debentures allotted as per Directors' Resolution no .... dated ....)	Dr.	4,00,000	4,00,000

Date	Particulars		Dr. (Rs.)	Cr. (Rs.)
June 30	Debenture Interest A/c To Bank A/c (Interest on Rs. 4,00,000 @ 12% for 6 months)	Dr.	24,000	24,000
" 30	12% FC Debentures A/c To Equity Share Capital A/c To Share Premium A/c (25% of Debentures' face value converted into 4,000 equity shares of Rs. 10 each at a premium of Rs. 15/- per share)	Dr.	1,00,000	40,000 60,000
Dec. 31	Debenture Interest A/c To Bank A/c (Interest @ 12% for 6 months on Rs. 3,00,000)	Dr.	18,000	18,000
1989 June 30	Debenture Interest A/c To Bank A/c (Interest @ 12% for 6 months on Rs. 3,00,000)	Dr.	18,000	18,000
" 30	12% FC Debentures A/c To Equity Share Capital A/c To Share Premium A/c (Conversion into 12,000 shares of Rs. 10 each at a premium of Rs. 15 per share)	Dr.	3,00,000	1,20,000 1,80,000

Working Notes

1. 25% of the face value of debentures was to be converted into two equity shares of Rs. 10 each at a premium of Rs. 15 per share after six months of allotment i.e., on 30th June, 1988. Total amount of debentures to be converted is 25% of Rs. 4,00,000 i.e., Rs. 1,00,000 and the number of equity shares is $2,000 \times 2 = 4,000$.

2. The remaining debentures were to be converted after 18 months of allotment i.e. on 30th June, 1989. The remaining balance was Rs. 4,00,000 – Rs. 1,00,000 i.e. Rs. 3,00,000 and the number of shares issued on conversion was $2,000 \times 6 = 12,000$.

Check Your Progress B

1. List the various ways by which debentures can be redeemed.

....

....

2. When do you create Debenture Redemption Reserve and how?

....

....

3. A company had to redeem Rs. 5,00,000 debentures at the end of 5 years, at a premium of 5%. Such a redemption is to be done by creating a sinking fund. The Sinking Fund Table shows that Rs. 180975 invested annually at 5% will amount Re. 1 at the end of the fifth year. What amount is to be set aside each year?

....

....

....

4. Fill in the blanks.

i) Redemption of debentures by purchase in the open market saves the premium on ....of debentures.

ii) Profit on redemption of debentures is treated as .... profit.

iii) The balance of Debenture Redemption Fund Account after redemption of debentures is transferred to ....

iv) Conversion of debentures into equity shares may also involve ....

v) Debentures can also be redeemed by conversion into shares and ....

13.7 LET US SUM UP

Apart from issuing .share capital a company can raise long-term finance by issuing debentures which carry a fixed rate of interest. The interest on debentures is usually paid twice a year. This interest must be paid whether the company earns profits or incurs losses. The company can issuemany types of debentures viz., naked or mortgage debentures, redeemable or irredeemable debentures, convertible or unconvertible debentures, and registered or bearer debentures. The type of debentures to be issued is always mentioned in the terms of the issue.

Debentures may be issued at par. at a premium or at a discount. The entries for issue of debentures are similar to those of issue of shares. They can also be issued as a collateral security for which no specific entry is passed. Debentures can be issued with different terms with regard to their redemption. When debentures are to bc redeemed at a premium, the same is treated as loss on issue of debentures and is debited as such at the time of issue. Such loss. like discount, must be written off during the period for which the debentures are issued.

In most cases, the debentures are redeemable at the end of certain period which is specified at the time of their issue. There are many ways by which the debentures can be redeemed, They may be redeemed

i) On maturity i.e., after the expiry of the period for which the debentures had been issued. The company can create a sinking fund or take an insurance policy for redemption of debentures on maturity.

ii) By instalments i.e., a fixed number of debentures are redeemed at the end of each year. This reduces the burden of interest on the company.

iii) By purchasing its own debentures in the market which may'be cancelled immediately. This enables the company to utilise its surplus funds.

iv) By conversions of debentures into new debentures or equity shares. The company must conform to the rules given in the Companies Act and also the guidelines issued by Controller of Capital issues from time to time.

13.8 KEY WORDS

Bearer Debentures: Debentures which are transferable by delivery only,

Debentures: A document acknowledging a debt by a company.

Debentures Redemption Fund: Sinking Fund created to redeem debentures.

Fully Convertible Debentures: Debentures whose full amount is convertible into equity shares of the company.

Irredeemable Debentures: Debentures which are not repayable until the company goes into liquidations.

Naked Debentures: Debentures which are not secured by any mortgage of asset.

Partially Convertible Debentures: Debentures which are only partially convertible into equity shares of the company.

Redeemable Debentures: Debentures which are repayable after the stipulated period.

Registered Debentures: Debentures which are registered in the name of the holder **with** the company and can be transferred only through proper transfer deed.

Secured Debentures: Those Debentures which are secured by the mortgage of some assets of the company.

13.9 ANSWERS TO CHECK YOUR PROGRESS

'A 1 i) Rs. 8,000 in first, second and third year, Rs. 6000 in fourth year, Rs. 4,000 in fifth year and Rs. 2,000 in the sixth year.

ii)

		Dr.	Cr.
Bank A/c	Dr.	1,00,000	
Loss on Issue of Debentures A/c	Dr.	5,000	
To Debenture A/c			1,00,000
To Premium on Redemption A/c			5,000

iii)

		Dr.	Cr.
a) Machinery A/c	Dr.	20,000	
To Mohan			20,000
b) Mohan	Dr.	20,000	
To Debentures A/c			20,000

2 i) borrowed ii) owner, lender iii) fixed . iv) fully convertible v) Debenture Suspense.

B 3 Rs. 95,011.87

4 i) redemption ii) capital iii) premium iv) general reserve v) new debentures

13.10 TERMINAL QUESTIONS/EXERCISES

Questions

1 What are the various types of debentures? Describe each one of them briefly.

2 What are the provisions of Companies Act regarding the issue of debentures at a discount?

3 Describe the accounting treatment of debentures issued as a collateral security by the company.

4 Discuss the various ways in which a company can redeem its debentures.

5 Explain the Sinking Fund Method of redemption of debentures giving the accounting entries involved at various stages.

6 What is a debenture? How does it differ from a share:

Exercises

1 A company issues 2,000 debentures of Rs. 1,000 each. Journalise the following transaction if

a) a debenture is issued at Rs. 960, redeemable at Rs. 1,000
b) a debenture is issued at Rs. 950, redeemable at Rs. 1,050
c) a debenture is issued at Rs. 1,000 redeemable at Rs. 1,100
d) a debenture is issued at Rs. 1,000, redeemable at Rs. 1,000
e) a debenture is issued at Rs. 1,200. redeemable at Rs. 1,000

2 Akash Ltd. issued 5,000 12% Debentures of Rs. 200 each at a discount of 4% on January 1, 1984 payable in full on application. These debentures are to be redeemed at the end of the 6th year at a premium of 5%.

Give journal entries relating to the above for 6 years assuming that the debentures were duly redeemed.

(Answer: Loss on issue of debentures Rs. 90,000 to be written off equally over 6 years i.e., Rs. 15,000 each year)

3 Anita Ltd. issued 10,000 Debentures of Rs. 100 each at par on January 1,1985 redeemable at par on December 31, 1989. The company has decided to establish a Sinking Fund for the purpose of redemption. It was expected that the investments will earn 5% net. The Sinking Fund Table shows that the sum of Rs. 0.180975 invested annually at 5% compound interest will amount to Re. 1 at the end of the 5th year. On December 31, 1989 the sale of Sinking Fund Investments realised Rs. 7,72,000. The company's bank balance stood at Rs. 3,18,000. The debentures were duly redeemed. Prepare necessary ledger accounts.
(Answer: Loss on sale of investments Rs. 8,024.87)

4 Sunanda Ltd. had Rs. 7,50,000 6% debentures outstanding on January 1,1988. On the same date, the Debenture Redemption Fund stood at Rs. 5,81,800 and the Debenture Redemption Fund Investments represented by 15% Government securities at Rs. 5,81,800. The annual contribution to Debenture Redemption Fund is Rs. 65,400.. The investments were sold for Rs. 6,78,000 on December 31, 1989 and debentures redeemed. Prepare the necessary ledger accounts.

(Answer: Loss on sale of DRF Investments Rs. 1710; Balance of DRF Account transferred to General Reserve Rs. 7,77,214.

5. Anupam Ltd. issued 6,000 10% Debentures of Rs. 200 each at a discount of 5% on January 1, 1984 payable in full in application. One-third of the nominal value of debentures is to be redeemed at the end of the third year and the balance in two equal instalments at the end of the fourth and fifth years respectively.

Prepare 10% Debentures Account, Debenture Interest Account and Discount on Issue of Debentures Account for 5 years.

(**Answer :** Discount written off 1st year Rs. 15,000; 2nd year Rs. 15,000; 3rd year Rs. 15,000; 4th year Rs. 10,000 and 5th year Rs. 5,000.)

6. Ahuja Ltd. purchased 400 of its own 12% Debentures of Rs. 100 each on March 1, 1989 @ Rs. 98.80. Interest on these debentures is payable half-yearly on June 30, and December 31, each year. The debentures were immediately cancelled after purchase. Pass the necessary journal entries ignoring-cum-interest aspect.

(**Answer :** Profit on Redemption Rs. 1,280).

Note: These questions will help you to understand the unit better. Try to .write answers for them. But do not submit your answers to .the University for assessment. These are for your practice only.

UNIT 14 PURCHASE OF BUSINESS AND PROFITS PRIOR TO INCORPORATION

Structure

14.0 Objectives
14.1 Intioduction
14.2 Meaning and Need
14.3 Purchase Consideration
14.4 Goodwill or Capital Reserve
14.5 Accounting Entries
14.6 Interest to Vendors
14.7 Debtors and Creditors Taken over for Collection and Payment on behalf of the Vendors
14.8 Profits Prior to Incorporation
14.9 Some Comprehensive Illustrations
14.10 Let Us Sum Up
14.11 Key Words
14.12 Answers to Check Your Progress
14.13 Terminal Questions and Exercises

14.0 OBJECTIVES

After studying this unit, you should be able to:

- explain the meaning of purchase of business in the context of company accounts
- describe how purchase consideration is ascertained
- make the necessary journal entries in the books of the company on purchase of existing business and prepare its opening balance sheet
- make necessary accounting entries in case the company decides to take over the debtors and creditors of the vendors for collection and payment on their behalf
- explain the meaning of profit prior to incorporation and describe the accounting treatment for the same.

14.1 INTRODUCTION

In Units 12 and 13 you learnt about the accounting entries for the issue and redemption of shares and debentures by a company. You also learnt that shares could be issued for consideration other than cash to the vendors who supplied some assets to the company. Sometimes, the company acquires the whole running business owned by a sole proprietor or a partnership firm. In such a situation, it takes over all the assets and liabilities of the firm and issues its shares and debentures to the owners of the firm as purchase consideration thereof. Similarly when partners of a firm decide to convert the partnership firm into a limited company, they transfer all assets and liabilities of the firm to the newly formed company and take the shares and debentures of that company in lieu thereof. Such an arrangement is termed as 'purchase of business' by a company. From the accounting point of view, this involves the ascertainment of the purchase consideration and making the necessary entries in the books of the company for the assets and liabilities taken over and for the payment of the purchase consideration. In this unit, we shall discuss all these aspects in details.

14.2 MEANING AND NEED

A purchase of business refers to the acquisition of a running business. Such business may be awned by a corporate body like a joint stock company or by a non-corporate body like a proprietory concern or a partnership firm. In the context of company accounts, when the business acquired by a company is owned by another company, it is called 'absorption' or 'merger' which involves a cumbersome legal process and a highly specialised accounting treatment. Here, the term 'purchase of business' is confined to the acquisition of running business owned by a sole proprietor or by a partnership firm.

Why should a company go in for acquiring an existing business instead of starting its own business? The answer is very simple. If a company wants to start a new business of its own, it will have to buy land at a suitable location, construct buildings, and identify and instal plant and machinery which may lake many years. Hence, in order to save time, effort and money, the management may decide to acquire an existing business provided such an opportunity is available. Sometimes, the partners of a firm who want to expand their business or diversify into more profitable lines, may decide to convert the firm into a limited company so that they will be able to raise more capital and enjoy the benefit of limited liability. In such a situation, the very objective of the formation of company is to acquire the existing business of the firm.

Purchase of business involves the taking over of assets and liabilities of a firm for an agreed amount of purchase consideration. Now let us learn how the amount of purchase consideration is arrived at and whether it includes some amount for goodwill or not, and study the accounting entries passed in the books of the purchasing company for the assets and liabilities taken over and for the payment of purchase consideration.

14.3 PURCHASE CONSIDERATION

Purchase consideration refers to the amount of price payable by the purchasing company to vendors of the running business. This amount may be mutually agreed to by the purchasing company and the vendors on the basis of the assets and liabilities taken over.

There are three methods to ascertain the atnount of purchase consideration: (1) Lump sum method (2) net payment method, and (3) net assets method.

1 **Lump sum** method: In most cases, the purchasing company and the vendors agree on a lump sum amount as the total purchase consideration for the business taken over. For example, it may be agreed that all the assets and liabilities of a firm will be taken over by the purchasing company for a sum of Rs. 5,00,000. In this case, Rs. 5,00,000 will be the amount of purchase consideration.

2 Net payment method: If lump sum amount is not specified but the detail of shares and debentures issued to partners and the cash paid to them are given, the purchase consideration can be worked out by aggregating these amounts. For this purpose, the share and debentures issued to the vendors will be taken at their issue price and not the nominal price. For example, a company which has taken over the business of a firm agrees to issue 10,000 shares of Rs. 10 each at a premium of Re. 1 per share, 500 debentures of Rs. 100 each at a discount of 5% and pay Rs. 30,000 in cash to the partners of the firm. In this case, the purchase consideration shall be worked out as follows:

	Rs.
10,000 shares of Rs. 10 each (at a premium of Re. 1 per share)	1,10,000
500 debentures of Rs. 100 each (at a discount of 5%)	47,500
Cash	30,000
Purchase Consideration	1,87,500

Under this method if, any amount of winding up cost incurred by the firm is borne by the company, the same shall also be added to the purchase consideration. Similarly, if the company also agrees to pay any external liability which has not been taken over by it, the actual amount paid for such liability at the time of acquisition shall also be included in the purchase consideration.

3 **Net** assets method: Where neither the lump sum amount of purchase consideration is given nor the details of shares, debentures, etc. issued to the owners and the creditors are available, the purchase consideration shall be worked out on the basis of the net assets (assets minus liabilities taken oves by the company). For this purpose, we shall take into account the agreed value (not the book value) of the assets and liabilities taken over by the company. To this we shall add the agreed amount of goodwill, if any. Sometimes, the assets and liabilities taken over by the company are not clearly specified. In such a situation, the assets like goodwill, patents, etc. *are* also included.

But, the fictitious assets like debit balance of Profit and Loss Account, the unwritten off amount of deferred revenue expenditure, etc. are not included. Thus, purchase consideration under net assets method is calculated as follows.

	Rs.
Agreed value of assets taken over	....
Agreed value of goodwill	....
	....
Less: agreed value of liabilities taken over	....
Purchase Consideration	....

14.4 GOODWILL OR CAPITAL RESERVE

When the purchase consideration is calculated on the basis of net assets acquired, the amount of goodwill is clearly stated. But, when the purchase consideration is given as a lump sum amount or it is calculated on the basis of net payments made, the goodwill can be ascertained by comparing the purchase consideration with the amount of net assets acquired.

If the amount of purchase consideratian is more than the value of net assets acquired, the difference is attributed to goodwill. On the other hand, if the value of net assets acquired is more than the purchase consideration, the difference may be treated as Capital Reserve. It represents a provision against the possible fall in the value of some assets whose values could not be ascertained at this stage. It should be noted that goodwill or capital reserve arises only when the purchase consideration is given as a lump sum or is calculated on the basis of net payments.

14.5 ACCOUNTING ENTRIES

When a business is bought, entries are made in the books of both parties, the vendors as well as the purchaser. You learnt about the entries in the books of the vendors in Unit 10 sub-section 10.5.3 which deals with sale to a company by the firm. Here, we shall discuss the entries to be made in the books of the purchasing company. The company usually makes three entries at the time of purchase of business. The first entry relates the purchase consideration, the second relates to the assets and liabilities taken over, and the third relates to the payment to vendors. The first entry for purchase consideration is as follows:

Business Purchase Account	Dr.
To Vendors	
(Being business purchased from the vendors for the given amount)	

The second entry, as stated earlier, relates to the incorporation of assets and liabilities taken over by the company. It should be noted that the assets should be shown at the agreed market or realisable value and not the book value as given in the Balance Sheet of the vendor. In case the market value is not given, the book value may be taken as the market value. The accounts of all assets taken over including the value of goodwill as agreed between the contracting parties should be debited and the accounts of liabilities taken over should be credited along with Business Purchase Account. It should also be remembered that the account of sundry debtors if taken over should be debited with the gross amount and the provision for doubtful debts should be credited along with other liabilities taken over. Thus entry will be as under:

Cash Account	Dr.
Sundry Debtors Account	Dr.
Stock Account	Dr.
Prepaid Expenses Account	Dr.
Goodwill Account (if any)	Dr.
To Provision for Doubtful Debts Account	
To Sundry Creditors	
To Business Purchase Account	
To Capital Reserve A/c (if any)	
(Being incorporation of assets and liabilities taken over)	

It should be noted here that if the purchase consideration is calculated on the basis of net assets method, the account of goodwill shall be debited with the agreed value of goodwill. But, in case the purchase consideration is given as a lump sum amount or is calculated on the basis of net payments, goodwill or capital reserve will be the balancing figure.

The third entry is for payment to the vendors. The Vendors Account should be debited and the Bank Account or Share Capital Account should be credited. It should be noted that if shares are issued at a premium, the Share Premium Account should be credited with the premium amount and the Share Capital Account should be credited with the nominal value of shares issued. Similarly if shares or debentures are issued at a discount, Discount on Issue of Shares (or Debentures) Account should be debited with the amount of discount allowed but the Share Capital or Debentures Accounts shall be credited with the nominal value of shares or debentures issued. Thus the journal entry in this respect will be as follows:

Vendors Dr.
Discount on Issue of Shares Account (if any)
Debentures Account (if any) Dr.
To Bank Account
To Share Capital Account
To Share Premium Account (if any)
To Debentures Account
(Being cash paid and shares or debentures issued to Vendors)

Sometimes the purchasing company also agrees to pay the cost of winding up of the business acquired. As stated earlier the amount of such cost should be added to the purchase consideration. As a result of such inclusion either goodwill (if any) shall increase or capital reserve (if any) shall decrease. But, in case the cost of winding up agreed to be paid by the purchasing company is not included in the purchase consideration, a separate entry will have to be made which will be as follows:

Goodwill/Capital Reserve A/c Dr.
(as the case may be)
To Bank A/c
(Being cost of winding up paid)

These are the main entries required to be made for the purchase of business. Additional entries may be required in case shares are also issued to the public. The procedure of making such entries on issue, forfeiture and reissue of shares have already been discussed in Unit 12 of this block. Look at Illustration 1 and study how is the purchase consideration arrived at, how various journal are made in the books of the company and the opening Balance Sheet prepared.

Illustration 1

The following is the Balance Sheet of Ram and Shyam as on 31st December, 1988 who were carrying on business as partners:

Balance Sheet of Ram and Shyam as on 31.12.88

Liabilities		Rs.	Assets	Rs.
Creditors		16,000	Cash in hand	4,000
Bills Payable		6,000	Debtors	22,000
Reserve Fund		10,000	Stock	30,000
Capital Accounts:			Furniture	4,000
Ram	40,000		Machinery	26,000
Shyam	23,000	63,000	Prepaid Expenses	2,000
			Goodwill	7,000
		95,000		95,000

A limited company named Rashmi Ltd. was formed to take over the business of Ram and Shyam as from 1st January, 1989. The Company agreed to take over all the assets and liabilities at book values with the exception of goodwill which was agreed to be worth Rs. 20,000. The authorised share capital of the Company was Rs. 5,00,000 divided into equity shares of Rs. 10 each. The vendors were to be allotted 6,000 equity shares of Rs. 10 each at a premium of Rs. 2 per share and the balance amount to be paid in cash. The

company also issued 10,000 equity shares to the public at a premium of Rs. 2 per share payable in full on application. The public issue was fully subscribed and tlie shares allotted.

Calculate purchase consideration, give journal entries and prepare the opening Balance Sheet of the Company. Give working notes wherever necessary.

Solution

Working Note

The Company has agreed to take over all the assets at their book values excepting goodwill which is considered wueth Rs. 20,000. It should be noted that there is no fictitious asset involved. The purchase consideration is to be calculated on the basis of net assets. The values of all the assets taken over as agreed to are to be aggregated and the book values of external liabilities i.e., creditors and bills payable are to be deducted therefrom to find out the purchase consideration.

Calculation of Purchase Consideration:

Agreed value of assets taken over :			
	Cash in hand	4,000	
	Debtors	22,000	
	Stock	30,000	
	Furniture	4,000	
	Machinery	20,000	
	Prepaid Expenses	2,000	
	Goodwill	20,000	1,08,000
Less value of liabilities taken over :			
	Creditors	16,000	
	Bills Payable	6,000	22,000
	Purchase consideration		86,000

As the Company has agreed to issue 6,000 equity shares of Rs. 10 at a premium of Rs. 2 per share against the purchase consideration and the balance payable in cash, the amount of cash payable will be Rs. 86,000 – (6,000× 12) = Rs. 86,000 – Rs. 72,000 i.e., Rs. 14,000 to be paid in cash.

As the company is a new one, it should issue shares to the public first. Hence, first the entries for public issue and thereafter the entries for business purchase shall be made.

Journal

			Debit Rs.	Credit Rs.
1	Bank A/c	Dr.	1,20,000	
	To Equity Share Application A/c			1,20,000
	(Being application money on 10,000 equity shares received)			
2	equity Share Application A/c	Dr.	1,20,000	
	To Equity Share Capital A/c			1,00,000
	To Share Premium A/c			20,000
	(Being amount of share capital and premium transferred)			
3	Business Purchase A/c	Dr.	86,000	
	To Vendors A/c			86,000
	(Being the business of Ram & Shyam purchased for Rs. 86,000)			
4	Cash A/c	Dr.	4.000	
	Debtors	Dr.	22,000	
	Stock A/c	Dr.	30.000	
	Furniture A/c	Dr.	4,000	
	Machinery A/c	Dr.	26,000	
	Prepaid Expenses A/c	Dr	2,000	
	Goodwill A/c	Dr.	20,000	
	To Creditors			16,000
	To Bills Payable A/c			6,000
	To Business Purchased A/c			86,000
	(Being various assets and liabilities taken over incorporated)			

5	Vendors Dr. To Bank A/c To Equity Share Capital A/c To Share Premium A/c (Being 6,000 equity shares allotted to Vendors at a premium of Rs. 2 each and the balance paid in cash)	86,000	 14.000 60,000 12,000

Opening Balance Sheet of Rashmi Ltd.

Liabilities	Amount	Assets	Amount
	Rs.		Rs.
Authorised Capital		Fixed Assets	
50,000 equity shares		Goodwill	20,000
of Rs. 10 each	5,00,000	Machinery	26,000
Issued, Subscribed &		Furniture	4,000
Paid up capital			
16,000 equity shares		Investments	—
of Rs. 10 each fully			
paid	1,60,000	Current Assets	
		Loans & Advnnces	
(Out of the above		Cash in hand	4,000
6,000 shares are issued		Cash at Bank	1,06,000
for consideration other			
than cash)		Debtors	22,000
Reserves & Surpluses		Stock	30,000
Share Premium	32,000	Prepaid Expenses	2,000
Secured Loans	—	Miscellaneous Exp.	—
Unsecured Loans	—	(to the extent	
		not written off)	
Current Liabilities			
& Provisions		Profit & Loss A/c	—
Creditors	16,000		
Bills Payable	6,000		
	2,14,000		2,14,000

14.6 INTEREST TO VENDORS

Payment of the purchuse consideration to the vendors can only be made after the company has been incorporated and shares issued to the public and money received. The business is normally purchused with effect from the opening date of the accounting yeur of the business which rnay be much earlier than tlie date of incorporation. Hence the vendors can rightly claim and are entitled to interest on the amount of purchase consideration at an agreed rate from the date of purchase to the dale of final payment. Usually there is a provision to this effect in the purchase agreement,

14.4 DEBTORS AND CREDITORS TAKEN OVER FOR COLLECTION AND PAYMENT ON BEHALF OF THE VENDORS

Sometimes, the purchasing company may not like to take over the debtors and creditors of the vendors but may simply agree to collect the debtors and pay to the creditors on behalf of the vendors. Under such u situation, the purchasing company will have to open three accounts viz., (1) Vendors' Debtors Account (2) Vendors' Creditors Account, and (3) Vendors' Suspense Account. The term vendors is added to the three accounts to distinguish them from the company's own debtors, creditors and suspense accounts. The Vendors' Debtors Account will be debited with the amount of debtors taken over for collection and the Vendors' Creditors Account will be credited with the amount of creditors taken over for making payment. Any difference between the two shall be transferred to Vendors' Suspense Account, As normally the amount of debtors is more than the amount of creditors, Vendors' Suspense Account stand credited. The usual entries required to be done in this respect are as follows:

a) For taking over the debtors and creditors
Vendors' Debtors Account Dr.
To Vendors' Creditors Account
To Vendor's Suspense Account

b) For cash collected from debtors
Cash Account Dr.
To Vendors' Debtors Account

c) For discount allowed to debtors and any bad debts
Vendors' Suspense Account Dr.
To Vendors' Debtors Account

d) For recovery of bad debt previously written off
Cash Account Dr.
To Vendors' Suspense Account

e) For making payment to the creditors
Vendors' Creditors Account Dr.
To Cash Account

f) For discount or any other allowance given by creditors
Vendors' Creditors Account Dr.
To Vendors' Suspense Account

g) For payment to an unrecorded creditor
Vendors' Suspense Account Dr.
To Cash Account

h) For commission agreed to be received for the work
Vendors' Suspense Account Dr.
To Commission Account

i) For final settlement (payment)
Vendors' Suspense Account Dr.
To Cash. Account

Illustration 2

Alfa Limited purchased the business of X and Y acquiring all the assets and liabilities excluding the debtors and creditors. However, the company agreed to collect the debtors on a commission of 2% on amount collected and to pay to the creditors on a commission of 1% on actual payment made on behalf of the vendors. The debtors and creditors taken over for collection and payment amounted to Rs. 58,000 and Rs. 42,000 respectively. A sum of Rs. 57,000 was collected from the debtors including Rs. 1,500 previously written off as bad debt. Discount allowed to debtors was Rs. 700 and a sum of Rs. 1,800 proved irrecoverable. Creditors were paid at a discount of $1\frac{1}{2}\%$ on an average. The company has to make payment for a bill discounted but dishonoured by the drawee. The amount of the bill was Rs. 2,000.

The company settled the account by making final payment to the vendors after deducting its own commission as agreed. Give journal entries in the books of Alfa Limited in respect of the above transactions.

Solution

Journal of Alfa Limited

1	Vendors' Debtors Account Dr. To Vendors' Creditors Account To Vendors' Suspense Account (Being Vendors' debtors and creditors taken over for collection and payment on their behalf)	58,000	42,000 16,000
2	Cash Account Dr. To Vendors' Debtors Account To Vendors' Suspense Account (Being cash collected from debtors including Rs. 1,500 previously written off as bad debt)	57,000	55,500 1,500

3	Vendors' Suspense Account To Vendors' Debtors Account (Being discount allowed Rs. 700/- and irrecoverable debt Rs. 1,800 written off)	Dr.	2,500	2,500
4	Vendors' Creditors Account To Cash Account (Being creditors paid at a discount of $1\frac{1}{2}$ %)	Dr.	41,370	41,370
5	Vendors' Creditors Account To Vendors' Suspense Account (Being cash discount allowed by creditors)	Dr.	630	630
6	Vendors' Suspense Account To Cash Account (Being payment made for a discounted B/R dishonoured)	Dr.	2,000	2,000
7	Vendors' Suspense Account To Commission Account (Being commission charged on cash collected Rs. 57,000 @ 2% and on)	Dr.	1,574	1,574
8	Vendors' Suspense Account To Cash Account (Being payment made to the Vendors as final settlement)	Dr.	12,056	12,056

Note: The students are advised to prepare the relevant account's and see for themselves that the three accounts viz., the Vendors' Debtors Account, Vendors' Creditors Account and Vendors' Suspense Account are closed and the cash account shows a balance of Rs. 1,574 being commission received by the company for the work,

14.8 PROFITS PRIOR TO INCORPORATION

As has been discussed earlier (Section 14.6), the acquisition of business usually commences from the beginning of the accounting year of the business. But, the incorporation of the company which takes over the said business may not commence on the same date. It may be much later. Hence, the profit of such business have to be divided into two parts: (1) Profits from the date of the beginning of the accounting year of the business upto the date of incorporation of the company, and (2) Profits from the date of incorporation of the company upto the closing of the accounting year of the business. The former is known as 'Profits prior to Incorporation' and the latter as 'Profits after Incorporation'.

The whole amount of profits belongs to the company, But since legally it cannot do any business before its incorporation, the profits earned by the company for the period falling before the date of incorporation is regarded as capital profit and is transferred to Capital Reserve. This amount can be utilised only for writing off the losses of capital nature. They are not available for declaring dividend to shareholders. Thus you can appreciate the need to calculate the profits prior to incorporation.

If the company could prepare the final accounts separately for the two periods, there will be no problems in ascertaining the profits prior to incorporation. But, it is neither convenient nor economical to prepare the final accounts twice. Hence, the company prepares its final accounts in the usual manner at the end of the accounting year, work out its profits for the whole year and then divide them into two periods on some appropriate basis. Thus the **whole problem of ascertaining the profits prior to incorporation relates to the Choice of appropriate basis which can be used for dividing the whole year's profits into two parts.** For this purpose we divide first the gross profit on the basis of sales during the two periods. For example, if the gross profit for the year works out at Rs. 1,05,000 and we find that sales during the pre-incorporation and post-incorporation periods were Rs. 6,00,000 and Rs. 15,00,000 respectively. The gross profit can be divided in the ratio of 2:5. This means that the gross profit for pre-incorporation period is Rs. 30,000 and for the post-incorporation period Rs. 75,000. Then we divide the indirect expenses (those appearing in the Profit and

Loss Account) between the two periods on some rational basis, taking each item of expense separately. Certain expenses like advertising, travelling expenses, etc. are related to sales, they can be divided in this sales ratio. Similarly certain expenses like rent, salaries etc. are related to time, they can be divided in the time ratio. Then there are some expense which may be related purely to pre-incorporation period or to post-incorporation period. These will have to be charged accordingly. Thus we can adopt the following bases f r dividing various expenses between the two periods.

a) Expenses related to sales should be divided in the ratio of sales. These are: carriage or cartage outward, cartage or carriage on sales, selling expenses, commission to selling agents or travelling agents, advertisement expenses, discount allowed, bad debts (if actual bad debts for the two periods are not given), etc.

b) Expenses of a fixed nature are related to time and should be charged according to time ratio. These are: rent and rates, salaries, office expenses. general charges, printing and stationery, depreciation, sundry or miscellaneous expenses, postage and telegrams, telephone charges, etc.

c) Expenses relating to pre-incorporation period should be charged to pre-incorporation period such as partners' salaries.

d) Expenses that are solely for the company should be charged to post-incorporation period such as interest on debenture directors' fees, managing director's remuneration, share issue expenses, preliminary expenses, etc.

e) Audit fee or auditor's remuneration can be charged on the basis of time or to the post-incorporation period only.

f) Interest to vendors shall be charged on the basis of time falling in the two periods but this time ratio will be quite different from the usual time ratio because the date of payment may be earlier than the close of the accounting year.

To calculate the profits for the two periods a columnar Profit and Loss Account with two amount columns on each side, one for pre-incorporation and the other for post-incorporation period is prepared. The pre-incorporation profit is transferred to Profit prior to Incorporation Account and the post-incorporation profit is transferred to Profit & Loss Appropriation Account.

Illustration 3

A limited company Pronto Ltd. was formed to take over the partnership business of Abhishek and Abhinav as from 1st Jan., 1988. The Profit and Loss Account of the business for the year ended 31st December, 1988 is as follows.

Profit and Loss Account

Dr.	Rs.		Cr. Rs.
To Rent and Rates	12,000	By Gross Profit	3,50,000
To Salaries	24,000		
To Directors' Fees	6,000		
To Interest on Debentures	5.000		
To Audit Fees	4.500		
To Discount allowed	10.500		
To Depreciation	54,000		
To General Expenses	9,000		
To Advertising	31,500		
To Carriage outward	7,000		
To Printing & Stationery	6.000		
To Commission on sales	21,000		
To Postage & Telegrams	7,500		
To Bad Debts	10,500		
To Preliminary Expenses	4,000		
To Telephone Charges	12,000		
To Managing Director's Remuneration	20,000		
To Repairs & Renewals	7,500		
To Interest to Vendors	15,000		
To Net Profit	83,000		
	3,50,000		3,50,000

Pronto Ltd. received the certificate of Incorporation on 1st May, 1988. Total sales for the year were Rs. 28,00,000. The sales for the post-incorporation period were 25% more each month than the sales for the pre-incorporation period. The account of the vendors was. settled on 1st July, 1988 and the purchase price and interest were paid on that date.

Calculate profit or loss prior to incorporation and after incorporation with proper working notes.

Solution

Profit & Loss Account

	Pre. Inc.	After Inc.		Pre. Inc.	After Inc.
	Rs.	Rs.		Rs.	Rs.
To Rent & Rates	4,000	8,000	By G.P.	1,00,000	2,50,000
" Salaries	8,000	16,000			
" Directors' Fees		6,000			
" Deb. Interest		5.000			
" Audit Fees		4,500			
" Discount allowed	3,000	7.500			
" Depreciation	18,000	36,000			
" General Expenses	3,000	6,000			
" Advertising	9,000	22.500			
" Carriage Outward	2.000	5,000			
" Printing & St.	2,000	4,000			
" Com. on sales	6,000	15,000			
" Postage & Tele.	2,500	5,000			
" Bad debts	3,000	7.500			
" Prel. Expenses		4,000			
" Telephone Charges	4,000	8,000			
" Mg. Director's Remuneration	-	20,000			
" Repairs & Renewals	2,500	5,000			
" Interest to Vendors	10,000	5,000			
" Net Profit	23,000	60,000			
	1,00,000	2,50,000		1,00,000	2,50,000

Thus profit prior to incorporation comes to Rs. 23,000 which should be transferred by making the following entry:

Profit & Loss A/c	Dr.	23,000	
To Profit Prior to Incorporation			23,000

Working Notes

1 The company received certificate of incorporation on 1st May, 1988. Hence pre-incorporation period is 4 months from Jan. to April and post-incorporation period is 8 months from May to December. The time ratio, therefore, is 4:8 or 1:2.
The expenses divided on time ratio are:
Rent& Rates, Salaries, Depreciation, General Expenses, Printing & Stationery, Postage and Telegrams, Telephone Charges, and Repairs and Renewals.

2 Total sales of the company for the year were Rs. 28,00,000. Post-incorporation sales for each month were 25% more than the pre-incorporation sales for each month. Let us assume pre-incorporation monthly sales as x rupees
Hence total pre-incorporation Sales for the four months will be $4 \times x = 4x$
Post-incorporation sales for each month is 25% more. Hence Post-incorporation sales for each month will be
$x + 25\% \text{ of } x = 1.25x$
Total post-incorporation sales for 8 months will be
$1.25x \times 8 = 10x$
Total sales for the year $= 4x + 10x = 14x$
Hence the equation $14x =$ Rs. 28,00,000
$x =$ Rs. 2,00,000
Total Pre-incorporation sales $= 2,00,000 \times 4 =$ Rs. 8,00,000
Total Post-incorporation sales $= 2,00,000 \times 10 = 20,00,000$

Hence the sales ratio is 8,00,000 : 20,00,000 or 2:5.
The expenses divided in sales ratio arc:
Discount Allowed, Advertising, Carriage outwards, Commission on Sales and Bad Debts.

3 Interest to vendors is for 6 months as the account of the vendors was settled on 1st July, 1988, of which 4 months fall before and 2 months after the incorporation. Hence the ratio for Interest to vendors will be 4:2 or 2:1.

4 Audit fees are charged to post-incorporation period here. It can also be charged on the basis of time i.e. in the ratio of 1:2 in which case profit prior to incorporation will come down to Rs. 21,500 and post-incorporation profit will increase to Rs. 61,500.

It is generally believed that while the date of certificate of incorporation is the relevant date for calculating the pre-incorporation profits in case of a private company, the relevant date for public limited company is the date of obtaining certificate of commencement of Business. This is based on the rule that while a private company can commence business soon after its incorporation, a public limited company can do so only after obtaining the certificate of commencement of business. However, it has now been widely accepted that when a company receives the certificate of commencement of business, the company's right to carry on the business relates back to the date of incorporation. Hence, the date of incorporation should be taken as the relevant date for the apportionment of profits between pre-and-post incorporation periods even in case of a public limited company. Thus, the date of obtaining the certificate of commencement of business is irrelevant to the calculation of pre-incorporation profit. The pre-incorporation period is based on the date of the certificate of incorporation in case of both the private and the public limited companies.

Check Your Progress A

1 State whether the following statements are true or false.

- i) The excess of purchase consideration over net assets acquired is Goodwill.
- ii) Dividends can be declared out of pre-incorporation profits because they also belong to the company.
- iii) The date of Certificate of Incorporation is the relevant date for calculating pre-incorporation profits in the case of a private limited company.
- iv) The excess of net assets over purchase price can be treated as goodwill
- v) Preliminary expenses should be divided in the ratio of time.
- vi) Post-incorporation profits can be utilised for the declaration of dividends.
- vii) In the case of public limited company the date of Certificate to Commence Business is the relevant date for calculating profits prior to incorporation as the company cannot do business before that date.
- viii) Interest to vendors is charged to pre-incorporation period only.

2 Indicate the correct answer.

a) Pre-incorporation profits can be credited to
- i) Dividend Equalisation Reserve
- ii) General Reserve
- iii) Capital Reserve

b) For calculating pre-incorporation profits in the case of a public limited company the relevant date is
- i) The date of take over
- ii) The date of Certificate of Incorporation
- iii) The date of Certificate to Commence Business

c) The excess of net assets acquired over the purchase price is
- i) Cash payable to the vendors
- ii) Cost of winding up of the business taken over
- iii) Capital Reserve

d) Preliminary expenses should be charged to
- i) Pre-incorporation period
- ii) Post-incorporation period
- iii) Both

3 Calculate the ratio of time from the following details: A public limited company was formed to take over the business of a firm as from 1st October, 1988. The company received the certificate of incorporation on 31st December, 1988 and the certificate to commence business on 1st March, 1989. The accounting year ends on 30th September, 1989.

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....

4 Bright Ltd. was incorporated on 1st November, 1988 to acquire the partnership business of Ajit and Anil from 1st July, 1988. The Company received certificate to commence business on 1st January, 1989.

The average monthly sales of the Company during the pre-incorporation period were 80% of the average monthly sales during the post-incorporation period. The total sales of the company for the year ending 30th June, 1989 were Rs. 21,00,000.
Calculate the Ratio of Sales.

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....

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14.9 SOME COMPREHENSIVE ILLUSTRATIONS

Illustration 4

Topno Ltd. was incorporated on 1st April, 1988 with an authorised capital of Rs. 10,00,000 divided into 80,000 equity shares of Rs. 10 each and 2,000 14% preference shares of Rs. 100 each, It offered 20,000 equity shares to the public for subscription at par which were fully subscribed. The amount payable was Rs. 3 on application Rs. 3 on allotment and the balance in two calls of equal amount. All monies were received by the company with the exception of two calls on 400 equity shares allotted to Mr. Ramesh which were forfeited and reissued at Rs. 8 as fully paid after the second call. Preliminary expenses amounted to Rs. 10,000 which were reimbursed by the company out of the proceeds of the issue. Share Issue expenses amounting lo Rs. 8,000 including underwriting commission were also paid by the company out of the proceeds of the issue. The company decided to acquire the business of Bindal Brothers with effect from 1st January, 1988 whose Balance Sheet is given below on terms and conditions mentioned hereinafter.

Balance Sheet of Bindal Bros. as on 31.12.87

Liabilities	Amount	Assets	Amount
	Rs.		Rs.
Trade Creditors	40,000	Bills Receivable	8,000
Loan Creditors	50,000	Debtors	32,000
Creditors for expenses	4,000	Stock	40,000
Reserves	12,000	Furniture	6,000
Capital Account	60,000	Machinery	30,000
		Buildings	44,000
		Goodwill	6,000
	1,66,000		1,66,000

The company paid to the vendors Rs. 20,000 in cash and issued 10,000 equity shares at par in full settlement of their claim. A loan creditor for Rs. 26,000 was issued 14% preference shares of an equal amount at par and another loan creditor for Rs. 24,000 was issued 14% debentures at a discount of 4 per cent, The Management has decided lo revalue buildings at Rs. 1,00,000 and Machinery at Rs. 20,000. Cost of winding up of the business amounting to Rs. 2,000 was also paid by the company. Give journal entries for the above transactions in the books of the company and prepare its Balance Sheet after take over.

Solution:

Journal of Topno Ltd.

		Debit	Credit
		Rs.	Rs.
Bank A/c To Equity Share Application A/c (Being application money on 20,000 equity shares received)	Dr.	60,000	60,000
Equity Share Application A/c To Equity Share Capitol A/c (Being share application amount transferred to share capital)	Dr.	60,000	60,000

Particulars		Dr.	Cr.
Equity Share Allotment A/c	Dr.	60,000	
To Equity Share Capital A/c			60,000
(Being transfer of allotment money falling due on allotment)			
Bank A/c	Dr.	60,000	
To Equity Share Allotment A/c			60,000
(Being allotment money received)			
Equity Share 1st Call A/c	Dr.	40,000	
To Equity Share Capital A/c			40,000
(Being amount due on 1st call transferred to share capital)			
Bank A/c	Dr.	39,200	
To Equity Share 1st Call A/c			39,200
(Being 1st call money received on 19,600 shares)			
Equity Share 2nd Call A/c	Dr.	40 000	
To Equity Share Capital A/c			40 000
(Being 2nd call money due transferred to Share Cap. A/c)			
Bank A/c	Dr	39,200	
To Equity Share 2nd Call A/c			39,200
(Being 2nd call money received on 19,600 shares)			
Equity Share Capital A/c	Dr.	4,000	
To Equity Share Ist Call A/c			800
To Equity Share IInd Call A/c			800
To Share Forfeiture A/c.			2,400
(Being forfeiture of 400 shares on which two calls not paid)			
Bank A/c	Dr.	3,200	
Share Forfeiture A/c	Dr.	800	
To Equity Share Capital A/c			4,000
(Being re-issue of forfeited shares @ Rs. 8 each)			
Share Forfeiture A/c	Dr.	1,600	
To Capital Reserve A/c			1,600
(Being final profit on re-issue of 400 forfeited shares)			
Preliminary Expenses A/c	Dr.	10,000	
Share Issue Expenses A/c	Dr.	8,000	
To Bank A/c			18,000
(Being preliminary expenses re-imbursed and share issue expenses paid)			
Business Purchase A/c	Dr.	1,72,000	
To Vendors			1,72,000
(Being business purchased for consideration of Rs. 1,72,000)			
Bills Receivable A/c	Dr.	8,000	
Debtors	Dr.	32,000	
Stock A/c	Dr.	40,000	
Furniture A/c	Dr.	6,000	
Machinery A/c	Dr.	20,000	
Buildings A/c	Dr.	1,00,000	
Goodwill (balancing figure)	Dr.	10,000	
To Trade Creditors			40,000
To Creditors for Expenses			4,000
To Business Purchase A/c			1,72,000
(Being various assets and liabilities taken over)			

Vendors A/c	Dr.	1,72,000	
Discount on Issue of Deb. A/c	Dr.	1,000	
To Bank A/c			22,000
To Equity Share Capital A/c			1,00,000
To Preference Share Capital A/c			26,000
To Debentures A/c			25,000
(Being 10,000 equity and 260 pref. shares and 250 deb. issued to Vendors and cash paid Rs. 22,000)			

Balance Sheet of Topno Ltd.

Liabilities	Amount	Assets	Amount
	Rs.		Rs.
Authorised Capital:		Fixed Assets:	
80,000 Equity Shares of Rs. 10 each	8,00,000	Goodwill	10.000
2,000 14% Pref. Shares of Rs. 100 each	2,00,000	Buildings	1,00,000
		Machinery	20,000
		Furniture	6,000
	10,00,000	Investments	
Issued & Subscribed:		Current Assets, Loans and Advances:	
* 30,000 equity shares of Rs. 10 each fully paid	3,00,000	Stock	40,000
260 14% Pref. shares of Rs. 100 each fully paid	26,000	Debtors	32,000
Reserves & Surplus:		Bills Rebeivable	8,000
Capital Reserve	1,600	Cash at Bank	1,61,600
Secured Loans:		Miscellaneous Expenses (to the extent not written off):	
14% Debentures	25,000	Preliminary Expenses	10,000
Unsecured Loans:		Share Issue Expenses	8,000
Current Liabilities & Provisions		Discount on Deben.	1,000
Trade Creditors,	40,000	Profit & Loss Account	-
Creditors for Exp.	4,000		
	3,96,600		3,96,600

* Out of 30,000 equity shares issued 10,000 equity shares are issued for consideration other then cash.

Working Notes

1. 400 Equity Shares were forfeited for non-payments of two calls, Amount received per share was Rs. 3 + Rs. 3 = Rs. 6. Discount allowed on re-issue is Rs, 2 per share. Hence final profit of Rs. 4 per share on re-issue amounting to Rs. 1,600 has been transferred to Capital Reserve.

2. Calculation of Purchase Consideration

Loan Creditor 1	26,000	Pref. Shares at par
Loan Creditor 2	24,000	Debentures at a discount of 4%
Vendors (cash)	20,000	
10,000 Equity	1,00,000	Equity shares at par
Winding up exp.	2,000	cash
Total	1,72,000	

Face value of debentures to be issued to loan creditor 2 at a discount of 4% will be 24,000 x 100/96 = Rs. 25,000. But in purchase consideration his claim of Rs. 24,000 only will be included.

3. Calculation of Goodwill

Purchase Consideration as above		1,72,000
Less Net assets taken as follows:		
Bills Receivable	8,000	
Debtors	32,000	
Stock	40,000	
Furniture	6,000	
Machinery	20,000	
Buildings	1,00,000	
Total Assets	2,06,000	

Less Liabilities			
Trade Crs.	40,000		
Crs. for exp.	4,000	44,000	1,62,000
	Goodwill		10,000

Illustration 5

The following is the Balance Sheet as on **31.12.88** of Puneet and Vineet who have been carrying on business in partnership:

Balance Sheet as on 31.12.88

Liabilities	Amount	Assets		Amount
	Rs.			Rs.
Creditors	26,000	Bills Receivable		6,000
Bills Payable	10,000	Debtors	45,000	
Bank Overdraft	30,000	Less Prov.	3,000	42,000
Reserve Fund	16,000	Stock		28,000
Puneet's Capital	40,000	Furniture		8,000
Vineet's Capital	38,000	Machinery		34,000
		Buildings		42,000
	1,60,000			1,60,000

Grover Ltd. purchased the business as from 1st January, 1989 for Rs. 2,00,000 payable by the issue of equity shares of the company of **Rs.** 10 each at par. The company took over all the assets and liabilities excluding debtors and creditors. However the company agreed to collect the debtors and pay off the creditors on behalf of the vendors for a commission of **2%** on amounts collected and 1% on amounts paid.

The management of the company decided to revalue Machinery at Rs. 30,000 and Buildings at **Rs. 1,60,000.**

The collections from debtors amounted to Rs. 42,000 including Rs. 4,000 previously written off as bad debts by the vendors. Discount allowed to debtors was Rs. 400 and the balance proved irrecoverable. The creditors were paid off at a discount of Rs. 200. The company settled the account of the vendors after deducting its commission and paid a cheque for the amount due. Give Journal entries including cash for the above transactions in the books of the company. Give proper working notes wherever necessary.

Solution

Journal of **Grover** Ltd.

Particulars		Dr. (Rs.)	Cr. (Rs.)
Business Purchase A/c	Dr.	2,00,000	
To Vendors			2,00,000
(Being business purchased for Rs. 2,00,000)			
Bills Receivable A/c	Dr.	6,000	
Stock A/c	Dr.	28,000	
Furniture A/c	Dr.	8,000	
Machinery A/c	Dr.	30,000	
Buildings A/c	Dr.	1,60,000	
Goodwill A/c	Dr.	8.000	
To Bills Payable A/c			10,000
To Bank Overdraft A/c			30,000
To Business Purchase A/c			2,00,000
(Being assets and liabilities taken over)			
Vendors A/c	Dr.	2,00,000	
To Equity Share Capital A/c			2,00,000
(Being purchase price paid by allotting 20,000 shares)			
Vendors' Debtors A/c	Dr.	45,000	
To Vendors' Creditors A/c			26,000
To Vendors' Suspense A/c			19,000
(Being debtors and creditors of Vendors taken over for collection and payment on their behalf)			

Particulars		Dr. (Rs.)	Cr. (Rs.)
Cash A/c To Vendors' Debtors A/c To Vendors' Suspense A/c (Being cash collected from debtors Rs. 38,000 and bad debts recovered Rs. 4,000)	Dr.	42,000	 38,000 4,000
Vendors' Suspense A/c To Vendors' Debtors A/c (Being discount allowed Rs. 400 and irrecoverable debts Rs. 6.600 written off)	Dr.	7,000	 7,000
Vendors' Creditors A/c To Cash A/c To Vendors' Suspense A/c (Being creditors paid off at a discount of Rs. 200)	Dr.	20,000	 25,800 200
Vendors' Suspense A/c To Commissjon A/c (Being commission 2% on cash collected Rs. 42,000 and 1% on cash paid Rs. 25,800)	Dr.	1,098	 1,098
Vendors' Suspense A/c To Bank Overdraft A/c (Being amount paid to vendors by cheque)	Dr.	15,102	 15,102

Working Notes

1 **Calculation of net assets acquired**

		Rs.
Bills Receivable		6,000
Stock		28,000
Furniture		8,000
Machinery		30,000
Buildings		1,60,000
Total assets acquired		2,32,000
Less liabilities taken over:		
Bills Payable	10,000	
Bank Overdraft	30,000	40,000
Net Assets Acquired		1,92,000

2 **Goodwill** = Purchase Price − Net Assets = 2,00,000 − 1,92,000 = Rs. 8,000.

14.10 LET US SUM UP

Sometimes, a company instead of starting a new business takes over a running business owned by a sole proprietor or a partriership firm. Quite often the partners of a firm decide to converl their firm into a limited company. In both cases a newly formed company takes over the assets and liabilities of the existing business for an agreed amount which is paid in the form of cash, shares and debeptures.

The price which the purchasing company pays to the vendors is called 'purchase consideration', The purchase consideration is usually specified as a lump sum amount. In case the lump sum amount is not specified, the purchase consideration can be arrived at either by net payment method or by net assets method. Under net payment method, the purchase consideration is equal to the total amount agreed to be paid to the owners and the creditors at the rime of acquiring the business. Under net assets method, the purchase consideration is equal to the value of net assets (assets minus liabilities) taken over by the purchasing company. This shall also include the agreed amount of goodwill,

In case net payment method is followed for ascertaining the purchase consideration, any amount of winding expenses which is borne by the purchasing company should also be included in the purchase consideration. The purchase consideration thus arrived at is compared with the agreed value of net assets taken over. If the purchase consideration is more than the net assets taken over, the excess is treated as goodwill. If, however, the purchase consideration is less than the net assets taken over, the difference is treated as capital reserve.

The purchasing company makes the necessary journal entries in its books for incorporating the assets and liabilities taken over (including goodwill or capital reserve) and for the payment of purchase consideration to the vendors. If the payment is delayed, the company may have to pay interest to the vendors at an agreed rate. Sometimes, the purchasing company instead of taking over the debtors and creditors of the vendors, simply agrees to collect the debtors and pay the creditors on behalf of the vendors for a commission. In such a situation, the purchasing company opens three accounts in its books: (i) Vendors' Debtors Account (ii) Vendors' Creditors Account, and (iii) Vendors' Suspense Account. These accounts stand closed after all collections and payments are completed.

When a company takes over a running business prior to the date of incorporation, any profits. made by the company from such business from the date of purchase of the business to the date of incorporation are termed as 'profits prior to incorporation'. Such profits are treated as Capital profits which are not available for distribution as dividends. The profits prior to incorporation are calculated by dividing the yearly profits between the period prior to incorporation and the period after the incorporation. For this purpose the gross profit is divided on the basis of sales rate and the indirect expenses are divided on some appropriate basis which depends upon the nature of each expense.

14.11 KEY WORDS

Purchase of business : Acquiring the assets and liabilities of an existing business owned by a non-corporate organisation.

Purchase Consideratiop : The total amount payable by the purchasing company for the value of net assets acquired at the time of acquisition.

Net Assets : The total of all agreed values of assets taken over including goodwill as reduced by the total of all values of liabilities taken over.

Net Payments: The total of all types of payments made by the purchasing company at the time of acquisition in respect of various claims.

Profit prior to incorporation: The profit from the date of purchase of business to the date of incorporation.

14.12 ANSWERS TO CHECK YOUR PROGRESS

A 1 i) True ii) False iii) True iv) False v) False vi) True vii) False viii) False

2 a) iii b) ii c) iii d) ii

3 Ratio of Time = 1:3

4 Ratio of Sales = 2:5

14.13 TERMINAL QUESTIONS AND EXERCISES

Questions

1 What do you mean by 'purchase of business'? Why do companies prefer to acquire an existing business instead of starting a new one of their own ab *initio*?

2 What is 'Purchase Consideration'? Explain the various methods of calculating purchase consideration.

3 Write explanatory notes on:
   (a) Goodwill/Capital Reserve on purchase of business
   (b) Interest to Vendors
   (c) Debtors and Creditors taken over on behalf of Vendors

4 What is profit prior to incorporation and how is it calculated? Explain its treatment in accounts.

Exercises

1 Mercury Ltd. was formed on 1st January, 1989 with an authorised capital of Rs. 14,00,000 divided into 1,00,000 equity shares of Rs. 10 each and 4,000 14% preference shares of Rs. 100 each to acquire the business of Sita and Smita as a going concern. The balance sheet of Sita and Smita as at 31st December, 1988 was as follows:

Balance Sheet of Sita and Smita as on 31.12.88

Liabilities	Rs.	Assets	Rs.
Creditors	15,000	Cash in hand	7,600
Bank Overdraft	3,000	Debtors	19,400
Loan from X	28,000	Stock	72,000
Capital Accounts:		Furniture	7,000
Sita	1,70,000	Machinery	1,40,000
Smita	1,44,000	Buildings	1,14,000
	3,60,000		3,60,000

Mercury Ltd. was to discharge the purchase consideration by the issue of 30,000 equity shares of Rs. 10 each at a premium of 10%, 1,000 14% preference shares of Rs. 100 each at par and Rs. 40,000 in cash. The purchasing company took over all the assets at their book values except buildings which was valued at Rs. 1,80,000. A provision of 10% on debtors was also considered necessary. The company also agreed to discharge the creditors but declined to take over X's Loan and Bank Overdraft.

To provide necessary funds for working capital and to pay the purchase consideration, the remaining equity shares were issued to the public for cash at a premium of 20%. The public issue was fully subscribed and all the monies received. Preliminary expenses amounting to Rs. 20,000 were paid by the company soon after the issue. The company also discharged the purchase consideration including the cash component immediately after the public issue.

Show necessary entries including cash in the journal of the purchasing company in respect of the above transactions and prepare the opening balance sheet.
(Answer: Goodwill Rs. 60,940; B/S total Rs. 12,85,000)

2 A company was formed with an authorised capital of Rs. 10 lakh divided into 50,000 equity shares of Rs. 10 each and 50,000 14% preference shares of Rs. 10 each to acquire the going concern of Mr. Ramdas whose Balance Sheet stood as follows:

Balance Sheet of Ramdas

Liabilities	Rs.	Assets	Rs.
Bills Payable	7,000	Cash at Bank	9,000
Creditors	12,800	Debtors	15,000
Capital	2,70,000	Stock	62,000
		Insurance Policy	13,800
		Machinery	1,00,000
		Premises	90,000
	2,89,800		2,89,800

The purchase price was agreed at Rs. 3,50,000 to be paid Rs. 1,00,000 in fully paid equity shares at par, Rs. 1,00,000 in fully paid 14% preference shares at par, Rs. 1,00,000 in 14% redeemable debentures at par and the balance in cash. The company did not take over the insurance policy. Stock and machinery were valued at 10% less than the book value and premises at 20% more than the book values by the company. The company agreed to discharge the liabilities also.

The remaining equity and preference shares were issued to the public at par. All monies due on shares were received with the exception of 600 equity shares held by Manohar on which he has not paid the last call of Rs. 4 per share which were subsequently forfeited and reissued at a discount of 20%.

Give journal entries to record the above transactions in the books of the company and prepare the opening Balance Sheet.

(Answer : Goodwill Rs. 92,000; B/S total Rs. 11,22,200)

3 Meltex Ltd. was formed on 1st June, 1988 to acquire the going concern of Ramesh Chand as from 1st January, 1988. Certificate to commence, business was received by the company on 1st August 1988.

Sales for the months of January, November and December, 1988 were half the average sales for the year. Sales for the months of May, June and July 1988 were one and a half times the average monthly sales for the year. Sales for the month of April, 1988 were twice the average monthly sales for the year.

The total sales for the year ended on 31st December, 1988 were 60 lacs of rupees. Calculate the Ratio of Sales for the pre-incorporation and post-incorporation periods.

(**Answer:** Ratio of Sales = 7 : 8)

4 Jolly Ltd. was formed to acquire the business of Shri Palkiwala on and from 1st January, 1989. The following is the Balance Sheet of Shri Palkiwala as on 31st December, 1988.

Balance Sheet of Shri Palkiwaln
(as on 31.12.88)

Liabilities	Rs.	Assets	Rs.
Trade Creditors	71,200	Sundry Debtors	84.000
Loan from Daruwala	1,20,000	Furniture	8,000
Palkiwala's Capital	1,00,800	Machinery	50,000
		Vehicle	30,000
		Buildings	1,20,000
	2,92,000		2,92,000

The company took over the fixed assets at book values less 10%. The goodwill of the firm was valued at Rs. 80,000. The company also took over the Loan of Daruwala who accepted 10% preference shares of Rs. 100 each at par. Tlie company did not take over the debtors and creditors but agreed to collect the debtors and pay to the creditors on behalf of Palkiwala. Palkiwala's debtors realised Rs. 80,000 and the company paid Rs,. 68,000 to the creditors in full settlement. After the realisation of debts and discharge of creditors Shri Palkiwala was paid Rs. 19,200 in cash and the balance in fully paid equity shares at par.

To provide funds for payment to Palkiwala and working capital requirements the company issued 10,000 equity shares of Rs. 10 each at par. The public issue was fully subscribed and all the monies were received.

Pass the necessary journal entries in the books of Jolly Ltd.

(**Answer:** 14,000 equity shares were issued to Mr. Palkiwala)

5 Snowtex Ltd. was incorporated on 1st May, 1988 to take over the business of Mr. Sonawala as a going concern from 1st of January, 1988. The Profit and Loss Account of the business for the year ending 31st December, 1988 was as follows:

Profit and Loss Account

Dr.	Rs.		Cr. Rs.
Rents and Taxes	90,000	Gross Profit	9,30,000
Salaries	2,30,400		
Directors Fees	18,000		
Audit Fees.	9,600		
Advertisement	60,000		
Discount	21,000		
Office Expenses	54,000		
Carriage	30,000		
Preliminary Expenses	39,000		
Interest on loan	18,000		
Net Profit'	3,60,000		
	9,30,000		9,30,000

The total turnover for the year ending 31st December, 1988 was Rs. 30 lacs. Turnover

for the period upto May 1, 1988 was Rs. 9 lacs and for the remaining period Rs. 21 lacs. Calculate the profits prior to and after incorporation.

(Answer: Pre-incorporation Profit Rs. 1,11,700 and post-incorporation profit Rs. 2,48,300)

(Hint: Audit Fee has been charged in the ratio of time and carriage in the ratio of sales. Interest on loan is assumed to be for twelve months and has been charged in the ratio of time)

6 Calculate the profits prior to incorporation from the following details: A public limited company was formed on 1st August 1988 to take over the business of a partnership firm as from 1st April, 1988. The company received the certificate to commence business on 1st November, 1988. Sales from 1st April, 1988 to 1st August, 1988 were Rs. 4,00,000 and sales from 1st August, 1988 to 1st November. 1988 were Rs. 6,00,000. Sales from 1st November, 1988 to 31st March, 1989 were Rs. 10,00,000. Gross profit for the year was Rs. 4,62,000. Total fixed expenses for the year were Rs. 140000 and total expenses relating to sales were Rs. 1,60,000. Directors' Fees amounted to Rs. 8,000 and Auditor's Remuneration was Rs. 16,000. Vendor's Account was settled on 1st November, 1988 and the purchase price Rs. 1,40,000 and interest thereon amounting to Rs. 98,000 were paid on that date. Also state how you will deal with the profit prior to incorporation and after incorporation.

Note: These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University for assessment. These are for your practice only.

SOME USEFUL BOOKS

Maheshwari, S.N., 1998 : *Introduction to Accounting* Vikas Publishing House, New Delhi. (Chapters 1-3, Section IV).

Gupta R.L. and M. Radhaswamy, 1998. *Advanced Accounting* Sultan Chand & Sons, New Delhi (Chapters 25).

Shukla, M.C., Grewal, T.S. & S.C. Gupta, 1998 : *Advanced Accounts* S. Chand & Co. Ltd., New Delhi, (Chapter 10).

Monga J.R., Ahuja G.C. & Ashok Sehgal, 1998 *Advanced Accounting* National Publishing House, New Delhi.

Jain, S.P. and Narang K.L., 1997. *Financial Accounting.* Kalyani Publishers, Ludhiana (Chapter 23).

William Pickles, 1982. Accountancy, E.L.B.S. and Pitman, London (Chapter XXIII)

UNIT 15 FINAL ACCOUNTS—I

Structure

15.0 Objectives
15.1 Introduction
15.2 Company Final Accounts
15.3 Legal Requirements as to Profit and Loss Account (Schedule VI Part II)
15.3.1 Income
15.3.2 Expenses and Provisions
15.3.3 Appropriation of Profits
15.3.4 Forms of Profit and Loss Account
15.3.5 Special Features of Company Profit and Loss Account
15.4 Legal Requirements as to Company Balance Sheet (Schedule VI Part I)
15.4.1 Proforma of Balance Sheet
15.4.2 Liabilities
15.4.3 Assets
15.4.4 Summarised Balance Sheet (Vertical Form)
15.5 Let Us Sum Up
15.6 Key Words
15.7 Answers to Check Your Progress
15.8 Terminal Questions

15.0 OBJECTIVES

After studying this unit you should be able to:

- state what is meant by final accounts of a company
- enumerate the legal provisions relating to the nature of particulars to be shown in the profit and loss account
- specify the legal requirements affecting presentation and preparation of company balance sheet
- be acquainted with the form of presentation of the profit and loss account and balance sheet of a company.

15.1 INTRODUCTION

Like any other business firm, it is also necessary for a company to prepare annual financial statements to ascertain and report the net result of its business operations (profit or loss) and the financial position as at the end of the accounting year.

The periodical financial statements mainly refer to the Balance Sheet and the Profit and Loss Account. The legal requirements with respect to the final accounts of a company are given in Section 210 to 223 and Part I and II of Schedule VI of the Companies Act 1956. In this unit we shall discuss these provisions in detail so that while preparing the company final accounts, they are duly taken care of,

15.2 COMPANY FINAL ACCOUNTS

The Final Accounts of a company refer to the annual financial statements which all business enterprises have to prepare. Section 209 of the Companies Act makes it obligatory for a company to maintain certain books of account. Section 210 of the Companies Act lays down that at every annual general meeting of shareholders, the Board of Directors of the company must present (1) Balance Sheet as at the end of the period, and (2) Profit and Loss Account for the period. The period is interpreted as a 'Financial year' which may be less or more than a calendar year but is not to exceed fifteen months.

Let us now discuss what information is to be included in the Profit and Loss Account and the Balance Sheet.

15.3 LEGAL REQUIREMENTS AS TO PROFIT AND LOSS ACCOUNT (SCHEDULE VI PART II)

In the Companies Act, 1956 there is no proforma prescribed for the preparation of the Profit and Loss Account of a company. However, the particulars and information to be given in the Profit and Loss Account are laid down in Schedule VI part II of the Act.

The Profit and Loss Account must set out various items relating to the income and expenditure of the company arranged under the most convenient heads.

15.3.1 Income

Items of income which are required to be included in the Profit and Loss Account of a Company are:-

1 Turnover: .It refers to total sale value of goods or income derived from services rendered. If the company deals in more than one type of goods, income from different classes of goods are to be shown separately. The amount of income from sale is arrived at after deducting sales returns and trade discount allowed from the total sales.

2 Income from investment: Income may be earned from two types of investments: (a) Interest on 'trade investments such as loans and advances, and (b) dividend and interest on investments in shares and debentures of other companies. The two types of investment income are to be shown separately.

3 Profit (or loss) on sale of investment in shares or debentures has to be shown as a separate item.

4 Dividend received from subsidiary companies (if any).

5 Miscellaneous income: Such income may include income from other sources, iike rent on land and buildings, recovery of insurance claims.

6 Extraordinary profits: Profits earned during the year from non-recurring transactions, for example, due to changes in the method of valuation of stock, are to be shown under this head.

15.3.2 Expenses and Provisions

Items of expenditure are required to be shown under different heads as follows:

1 Cost of goods sold: The cost of goods sold is generally arrived at by adding opening stock and purchases and deducting closing stock from the total:

	Rs.
Opening stock of goods	....
Add purchases	....
Less closing stock	....
Cost of goods sold	

Details of stock (raw materials, semi-finished goods and finished goods) are shown separately under the respective items of stocks and purchases.

Alternatively, the difference between the value of stock (of finished and semi-finished goods) at the beginning of the year and at the end of year is calculated. This may indicate increase in stock or decrease of stock at the end of year. If there is increase in stock, it is shown as a deduction from the cost of Goods sold. On the other hand, if there is decrease in stock, it is added to the cost of goods sold. Purchases of finished goods, if any, are shown separately. Raw materials consumed are shown under another head as an item of manufacturing expenses.

2 Manufacturing and Selling Expenses. Expenditure incurred on manufacturing and selling operations include:

i) Raw materials consumed (opening stock plus purchases less closing stock)

ii) Stores consumed
iii) Power and Fuel
iv) Rent
v) Repairs to buildings
vi) Repairs to machinery
vii) Insurance
viii) Rates and taxes
ix) Miscellaneous expenses
x) (a) Salaries, wages and bonus
   (b) Contribution to provident fund, pension fund
   (c) Employee welfare expenses
xi) Commission to selling agents, discounts and allowances
xii) Depreciation on fixed assets. (The methods and rates of depreciation to be charged on different categories of assets are laid down in the Companies Act)
xiii) Interest on debentures and long-term loans paid or payable
xiv) Remuneration payable to Directors (including managing director) or manager, if any
xv) Amount reserved for
   (a) repayment of preference share capital
   (b) repayment of loans and debentures
xvi) Provision for Taxation, Provision for bad and doubtful debts
xvii) Audit Fees

15.3.3 Appropriation of Profits

After ascertaining profits, the amount of profit for the current year and that of the previous year are distributed or 'appropriated' for different purposes. Thus, the balance of profit brouglit forward from the previous year is added to the profit for the current year. The items of appropriation generally are: transfer to reserves and provision for dividend proposed to be paid to shareholders. Other items included in this part of the Profit and Loss Account are: Debenture Redemption Reserve and Arrears of depreciation of previous year, if any.

The final balance of profit after the appropriation is carried forward and taken to the next year's account. This part of the Profit and Loss Account may be regarded as Profit & Loss Appropriation Account; but there is no separate heading used for it. The second part of the account showing appropriation of profits is sometimes called 'Below the Line' Account.

15.3.4 Forms of Profit and Loss Account

The Companies Act is silent as regards the form of presentation of Profit and Loss Account. Hence, companies may adopt one of the two alternatives forms:

i) Vertical form; and
ii) Horizontal or 'Left-Right' form.

The vertical form of presentation is illustrated below.

PLMB Co. Ltd.
Summarised Profit and Loss Account
For the year ending 31 Dec., 1998

		Current Year	Previous Year Rs.
I	**Income**		
	Sales		
	Interest on Loans and Advances		
	Total		
II	**Expenditure**		
	Cost of goods sold		
	Raw materials consumed		
	Power and Fuel		
	Repairs to Machinery		
	Salaries, Wages & Bonus		
	Provision for Bad & Doubtful Debts		
	Depreciation		
	Interest on Debentures		
	Audit Fees		
	Total		
III	**Profit before Tax (I-II)**		
IV	**Provision for Taxation**		

		Current Year Rs.	Previous Year Rs.
V	Profit after Tax (III-IV)		
VI	Balance brought forward from last year		
VII	Profit available for Appropriation (V + VI) Proposed Dividend on Equity Shares Transfer to General Reserve		
VIII	Balance transferred to Balance Sheet		

The Horizontal (Left-Right) form of presentation is shown below:

PLMB *Co.* Ltd.
Summarised Profit and Loss Account for the year ended 31 Dec., 1998

Previous Year	Expenditure	Current Year	Previous Year	Income	Current Year
Rs.		Rs.	Rs.		Rs.
	Cost of goods sold				
	Raw materials consumed			Sales	
	Power and Fuel			Interest on loans and advances	
	Rent Rates and Taxes				
	Repairs to Machinery				
	Salaries, Wages & Bonus				
	Provision for Bad & Doubtful Debts				
	Depreciation				
	Interest on Debentures				
	Audit Fees				
	Provision for taxation				
	Balance (Profit) Carried down				
	Proposed Dividend on Equity Shares			Balance (Profit) b/d	
	Transfer to General Reserve			Balance brought forward from previous year	
	Balance tfd. to Balance Sheet				

15.3.5 Special Features of Company Profit and Loss Account

The special features of the Profit and Loss Account of a company are summarised below.

1 It is not necessary to prepare a Trading Account showing gross profit. The Profit and Loss Account includes all items of income and expenditure and shows the net profit.

2 After net profit is ascertained, the distribution or appropriation of profit is shown in the second part of the Profit and Loss Account known as 'Below the line'. In this part, the balance of profit brought forward from, the previous year is added to the current year's profit. Dividend proposed to be paid to shareholders and transfer to genera! reserve are two main items of appropriation. The final balance of profit is shown in the Balance Sheet.

3 The Companies Act requires that figures of the previous year must be shown in a separate column alongside the respective figures of the current period.

4 Since various details relating to income and expenditure must be shown as required by the Act, a summarised Profit and Loss Account is prepared and details of items are shown separately in the form of annexures.

5 The form of presentation may be 'vertical' or 'horizontal,(Left-Right). It is nor necessary to write 'To' and 'By' on the two sides even when the account is prepared in 'horizontal' form.

Check Your Progress A

1 From the following particulars relating to the operations of a company, how will you present the total income in the Profit and Loss Account?

	Rs.
Cash Sales	1,25,000
Credit Sales	58,50,000
Sales Returns	85,000
Trade Discount allowed on sale	38,000
Insurance Claims realised	42,000
Dividend received from Subsidiaries	28,000
Interest received on Trade Investments	15,000

2 What is meant by appropriation of profits?

....

....

....

....

3 The following information is available from the books of accounts of a company. Show how you will arrive at the cost of goods sold and present it in the Proft and Loss Account.

Stock as at the beginning of the year:

	Rs.
Raw Materials	72,000
Semi-finished Goods	38,000
Finished Goods	85,000

Stock as at the end of the year:

	Rs.
Raw Materials	79,000
Semi-finished Goods	30,000
Finished Goods	90.000
Purchase of Raw Materials	1,50,000

4 Which of the following items are to be shown below the line as appropriation of profits:

i) Provision for Taxation

ii) Provision for Proposed Dividend

iii) Provision for Doubtful Debts

iv) Transfer to General Reserve

v) Provision for Debenture Redemption

15.4 LEGAL REQUIREMENTS AS TO COMPANY BALANCE SHEET (SCHEDULE VI PART I)

The Balance Sheet of a company like that of any other type of business organisation is a statement of assets and liabilities. However, in the case of a company, the nature of details to be shown and the order of arrangement of the items must conform to the requirements prescribed in Schedule VI, Part I of the Companies Act.

15.4.1 Proforma of Balance Sheet

There are two alternative proforma given in Schedule VI: (i) horizontal, and (ii) vertical. Any one of these forms may be adopted for the Balance Sheet of a company.

In the horizontal form, liabilities are presented on the left hand side and assets on the right hand side. In the vertical form, the liabilities are shown under the heading 'Sources of Funds'. This is followed by the assets shown under the heading 'Application of Funds'.

Both the prescribed forms of Balance Sheet require that figures of **the** previous **year should be shown in separate column along with the figures** of **the current year with respect to each of the items** of **liabilities and assets.**

k t us now examine the items of liabilities and assets to be presented with the relevant details in outline.

15.4.2 Liabilities

1 **Share Capital:** Under this heading, the following details are to be shown.

i) Authorised Capital:
.... Shares of Rs. .... each

This refers to the total amount of share capital which the company is authorised to raise according to the Memorandum of Association. It may include Preference Share Capital and Equity Share Capital, or only Equity Share Capital. The total amount of authorised capital is just to be shown by way of information, that is, not to be added as a liability in the balance sheet.

ii) Issued Captial:
.... Shares of Rs. .... each

Issued Capital is that part of authorised capital which has been issued for subscription till the date of balance sheet. The issued capital may have been fully subscribed or partly subscribed. The amount of issued share capital is not taken as a liability. It is shown by way of information.

iii) Subscribed Capital:
.... Shares of Rs. .... each, Rs. .... called up

That part of issued capital which has been actually subscribed by investors is shown under this head along with the amount of share value called up. When a company announces the issue of shares to the public, applications are invited with a certain amount per share to be deposited as application money. As and when shares are doted, the application money is transferred to share capital account. The allotees are then required to deposit the allotment money, which is fixed. On receipt of the amount payable on allotment, it is also transferred to share capital account. The balance of the value of shares is payable when calls are made. So, the item of subscribed capital is to indicate what part of the share value has been called up per share. Sometimes, the amount due on allotment and calls made remain unpaid in respect of a number of shares. The amount is known as 'Calls in Arrear'. This amount is shown as a deduction from the subscribed and called up capital.

Subscribed Capital
.... Shares of Rs. .... each,
Rs. .... called up Rs. ....
Less Calls in Arrear Rs. ....

If shareholders concerned fail to pay the amount due on allotment of calls, the shares are liable to be forfeited. In that case, the amount already received on the forfeited shares (the amount originally paid) is added to the subscribed and called up capital.

Subscribed Capital
.... Shares of Rs. .... each,
Rs. .... called up ....
Less Calls in Arrear ....

Add Forfeited shares ....

This is the final amount shown as the share capital in the amount column.

2 **Reserves and Surpluses:** This includes the following items.

i) Capital Reserve—Reserve created by transferring capital profits to this account.

ii) Capital Redemption Reserve—Reserve created for redemption of preference shares.

iii) Share Premium Account—If shares have been issued at a premium, the premium received (i.e., the amount collected in excess of the share capital) is credited to a separate account. The balance of this account is shown under the heading 'Reserves and Surplus'.

iv) Other Reserves—The total amount of General Reserve including addition to it made during the current year should be shown.
If the Profit and Loss Account shows net loss, it should be shown as a deduction from the General Reserve.

v) Surplus—The balance of net profit in the Profit and Loss Account is to be shown against this item.

vi) Sinking Funds—Reserves which are specifically created and represented by earmarked investments in outside securities are known as 'Sinking Funds'. Such funds are generally accumulated either for replacement of fixed assets or redemption of liabilities.

3 **Secured Loans:** The following liabilities are included under this heading.

i) Debentures
ii) Loans and Advances from Banks
iii) Loans and Advances from Subsidiary Companies
iv) Other Loans and Advances

Interest accrued on secured loans are to be included in the appropriate items (sub-headings). The nature of security is also to be specified in each case. Loans from directors or managers, if any, are to be shown separately.

4 **Unsecured Loans:** Loans which are unsecured generally include the following.

i) Fixed Deposits—Deposits raised from the public come under this sub-heading.

ii) Loans and advances from subsidiary companies, if these are unsecured.

iii) Short-term loans and advances
(a) From Banks
(b) From Others
These are loans and advaqces which are due for repayment within a year from the date of the Balance Sheet.

iv) Other Loans and Advances
Interest accrued and due on unsecured loans are to be included under the appropriate sub-headings.

5 **Current** Liabilities **and** Provisions:

A **Current Liabilities**: These include

i) Acceptances (i.e., Bills Payable).

ii) Sundry Creditors.

iii) Subsidiary Companies—Short-term liabilities owed to subsidiary companies.

iv) Advance Payments and Discounts received for which value has yet to be given—These may include advances received in advance from customers or discounts received in advance.

v) Unclaimed dividends—The amount of dividend declared and due to shareholders which has not been drawn by some of them is shown as a current liability.

vi) Interest accrued but not due on loans—This refers to that part of interest on loans which is to be paid when the due date comes which may be in

the next year. Suppose interest on loan is paid annually on March 31, the Balance Sheet as on December 31 will show 9 months' interest which has accrued for the period from April 1 to December 31. This amount will be adjusted next year on March 31.

B Provisions: Under this sub-heading are included the estimated amounts of expense or loss which have been taken into account before ascertaining profits. These may be:
i) Provision for taxation
ii) Dividends proposed to be paid
iii) Provision for contingencies (unanticipatea losses or expenses)
iv) Provision for Employees Provident Fund
v) Provision for Pension or other benefits to employees.

6 Contingent Liabilities: Liabilities which are uncertain and may arise depending upon future events are known as 'contingent liabilities'. Thus, contingent liability is one which, though not a liability at the date of Balance Sheet, may be so later upon the happening of a certain event. Such liabilities are required to be shown as a foot-note, after all other liabilities have been listed. These are not to be added to the other liabilities. Items which may come under this sub-heading are:

i) Claims against the company acknowledged as debts: A typical situation in which such a claim may arise is where an amount is expected to be paid to contractors on completion of a building according to the contract signed.

ii) Uncalled liability on shares partly paid: Where investment has been made in shares of another company and the shares are partly paid up, liability may arise on further call being made for payment of the uncalled amount.

iii) Arrears of fixed cumulative dividends: Arrears of dividend on preference share capital are payable out of future profits, hence it is shown as a contingent liability.

iv) Estimated amount of contracts remaining to be executed on capital account and not provided for: This type of liability may relate to expenses to be incurred on incomplete contracts which are yet to be fully executed.

v) Any other amount for which the company is contingently liable: This may include, for example, customers' claim for damages for delay in delivery which is pending, and yet to be settled.

15.4.3 Assets

1 Fixed Assets: Expenses incurred for the acquisition of fixed assets have to be shown separately for various assets such as Goodwill, land, buildings leasehold properties, plant and machinery, railway sidings, furniture and fittings, development of property, patents, trademarks and designs, live stock, motor vehicles, etc.

For each of the asset heads, the value should be arrived at by showing the original cost of the asset, additions, if any, made during the year, deductions, therefrom during the year, and the total amount of depreciation deducted or provided for up to the end of the year. The value of assets thus determined may be shown in the summarised Balance Sheet, and the details given in the separate schedule.

2 Investments: This heading should include different types of investments separately, indicating in each case the mode of valuation such as cost or market value.

i) Investment in Govt. Securities or Trust Securities.
ii) Investment in Shares, debentures, etc. of other companies—Different classes of shares in which investment has been made and whether the shares are fully paid-up are to be shown separately, so also in the case'of debentures.

iii) Immovable properties (like land and buildings).

iv) Investment in the capital of partnership firms.

3 Current **Assets, Loans** and Advances:

A Current Assets: These are assets likely to be converted into cash within a year. The items under this head may include:

i) Interest accrued on investments

ii) Stores and Spare Parts

iii) Loose Tools

iv) Stock-in-trade—The mode of valuation should be stated

v) Work-in-Progress—The mode of valuation should be stated in this case also.

vi) Sundry Debtors—Details in respect of sundry debtors are to be given as follows:

(a) Debts outstanding for a period exceeding six months

(b) Other debts

also: (i) Debts considered good and in respect of which the company is fully secured

(ii) Debts considered good for which the company holds no security other than the debtors personal security

iii) Debts considered doubtful or bad

Provision for doubtful or bad debts is required to be shown under the sub-head 'Reserves for Doubtful and Bad Debts' on the liabilities side of the Balance Sheet below the head Reserves and Surplus.

vii) (a) Cash balance on hand
(b) Bank Balances

B Loans and Advances: Where loans have been given or advances made by the company, the amounts are required to be shown under separate sub-headings as follows;

i) Advances and loans to subsidiary companies

ii) Advances and loans to partnership firms in which the company or any of its subsidiaries is a partner

iii) Bills of Exchange being Bills Receivable

iv) Prepaid Expenses or Advance Payments which are recoverable in cash or kind or for value to be received e.g., Rates, Taxes, Insurance, etc.

v) Balance of deposits with any Government agency like Customs, Port Trust, etc.

4 **Miscellaneous** Expenditure: Certain expenses are incurred by companies, which are written off over 3 to 5 years by charging a proportionate part of the expense each year to Profit and Loss Account. The balance of such expenses to the extent not written off or not adjusted are required to be shown under this heading. Strictly speaking, these items are not assets, but are shown along with the assets since the debit balances of these expense accounts are carried forward to the next year. The items of such expenditure may include:

i) Preliminary Expenses—Expenses incurred in connection with the formation of the company and its registration

ii) Commission or brokerage paid on under-writing or subscription of shares or debentures and the expenses of floatation of shares or debentures

iii) Discount allowed on the issue of shares or debentures

iv) Interest paid (to shareholders) out of share capital during construction work

v) Development expenditure

5 Profit and Loss **Account:** A company may suffer net loss which is not covered by the general reserve created out of past profits. In that event, the amount of net loss (the debit balance in the P & L Account) not covered by general reserve is to be shown under this sub-heading. It will then be shown as follows:

	Rs.
Profit and Loss Account (Dr. Bal.)	....
Less: General Reserve	....
	....

15.4.4 Summarised Balance Sheet (Vertical Form)

In the vertical form of Balance Sheet, as in the case of horizontal form, the details required to be given are shown in separate schedules. The form of presentation is as follows:

PLMB Co. Ltd.
Balance Sheet as on December 31,1989

	Schedule No.	Figures as at Dec. 31,1989	Figures as at Dec. 31, 1988
		Rs.	Rs.
Sources of Funds			
1 *Shareholders Funds:*			
(a) Capital			
(b) Reserves & Surplus			
2 *Loan Funds:*			
(a) Secured Loans			
(b) Unsecured Loans			
TOTAL			
Application of Funds			
1 *Fixed Assets:*			
Gross Block			
Less: Depreciation			
Net Block			
2 Investments			
3 *Current Assets Loans and Advances:*			
(a) Inventories			
(b) Sundry Debtors			
(c) Cash & Bank Balances			
Less: Current Liabilities and Provisions			
Current Liabilities			
Provision for Taxation			
Provision for Proposed Dividend			
Net Current Assets			
4 (a) Misc. Expenditure not written off			
(b) Profit & Loss Account			
TOTAL			

Check Your Progress B

1 What are the items included under the heading 'Reserves and Surplus' on the liabilities side of a company Balance Sheet?

....

....

....

....

2 While preparing the balance sheet of a company, under what headings will you include the following liabilities and assets?

i) Calls in Arrear

ii) Share Premium

iii) Public Deposits

iv) Sundry Creditors

v) Sundry Debtors

vi) Arrears of dividend on Cumulative Preference shares

vii) Unclaimed Dividends

viii) Debentures

ix) Forfeited Shares (amount received)

x) Preliminary Expenses

15.5 LET US SUM UP

The Final Accounts of a company refer to the annual financial statements consisting of (1) Profit and Loss Account which discloses the results of operation, either profit or loss, for a financial year, and (2) Balance Sheet which depicts the financial position of the company as on the closing day of the year. The Profit and Loss Account is also known as Income Statement for the year. The Balance Sheet may be described as a statement of assets and liabilities of the company.

In the Companies Act, 1956, there is no proforma prescribed for preparation of the 'Profit and Loss Account of a Company. However, the particulars and infonnation to be given in the Profit and Loss Account are laid down in Schedule VI, Part II, of the Act. The Profit and Loss Account must set out the various items relating to income and expenditure of the company arranged under properly classified heads.

Since the. Companies Act is silent as regards the form of presentation, the Profit and Loss Account may be prepared by adopting either (a) the vertical form, or (b) the horizontal or 'left-right' form.

The special features of the company Profit arid Loss Account are: (i) It is not necessary to prepare a separate Trading Account; (ii) There is no separate heading required to be given for the appropriation of profits. The distribution or appropriation of profits is shown in the second part of the Profit and Loss Account, which is also described as 'Below the linc'.

The Companies Act requires that the figures of the previous year must be'shown in a separate column along side the figures of the current year.

As regards the preparation of Balance Sheet, thc nature of details to be shown with respect to the liabilities and assets and the order of arrangement of the items are prescribed in Schedule VI, Part I of the Companies Act.

There are two alternate proformas given in Schedule VI for the preparation of company Balance Sheets: (i) horizontal, and (ii) vertical. Any of these forms may be adopted for the Balance Sheet of a company. In the horizontal form, liabilities are presented on the left-hand side and assets on the right-hand side. In the vertical form, the liabilities are first listed under the heading 'Sources of Funds'. This is followed by the assets shown under the heading 'Application of Funds'.

Both the prescribed forms require that figures of thc previous year should be shown in a separate column alongside the figures of the current year with respect to each of the sub-headings under liabilities (Sources of fimds) and assets (Application of Funds).

15.6 KEY WORDS

Appropriation: Distribution of profits.
Balance Sheet: Statement of assets and liabilities depicting thc financial position as at the end of the financial year.
Below the Line: Part of the Profits and Loss Account which shows the appropriation of profits.
Contingent Liability: Liability which depends upon the happening of a certain event.
Gross Block: Gross value of fixed assets before depreciation.
Preliminary Expenses: Expenses incurred in connection with the formation and registration of a company.
Premium on shares: Amount realised in excess of the face value of shares of a company.
Profit and Loss Account: Income statement disclosing the results of operation (profit or loss) for the financial year.
Turnover: Total value sale of goods or supply of services,
Underwriting Commission: Commission payable to underwriters of shares and debentures in lien of their undertaking to subscribe to the issue in the event of under-subscription by the public.

15.7 ANSWERS TO CHECK YOUR PROGRESS

			Rs.
A 1	Sales		59,75,000
	Less: Sales Return	85,000	
	Trade Discount	38,000	1,23,000
			58,52,000
	Income from Investment		15,000
	Dividend received from Subsidiaries		28,000
	Miscellaneous Income:		
	Recovery of Insurance Claim		42,000
	TOTAL		59,37,000

			Rs.
3	Cost of Goods Sold:		
	Opening Stock:		
	Raw Materials	72,000	
	Semi-finished Goods	38,000	
	Finished Goods	85,000	
		1,95,000	
	Add: Purchase of Raw materials	1,50,000	3,45,000
	Less: Closing Stock:		
	Raw Materials	79,000	
	Semi-finished Goods	30,000	
	Finished Goods	90,000	1,99,000
	Cost of Goods Sold		1,46,000

4 ii), iv), v)

B 2
i) Liabilities side as a deduction from the sub-head 'Subscribed Capital' under the head 'Share Capital',
ii) Liabilities side under the head 'Reserves & Surpluses'.
iii) Liabilities side under the head 'Unsecured Loans'.
iv) Liabilities side under the head 'Current Liabilities'.
v) Asset side under the head 'Current Assets'.
vi) Liabilities side under the head 'Contingent Liabilities'.
vii) Liabilities side under the head 'Current Liabilities'.
viii) Liabilities side under the bead 'Secured Loans'.
ix) Liabilities side as an addition to 'Subscribed Capital'
x) Assets side under the head 'Miscellaneous Expenditure' to the extent not written off.

15.8 TERMINAL QUESTIONS

1 What are the special features of the Profit and Loss Account of a Company?

2 What do you understand by Appropriation of Profits. What are the items relevant in that connection?

3 Enumerate four items each of current assets and current liabilities, How are current assets and current liabilities shown in the vertical form of Balance Sheet?

4 What are the particulars required to be given with regard to the fixed assets while preparing Balance Sheet of a Company?

5 State the nature of particulars and information to be given in Company Final Accounts with regard to

i) Sundry Debtors
ii) Share Capital
iii) Reserves and Surplus

Note: These questiohs will help you to understand the unit better. Try to write answers for them but do not submit your answers to the University. These are for your practice only.

UNIT 16 FINAL ACCOUNTS—II

Structure

16.0 Objectives
16.1 Introduction
16.2 Treatment of Special Items Relevant to Company Final Accounts
 16.2.1 Preliminary Expenses
 16.2.2 Expenses on Issue of Shares and Debentures
 16.2.3 Discount on Issue of Shares and Debentures
 16.2.4 Premium on Issue of Shares
 16.2.5 Calls in Arrears and Calls in Advance
 16.2.6 Forfeited Shares
 16.2.7 Depreciation on Fixed Assets
 16.2.8 Provision for Taxation
 16.2.9 Dividends
 16.2.10 Interest on Debentures
 16.2.11 Transfer to Reserves
 16.2.12 Balance of Profit and Loss Account
16.3 Preparation of Final Accounts
16.4 Let Us Sum Up
16.5 Key Words
16.6 Answers to Check Your Progress
16.7 Terminal Questions/Exercises

16.0 OBJECTIVES

After studying this unit, you should be able to:

- identify and deal with some special items related to profit and loss account and balance sheet
- apply the basic principles of arrangement, classification and presentation of items in the profit and loss account and balance sheet
- prepare final accounts of a company.

16.1 INTRODUCTION

In Unit 15 you learnt about the legal requirements relating to the contents of Profit and Loss Account and the Balance Sheet of a company, and also their vertical and horizontal proformas. In this unit, attempt has been made to further clarify the points relating to some items related to the final accounts of a company with reference to the provisions of the Companies Act and discuss the preparation of company final accounts in detail.

16.2 TREATMENT OF SPECIAL ITEMS RELEVANT TO COMPANY FINAL ACCOUNTS

There are certain items appearing in the final accounts which are peculiar to the company form of organisation. They are as follows.

16.2.1 Preliminary Expenses

All expenses relating to the formation of company are grouped under one heading known as Preliminary Expenses. This includes expenses like cost of printing the Memorandum and Articles of Association, fees paid to lawyers for drafting various documents, stamp duty, and registration and filing fees payable at the time of registration of the company, The total amount debited to Preliminary Expenses Account is treated as a capital expenditure. It is generally written off within a period of 3 to 5 years. The annual amount decided to be written off is debited to the Profit and Loss Account. The balance of the Preliminary Expenses Account is shown on the asset side of the Balance Sheet as a separate item under the heading 'Miscellaneous Expenditure and Losses'.

Suppose a company incurred preliminary expenses amounting to Rs. 9,000 and decided to write off the amount in equal proportions over three years. At the end of first year, Rs. 3,000 will be charged to the Profit & Loss Account and Rs. 6,000 will

be shown on the asset side of the Balance Sheet. The debit balance of Rs. 6,000 in the Preliminary Expenses Account will be carried forward to the next year. At the close of second year, another Rs. 3,000 will be charged to Profit and Loss Account and the remaining balance of Rs. 3,000 shown on the asset side of Balance Sheet. In the third year again Rs. 3,000 will be charged to Profit & Loss Account. The Preliminary Expenses A/c will thus be closed, and it will no longer appear in the Balance Sheet.

16.2.2 Expenses on Issue of Shares and Debentures

When shares and debentures are issued to the public, company incurs expenses by way of underwriting commission, brokerage and fees. Underwriting commission is agreed to be paid to an individual, a firm or an institution which undertakes to subscribe to that part of the shares or debentures which may not be subscribed by the public. The commission is generally fixed as a percentage of the issue price of shares or debentures underwritten. Brokerage is paid by the company to brokers who procure subscription for the shares or debentures. Sometimes, one or more institutions may he appointed managers to the issue for which fees are payable and fixed as a percentage of the issue price of shares or debentures. The maximum rates at which underwriting commission, brokerage and fees can be paid by any company are laid down in the Companies Act and prescribed by Government order.

All expenses on issue of shares and debentures are capitalised and normally charged to the Profit & Loss Account over a period not exceeding 5 years. The unwritten off amount is shown every year on the asset side of the Balance Sheet as a separate item under the heading 'Miscellaneous Expenditure and Losses'.

Let us illustrate the treatment of the above mentioned item in the Company final accounts with the help of an example. A company was registered in January 1987 with all authorised capital of 1,00,000 equity shares of Rs. 10 each. Preliminary expenses amounted to Rs. 9,000. The company issued 50,000 shares to the public. The issue was underwritten by a firm for which the company agreed to pay commission at $2\frac{1}{2}$% of the issue price. Applications were received for 45,000 shares from the public which were duly alloted and fully paid. The company decided to carry forward the preliminary expenses and expenses on issue of shares to the next year. How will the transactions be reflected in the Balance Sheet for 1987?
Before preparing the Balance Sheet of the company, we should note the following points;

i) The public subscription being less than the number of shares issued the balance of shares were to be taken up by the underwriters.

ii) The amount payable to the underwriters on account of underwriting commission was Rs. 12,500($2\frac{1}{2}$% on Rs. 5,00,000 issued capital). On the other hand, the Underwriters were to pay Rs.50,000 (Rs. 10 per share on 5,000 shares) to the company. The net amount due to the company from the underwriters was Rs.37,500. However, underwriting commission payable should be treated separately as a deferred revenue expenditure or loss.

iii) Preliminary expenses and expenses on issue of shares including (underwriting commission) were decided to be carried forward to the next year. This was so possibly because operations were not started in 1987.

The Balance Sheet as at the end of 1987 would show the items as follows:

Liabilities	Rs.	Assets	Rs.
Share Capital		**Fixed Assets**	—
Authorised Capital: 100,000 Equity Shares of Rs. 10 each	10,00,000	....	
		Current Assets:	
Issued capital: 50,000 Equity shares of Rs. 10 each	5,00,000	Cash in hand and at Bank	4,78,500
		Miscellaneous Expenditure Losses	
Subscribed Capital: 50,000 Equity Shares of, Rs. 10 each, Rs. 10 per share called up and paid	5,00,000	Preliminary Expenses	9,000
		Underwriting Commission	12,500
	5,00,000		5,00,000

16.2.3 Discount *on* Issue of *Shares* and Debentures

Discount allowed on the issue of shares or debentures implied capital loss for the company, the amount realised on issue being less than the face value of the securities. The amount of discount may be written off by charging it against capital profits, if any. Otherwise, it is charged lo Profit and Loss Account over a period of 3 to 5 years. The amount, not so written off, is carried forward to the next year and shown in current year's Balance Sheet as a separate item under the heading 'Miscellaneous Expenditure and Losses'. In other words discount on issue of shares and debentures is also treated as a deferred revenue expenditure and treated in the company final accounts in the same way as preliminary expenses.

16.2.4 Premium on Issue of Shares

Premium on shares issued refers to the value realised over the above the issue price. Where shares are issued at a premium, the amount of premium is required to be credited to separate account called 'Share Premium Account', It represents capital profit for the company, and may be applied to write off capital expenditure and capital losses like preliminary expenses, underwriting commission and brokerage, discount allowed on the issue of shares and debentures, premium payable on the redemption of preference shares or debentures, etc. The credit balance of Share Premium Account which remains after meeting any of the above expenses or losses is to be shown on the liabilities side of the Balance Sheet as a separate item under the heading 'Reserves and Surpluses'.

Let us explain it with the help of an example. Shakti Ltd. raised from the public Rs. 6,00,000 by issuing 50,000 equity shares of Rs. 10 each at Rs. 12 per share. Underwriting Cornmission was agreed to be paid at $2\frac{1}{2}$%. Rs. 7,500 was paid as brokerage to a firm of stock brokers. From the above information show the relevant figures in the company's Balance Sheet.

Shares were issued at a premium of Rs. 2 per share. So, the amount of premium received was Rs. 1,00,000 (Rs. 2 per share on 50,000 shares).

Underwriting Commission of $2\frac{1}{2}$% comes to Rs. 15,000 ($2\frac{1}{2}$% of Rs. 6,00,000 the issued price).

The total amount of issue expenses, underwriting commission (Rs. 15,000) arid brokerage (Rs. 7,500) will be to Rs. 22,500. This amount should bc charged to the Share Premium Account, which will have a credit of Rs. 1,00,000. Thus, issue expenses,would be fully written off and Share Premium Account will be left with a credit balance of Rs. 77,500 (Rs. 1,00,000—Rs. 22,500).

It should be noted that the amounts of share issue expense, preliminary expenses, etc. will be written off against the premium on share only when it is so specified. The Balance Sneet will show the items as follows:

Liabilities side

Share Capital		
Authorised .... Share of Rs. .... each		———
Issued and Subscribed Capital		
50,000 Equity shares of Rs. 10 each fully called up and paid		5,00,000
Reserves & Surplus		
Share Premium Account Rs.	1,00,000	
Less: Expenses on issues of shares	22,500	77,500

16.2.5 *Calls* in Arrears and, Calls in Advance

A company issuing shares to the public requires payment to be made by subscribers partly along with applications, partly on allotment of shares and the balance in one or two instalments, known as call money. If the amount due on call remains unpaid in respect of some shares, it is debited to Calls in Arrears Account. This amount is

shown as a deduction from the amount of subscribed and called up capital on the liabilities side of the Balance Sheet.

A different situation may arise where a company receives applications for a larger number of shares than offered by it to rhe public for subscription. This is known as over-subscription. In that event generally the applicants are alloted a smaller number of shares than applied for.

The excess amount of application money is adjusted towards the amount due on allotment. If there is still an excess of application money it should be refunded. But the amount may be retained by the company to be adjusted against call money, as and when calls are made. For the time being, this amount is regarded as calls in advance, that is, the money received in anticipations for future calls. Calls in Advance Account is credited with this sum. It is shown as a separate item under the head 'Share Capital' on the liabilities side of the Balance Sheet, but not added to the subscribed and called up capital.

16.2.6 Forfeited Shares

In case calls on certain shares remain unpaid on the expiry of the time allowed for its payment as per notice of demand, the company may forfeit those shares and the amount received thereon, which may include application and allotment money. Forfeiture of shares leads to reduction of share capital and requires that the Calls in Arrears Account (representing calls unpaid) should be adjusted accordingly. The amount received on the forfeited shares is credited to a new account termed as 'Forfeited Shares Account' and added to the paid up share capital till such shares are reissued.

Shares which have been forfeited may he reissued at a later stage at the convenience of the company. If it is decided to reissue those shares at a discount, the maximum amount of discount which may be allowed to new allotees cannot exceed the amount received on the shares from the previous allotees. The discount allowed on reissue is charged to the Forfeited Shares Account. If the discount allowed on reissue of forfeited shares is less than the amount originally received on these shares, the difference should be treated as a capital profit and transferred to Capital Reserve Account to be shown under the heading 'Reserves and Surpluses'.

Suppose, for example, a company has forfeited 100 shares of Rs. 10 each on which Rs. 5 per share had been paid as application, and the allotment money and call money of Rs. 5 per share was not paid. In this case, Rs. 500 will be credited to Forfeited Shares Account on the forfeiture of shares. Assume that 60 shares were reissued at a discount of Rs. 3 per share, that is, discount allowed on reissue amounted to Rs. 180 against Rs. 300 (Rs. 5 per share) originally received on these 60 shares. The amount credited to the Forfeited Shares Account will be reduced by Rs. 300, of which Rs. 180 will be transferred to Share Capital Accounr and Rs. I20 (capital profit) transferred to Capital Reserve. The remaining balance of Rs. 200 in the Forfeited Shares Account (representing the amount received on 40 shares which are not yet reissued) will be carried forward and shown on the liabilities side of Balance Sheet as an addition to the amount of subscribed and called up capital. You have already learnt about it in detail in Unit 12.

16.2.7 Depreciation on Fixed Assets

In the case of companies, the annual provision for depreciation on fixed assets, like land and buildings, plant and machinery, etc., is charged (debited) to the Profit and Loss Account. The amount of depreciation is accumulated from year to year in the Depreciation Account for each category of fixed assets. Thus, in the Trial Balance prepared at the end of any year total depreciation provided till the end of previous year appears as a credit balance. To this amount, the amount of depreciation provided for the current year is added. The total amount of depreciation provided till the end of current year is shown as a deduction from the original cost of fixed assets in the Balance Sheet, the item is shown as Net Block (original cost less depreciation) under the heading 'Fixed Assets'. The detailed particulars are required to be shown separately for each category of fixed assets i.e., original cost of the asset as at the beginning of the year, additions made during the year, sale, if any, depreciation provided till the end of previous year and during the current year, total amount of depreciation provided till date, and the net value of the assets.

16.2.8 Provision for Taxation

Every company makes provision for taxation in respect of profit made-during a particular year. Provision for taxation should, strictly speaking, be regarded as an appropriation of profits and thus shown 'below the Line', that is, after net profits have been arrived at. However, many companies actually show it 'above the line' that is, in the first part. of the Profit and Loss Account. The credit balance in the 'Provision for Taxation Account' is shown on the liabilities side of the Balance Sheet as a separate item under the sub-heading 'Provisions' which comes under the heading 'Current Liabilities and Provisions'. The balance of the account is carried forward till assessmerit of tax in respect of the relevant year has been finalised.

16.2.9 Dividends

Every profit-earning company generally distributes a part of the profits among its shareholders. The amount so distributed is known as dividend. When directors declare dividend during the course of an accounting year in anticipation of profits of the same year it is known as interim dividend. However, the general practice is that directors declare the dividend to be paid at the annual general meeting of the company. This is known as the final dividend. Interim dividend if any, declared is shown as an appropriation of profit and debited 'below the line' in the Profit & Loss Account. The final dividend proposed to be declared is also an appropriation of profits and debited to the Profit & Loss Account 'below the line'.

The proposed dividend for the current year appears on the liabilities side of the Balance Sheet under the sub-heading 'Provisions' below the heading 'Current Liabilities and Provisions'. This is because the proposed dividend is payable after it is approved at the annual general meeting which is to be held after the final accounts have been prepared at the close of the year. If dividends remain unclaimed, the amount is shown under the heading 'current liabilities' in the Balance Sheet.

16.2.10 Interest on Debentures

You know that the rate of interest on debentures is always mentioned with the debentures. The interest is generally payable half-yearly on 30th June and 31st December (or 31st March and 30th September). You will always find a figure of interest on debentures in the Trial Balance where the company has issued the debentures. But it will usually be for the half year. This implies that we have to provide for the remaining half year interest whether specified in adjustments or not. In other words, unless debentures have been issued during the course of the accounting year, we must provide for full year's interest.

16.2.11 Transfer to Reserves

It is a common practice in companies to transfer a part of profits to reserves. The amount transferred to general reserve or any specific reserve is treated as an appropriation of profits and is thus shown 'below the line' in the Profit and Loss Account of a company. This amount is also added to the concerned reserve while preparing the Balance Sheet.

16.2.12 Balance of Profit and Loss Account

The balance of Profit and Loss Account of current year before appropriations, and the balance of Profit & Loss Account brought forward from the previous year are shown in the second part (below the line) of the current year's Profit & Loss Account. Jf there are profits, appropriations are made out of the same which may consist of transfer to general reserve, dividends declared, and provision for taxation. The final balance of profit is carried forward to'the next year. The amount is also shown as a surplus on the liabilities side of Balance Sheet under the heading 'Reserves and Surplus'.

However, if the find balance of Profit & Loss Account indicates Net Loss (that is, a debit balance) it is shown as a deduction from General Reserve on the liabilities side, If, however, the net loss is more than the amount of General Reserves, it will be shown on the asset side of Balance Sheet (to the extent not adjusted) under the beading 'Miscellaneous Expenditure and Losses'.

Example: PRO Company carried forward Rs. 40,000 credit balance in the Profit & Loss Account from the year ending March 31, 1988 to the next year, It made a

further profit of Rs. 2,80,000 during the next year ending March 31, 1989. The following decisions of the Directors were to be carried out:

Provision for Taxation: Rs. 90,000
Dividend on 12% Preference Shares, Rs. 1,20,000
Dividend at 15% on 30,000 equity shares of Rs. 10 each fully paid, Rs. 45,000
Transfer to General Reserve Rs. 30,000

You are required to prepare the Profit & Loss Account 'below the line' for the year ending March 31, 1989. Show how the relevant items will appear in the Balance Sheet:

Profit & Loss Account (Below the line)
for the year ending March 31, 1989

	Rs.		Rs.
Provision for Taxation	90,000	Balance b/d	40,000
Proposed Preference Dividend at 12%	1,20,000	Profit made during the year	2,80,000
Proposed Equity Dividend	45,000		
General Reserve	30,000,		
Balance c/d	35,000		
	3,20,000		3,20,000

Balance Sheet as on March 31, 1989
(Liabilities Side only)

		Rs.
Share Capital		
Authorised ....12% Prd. Shares of Rs. ..... each		10,00,000
.... equity shares of Rs. ..... each		....
		10,00,000
Issued & Subscribed .... 12% Pref. shares of Rs. ..... each		
30,000 Equity Shares of Rs. 10 each fully called up and paid		3,00,000
		13,00,000
Reserves and Surplus		
Surplus (P&L A/c Balance)	35,000	
Addition to Reserve	30,000	65,000
Secured Loans		
Unsecured Loans		
Current Liabilities & Provision		
A Current Liabilities...........		
B Provisions		
Provision for Taxation		90,000
Proposed Dividends		
on Preference shares	1,20,000	
on Equity Shares	45,000	1,65,000

Check Your Progress A

1 Under what heads will you classify the following items on the liabilities side of the Balance Sheet of a Company?

(i) Proposed Dividend, (ii) Unclaimed Dividend, (iii) Interest accrued and due on secured loans, (iv) Provision for Taxation, (v) Arrears of dividend on cumulative preference shares, (vi) Share Premium Account (vii) Forfeited Shares Account, (viii) Credit balance of Profit & Loss Account.

2 Classify the following items under proper headings on the asset side of Balance Sheet.
(i) Work in Progress, (ii) Government Bonds, (iii) Goodwill, (iv) Loose Tools, (v) Prepaid Insurance, (vi) Discount on Issue of Shares, (vii) Advance to Subsidiary Company, (viii) Trade Mark.

3 How will you show the following items in the Balance Sheet of a Limited Company as on December 31, 1989:

i) Original Cost of Machinery Rs. 4,50,000.

ii) Book Value of Machinery as on January 1,1989 Rs, 3,00,000.

iii) Depreciation was to be written off at 10% on written down value.

16.3 PREPARATION OF FINAL ACCOUNTS

Let us recapitulate what has been discussed in Unit 15 and the preceding sections of this unit. The following points are worth remembering:

i) In Profit & Loss Account and Balance Sheet of a company, figures of current year as well as of the preceding year must be given.

ii) There is no proforma of Profit & Loss Account of a company. However, there are detailed legal provisions about the information to be contained in this statements. The Profit & Loss Account may be presented in vertical or horizontal form. Similar is the case with the Balance Sheet. But for Balance Sheet there is a prescribed proforma.

iii) Since there is flexibility in presentation of Profit & Loss Account the student may follow the usual proforma. It is however, considered desirable to divide it into three parts and include the information required by the Companies Act.

The Proforma of the Profit & Loss Account to be used in Figure 16.1

Figure 16.1: Proforma of Profit & Loss Account

.... Co. Ltd.

Profit & Loss Account for the year ending ....

Dr. Cr.

Particulars		Amount	Particulars		Amount
		Rs.			Rs.
Part I					
Opening Stock		xx	Sales	xx	
Purchases	xx		Less Sales Returns	xx	xx
Less Purchase Returns	xx	xx	Closing Stock		xx
Carriage inward		xx			
Wages		xx			
Manufacturing Expenses		xx			
Gross Profit c/d		xx			
		xx			xx
Part II					
General & Administrative expenses			Gross Profit b/d		xx
Salaries, Rent, Stationery, Electricity, Insurance, etc		xx	Non Operating incomes like rent, interest, dividend, etc.		xx
Selling and Distribution Expenses					
Advertising, Salesmen salary, Commission, Discount, Bad debts, etc.		xx			
Repairs & Maintenance					
Repairs, renewals, depreciation, etc.		xx			
Financial Expenses		xx			
Interest, taxes, etc.		xx			
NET PROFIT		xx			
		xx			xx
Part III					
Reserves		xx	Balance b/d		xx
Dividends		xx	Net Profit		xx
Balance c/f		xx			
		xx			xx

Note: Part I is generally referred to as Trading or Manufacturing Account, Part II is called General Profit & Loss A/c and Part III as Profit & Loss Appropriation Account.

For the benefit of the students the following summarised proforma of Balance Sheet of a company is given in Figure 16.2. The students are supposed to identify the items to be included under each broad head (Refer to Schedule VI Part I given in unit 15).

Figure 16.2: Proforma of Summarised Balance Sheet

.... Co. Ltd.

Balance Sheet as on ....

Liabilities	Amount	Assets	Amount
	Rs.		Rs.
I. Share Capital	xx	I. Fixed Assets	xx
II. Reserves and Surplus	xx	II. Investments	xx
III. Secured Loans	xx	III. Current Assets, Loans & Advances	xx
IV. Unsecured Loans	xx	IV. Miscellaneous Expenditure	xx
V. Current Liabilities and Provisions	xx		
TOTAL	xx	TOTAL	xx

Illustrations 1,2 and 3 shall help you to understand the preparation of the final accounts of a company.

Illustration 1

Spik and Span Ltd. was registered with an authorised capital of Rs. 3 lakh divided into 30,000 equity shares of Rs. 10 each. The company offered 15,000 shares for public subscription of which Rs. 7.50 per share was called up.

The following trial balance was drawn from the book of accounts as on March 31, 1989. You are required to prepare a Profit & Loss Appropriation Account for the year ending on March 31, 1989 and Balance Sheet as on that date.

	Debit Rs.	Credit Rs.
Land	23,800	
Buildings	52,900	
Calls in Arrear	5,000	
Brokerage on Shares	800	
Stores and Spare parts	18,000	
Preliminary Expenses	7,600	
Unexpired Insurance	640	
Live Stock	900	
Plant & Machinery	1,03,600	
Loose Tools	24,000	
Stock in trade at cost	50,000	
Cash at Office	12,480	
Cash at Bank	25,000	
Sundry Debtors	26,000	
Share Capital		1,12,500
Sundry Creditors		1,24,600
Capital Reserve		30,800
Wages Outstanding		1,820
Godown Rent due		700
General Reserve		16,800
Employee's Benefit Fund		3,000
Salaries Outstanding		1,000
Reserve for Doubtful Debts		1,300
Unpaid Dividends		700
Profit & Loss Account		57,500
Total	3,50,720	3,50,720

Out of the creditors of, Rs. 1,24,600 Rs. 84,600 were due to bank for a loan secured by mortgage on buildings and machinery, and Rs. 22,000 were due on account of loan from subsidiary company.

The company earned a profit of Rs. 61,200 during the year. The balance of profit brought forward from the previous year was Rs. 38,600 out of which it was decided that Rs. 15,000 be paid as final dividend, Rs. 16,800 be carried to General Reserve, Rs. 3,000 to Employees Benefit Fund. It was further resolved that Rs. 7,500 be paid by way of interim dividend for the first half of the current year.

Solution:

Spik & Span Ltd.

Profit & Loss Appropriation A/c for the year ended March 31, 1989

	Rs.		Rs.
To Interim Dividend	7,500	Balance as per P & L A/c for the year ending March 31, 1988	38,600
To Dividend	15,000		
To General Reserve	16,800		
To Employee's Benefit Fund	3,000		
To Balance c/f	57,500		
		Profit as per P & L A/c	61,200
	99,800		99,800

Spik & Span Ltd.

Balance Sheet as on March 31, 1989

Liabilities	Rs.	Assets		Rs.
Share Capital:		**Fixed Assets:**		
Authorised		(Net Block)		
30,000 Equity Shares of Rs. 10 each	3,00,000	Land	23,800	
		Buildings	52,900	
Issued & Subscribed Capital:				
15,000 Equity Shares of Rs. 10 each Rs. 750 per		Plant & Machinery	10,3,600	
Share called up Rs. 1,12,500		Live Stock	900	1,81,200
Less Calls in Arrear 5,000	1,07,500	**Current Assets:**		
		Stock in trade at cost		50,000
		Stores & Spares		18,000
Reserves and Surplus:				
Capital Reserve	30,800	Loose Tools		24,000
General Reserve	16,800	Sundry Debtors Rs. 26,000		
		Less Reserve		
Profit & Loss Account	57,500	for D'ful Debts	1,300	24,700
Employees Benefit Fund	3,000	Cash & Bank Balances		37,480
Secured Loans:		**Loans and Advances:**		
From Bank (Secured by mortgage on buildings machinery)	84,600	Unexpired Insurance		640
Unsecured Loans:		**Miscellaneous Expenditure & Losses:**		
From Subsidiary	22,000			
Current Liabilities and Provisions:		Preliminary Expenses		7,600
		Brokerage on Shares		800
Sundry Creditors	18,000			
Unpaid Dividends	700			
Outstanding Wages	1,820			
Outstanding Salary	1,000			
Godown Rent due	700			
	3,44,420			3,44,420

Illustration 2

The following balances appeared in the books of ABC Co. Ltd. as on December 31, 1988.

	Dr.	Cr.
	Rs.	Rs.
Paid up Capital		
60,000 Equity Shares of Rs. 10 each		6,00,000
General Reserve		2,50,000
Unclaimed Dividend		6,526
Trade Creditors		36,858
Buildings at Cost	1,50,000	
Purchases	5,00,903	
Sales		10,83,947
Manufacturing Expenses	3,59,000	
Establishment Charges	26,814	
General Charges	31,078	
Machinery at Cost	2,00,000	
Motor Vehicle at Cost	30,000	
Furniture at Cost	5,000	
Opening stock	1,72,058	
Book Debts	2,23,380	
Investments	2,88,950	
Depreciation Reserve		71,000
Advance Payment of Income Tax	50,000	
Cash Balance	72,240	
Directors Fees	1,800	
Investment's Interest		8,544
Profit and Loss Account (January 1, 1988)		16,848
Staff Providend Fund		37,500
	21,11,223	21,11,223

From these balances and the following information prepare the Company's Balance Sheet as on December 31, 1988 and its Profit and Loss Account for the year ended on that date.

a) The stock on December 31, 1988 was Rs. 1,48,680.

b) Provide Rs. 10,000 for depreciation on fixed assets, Rs. 6,500 for Managing Director's Commission and Rs. 1,500 for the Company's contribution to the Staff Providend Fund.

c) Interest accrued on Investment amounted to Rs. 2,750.

d) A Provision of Rs. 60,000 for taxes in respect of the profit for 1988 is considered necessary.

e) The directors propose a final dividend at 4% after transfering Rs. 50,000 to General Reserve.

f) A claim of Rs. 2,500 for workmen's compensation is being disputed by the company.

g) The market value of investment as on 31.12.88 amounts to Rs. 3,02,500.

Solution:

Profit and Loss Account of the ABC Co. Ltd. for the year ended December 31, 1988

Dr.	Rs.			Cr. Rs.
To Opening Stock	1,72,058	By Sales		10,83,947
To Purchases	5,00,903	By Closing Stock		1,48,680
To Manufacturing Expenses	3,59,000			
To Gross Profit	2,00,666			
	12,32,627			12,32,627
To Establishment Charges	26,814	By Gross Profit		2,00,666
To General Charges	31,078	By Interest on		
To Director' Fees	1,800	Investment	8,544	
To Depreciation on		Add Accrued		
Fixed Assets	10,000	Interest	2,750	11,294
To Managing Directors' Remuneration	6,500			

Dr.	Rs.		Cr. Rs.
To Contribution to Staff Providend Fund	1,500		
To Provision for Taxation	60,000		
To Profit for the year c/d	74,268		
	2,11,960		2,11,960
To General Reserve (Transfer)	50,000	By Balance as per last year	16,848
To Proposed Dividend	24,000	By Profit for the year	74,268
To Balance c/d	17,116		
	91,116		91,116

Balance Sheet of ADC Co. Ltd. as on December 31, 1988

Liabilities	Amount Rs.	Assets	Amount Rs.
Share Capital:		**Fixed Assets:**	
Authorised Capital	—	Building at Cost 1,50,000	
Issued, Subscribed and paid up Capital		Machinery at Cost 2,00,000	
60,000 Equity Shares of Rs. 10 each	6,00,000	Motor Vehicle at cost 30,000	
		Furniture at cost 5,000	
		3,85,000	
Reserves and Surplus General Reserve 2,50,000			
Added during the yr. 50,000	3,00,000	Less Depreciation (71,000 + 10,000) 81,000	3,04,000
Profit & Loss Account	17,116	**Investments**	2,88,950
Secured Loan	....		
Unsecured Loan			
Current Liabilities & Provisions			
A. **Current Liabilities:**		**Current Assets**	
Trade Creditors	36,858	**Loans and Advances:**	
Unclaimed Dividend	6,526	A. **Current Assets**	
Managing Directors Remuneration	6,500	Stock in trade (at cost or market value whichever is less)	1,48,680
B. **Provisions:**			
Provision for Taxation	60,000	Book debts	2,23,380
Proposed dividend	24,000	Cash Balance on hand	72,240
Staff Provident Fund 37,500		B. **Loans and Advances:** Acrued Interest on Investments	2,750
Added during the year 1,500	39,000	Advance Payment of Tax	50,000
		Misc. expenditure	....
	10,90,000		10,90,000

Note: There is a contingent liability for Rs. 2,500 in respect of a claim for workmen's compensation which is disputed by the company.

Illustration 3

The following Trial Balance was extracted from the books of a company on December 31, 1989.

	Rs.	Rs.
Share Capital (40,000 Shares of Rs. 10 each Rs. 8 per share called up)		3,20,000
Calls in Advance		4,000
Gross Profit (Excess of Sales over cost of goods sold)		1,75,000
Closing Stock	30,000	
Sundry Debtors and Creditors	78,000	60,000

	Rs.	Rs.
Fixed Assets (at cost)		
Furniture	70,000	
Motor Vehicle	80,000	
Premises	2,30,000	
Depreciation Provision upto Dec. 31 1987		
Furniture		14,000
Motor Vehicle		16,000
Premises		4,600
Salaries	39,500	
Motor Vehicle Expenses	18,000	
Printing and Stationary	2,400	
Postage and Telegram	3,000	
Investment in Shares (at Cost)	30,000	
Dividend unpaid		2,500
Audit Fees	1,500	
Directors' Fees	2,400	
Preliminary Expenses	6,000	
Profit & Loss A/c (Bal. as on 31.12.87)		45,000
Cash at Bank	50,300	
	6,41,100	6,41,100

Additional particulars are given as follows:

i) Salaries include Rs. 7,500 paid to Managing Director

ii) Provision is to be made for taxation, Rs. 30,000 and proposed dividend at 15%

iii) Preliminary Expenses to be written off Rs. 2,000

iv) The market value of investment in shares as on December 31, 1988 was Rs. 36,000

v) Depreciation on fixed assets is to be provided on the written down value at 10% on Furniture, 20% on Motor vehicle and 2% on Premises

vi) A customer's claim for damages Rs. 7,500 is in dispute

Prepare the Company's Profit and Loss Account for the year ended December 31, 1988, and Balance Sheet as on that date, both in Vertical form.

Solution:

.... Company Ltd.

Profit and Loss Account for the year ended 31-12-88

	Rs.	Rs.
Sales income	....	
Less Cost of Goods Sold	....	
Gross Profit		1,75,000
Less Salaries	32,000	
Mg. Directors' Salary	7,500	
Motor Vehicles Expenses	18,000	
Printing & Stationery	2,400	
Postage & Telegrams	3,000	
Depreciation:		
Furniture	5,600	
M. Vehicle	12,800	
Premises	4,508	
Audit Fees	1,500	
Directors' Fees	2,400	
Preliminary Expenses	2,000	91,708
		83,292
Less Provisions for Taxation		30,000
		53,292
Add Balance from last year		45,000
		98,292
Less Proposed Dividend		48,000
Balance Carried forward		50,292

---------------- Company Ltd.
Balance Sheet as on 31-12-88

Particulars		Rs.	Rs.
Sources of Fund			
1 **Owners' Fund**			
40,000 Shares of			
Rs. 10 each Rs. 8 per share called up	3,20,000		
Calls in Advance	4,000		
			3,24,000
2 **Reserves & Surplus**			
Profit & Loss Account (Cr. Bal.)			50,292
			3,74,292
Note: Contingent Liabilities on account of customers' claim for damages in dispute	Rs. 7,500		
Uses of Fund			
1 **Fixed Assets**			
Premises (at Cost)		2,30,000	
Less Depreciation		9,108	2,20,892
Motor Vehicle (at Cost)		80,000	
Less Depreciation		28,000	51,200
Furniture (at Cost)		70,000	
Less Depreciation		19,600	50,400
2. **Investments:**			
Investments in Shares (at Cost)			30,000
(Market Value Rs. 36,000)			
3. **Current Assets**			
Stock		30,000	
Sundry Debtors		78,000	
Cash at Bank		50,300	
		1,58,300	
Less Current Liabilities			
Sundry Creditors	Rs. 60,000		
Unpaid Dividends	2,500	62,500	95,800
			4,48,292
Less Provisions			
For Taxation		30,000	
For Proposed Dividend		48,000	78,000
			3,70,292
4. Miscellaneous Expenditure:			
Preliminary Expenses			4,000
			3,74,292

16.4 LET US SUM UP

Before preparing the final accounts of a company one must gain clarity about the nature of certain items and their treatment in the final accounts. These are preliminary expenses, expenses on issue of shares and debentures, discount on shares and debentures, premium on shares, calls in arears, calls in advance, forfeited shares, depreciation, provision for taxation, interest on debentures, transfer to reserve, and the balance of the Profit and Loss Account.

The items like preliminary expenses, share issue expenses, discount on shares etc. are regarded as deferred revenue expenses and treated as such in the final accounts. Premium on shares is regarded as capital profit and is shown under Reserves and Surpluses. Calls in arrears are deducted from paid up capital and the calls in advance are shown under the heading share capital as a liability. The amount forfeited on shares is added to the paid up capital. The accumulated amount of depreciation is deducted from the fixed assets. The provision for taxation is shown as a current liability. It must be ensured that interest on debentures is provided for the full year.

All appropriations of profits like payment of dividend (interim and final), proposed dividend, transfers to reserves must be shown in the third part of the Profit and Loss Account. The unclaimed dividend is shown as a current liability. Proposed Dividends and transfer to reserves should also be shown in the Balance Sheet.

16.5 KEY WORDS

Dividend: Part of profits distributed to the equity shareholders.

Final Dividend: Dividend declared in the annual general meeting.

Interim Dividend: Dividend declared during the course of an accounting year in anticipation of profits of that year.

Preliminary Expenses: Expenses relating to the formation of company grouped under one heading.

Provision for taxation: The amount appropriated from profit for the liability arising on account of payment of taxes.

16.6 ANSWERS TO CHECK YOUR PROGRESS

A1 i) Provisions ii) Current Liabilities iii) Secured Loans iv) Provisions v) Contingent Liabilities vi) Reserves and Surplus vii) Subscribed Capital viii) Reserves and Surplus

2 i) Current Assets ii) Investments iii) Fixed Assets iv) Current Assets v) Loans and Advances vi) Miscellaneous Expenditure vii) Loans and Advances viii) Fixed Assets.

		Rs.
Cost		4,50,000
Less Depreciation	1,50,000	
	+ 30,000	1,80,000
		2,70,000

16.7 TERMINAL QUESTIONS/EXERCISES

Questions

1 What are Preliminary Expenses and how are they treated in the books of account?

2 How is Provision for taxation treated in books of Account?

Exercises

1 The following balances have been extracted from PQR Ltd. as on September 30 1987.

	Dr.	Cr.
Share Capital (Authorised and issued):		
Equity (1,50,000 shares)		15,00,000
8% Redeemable Preference (400 shares)		40,000
Share Premium		25,000
Preference share Redemption	48,000	
General Reserve		1,00,000
Land (Cost)	3,00,000	
Buildings (Cost less Depreciation)	7,00,000	
Furniture (Cost less Depreciation)	20,000	
Motor Vehicle (Cost less Dep.)	35,000	
Trading Account—gross profit		9,00,000
Establishment Charges	2,50,000	
Rates, Taxes and Insurance	12,000	
Commission	4,000	

	Dr.	Cr.
Commission		5,000
Discount received		8,000
Directors' Fees	2,000	
Depreciation	60,000	
Sundry Office Expenses	60,000	
Payment to Auditors	4,000	
Sundry Debtors and Creditors	1,06,600	25,600
Profit and Loss Account (as on 30.9.86)		10,000
Unpaid Dividend		2,000
Cash in hand	12,000	
Cash at Bank in Current Account	1,95,000	
Security Deposit	10,000	
Outstanding Expenses		6,000
Investment in G.P. Notes	2,00,000	
Stock-in-trade (at or below cost)	3,53,000	
Provision for taxation (y/e 30.9.86)		70,000
Income tax paid under dispute (y/e 30.9.86)	1,00,000	
Advanced payment of income-tax	2,20,000	
TOTAL	26,91,600	26,91,600

The following further details are available:

1 The Preference shares were redeemed on 1st October, 1986 at a premium of 20% but no entries were passed for giving effect thereto, except payment standing to the debit of Preference Share Redemption A/c.

2 Depreciation provided up to 30th September, 1987 is as follows:

a) Buildings	2,10,000
b) Furniture	20,000
c) Motor Vehicles	60,000

3 Establishment charges include Rs. 18,000 paid to Managing Director as minimum remuneration in terms of agreement which provides for a remuneration of 5% of annual net profits subject to the above minimum in the case of absence or inadequacy of profits in the year.

4 Payment to Auditors includes Rs. 1,000 for taxation work in addition to audit fees.

5 Market value of investments on 30th September '1987 Rs. 1,80,000

6 Sundry Debtors include Rs. 40,000 due for a period exceeding six months.

7 All receivables and deposits are considered good for realisation.

8 Income-tax demand for the year ended 30.9.86 Rs. 1,00,000 has not been provided for against which an appeal is pending.

9 Income-tax to be provided @55%.

10 Directors decide to transfer Rs. 25,000 to the General Reserve and to recommend payment of dividend on equity shares at the rate of 5%.

11 Ignore previous year's figures.

You are required to prepare the Profit and Loss Account for the year ended 30th September, 1987 and the Balance Sheet as at that date.

(**Ans:** Net Profit Rs. 2,30,422,
Total of Balance Sheet Rs. 22,51,600).

2 The following balances have been extracted from the books of XYZ Ltd. as on March 31, 1988:

	Rs.		Rs.
Freehold Land	23,000	Income from Investments	1,200
Buildings	7,500	Provisions for doubtful debt	
Furniture	2,000	(Ist April 1987)	200
Debtors	5,000	Creditors	2,000
Stock (31 March'88)	4,000	Provision for Depreciation	
Cost at Bank	500	(1st April, 1987)	
Cash in hand	300	Buildings 200	
Cost of Goods sold	30,000	Furniture 300	500
Salaries and Wages	1,300	Suspense A/c	650
Misc. Expenses	800	Equity Share Capital	36,750
Investment in Shares	18,000	6% Cumulative Pref.	
Interest	300	Share Capital	8,000
Bad Debts	100	Share Premium	1,000
Repairs and Maintenance	150	Bank Overdraft	5,000
Advance payment of		Sales	38,000
Income-tax	600	Profit & Loss A/c (1st April, 1987)	250
	93,550		93,550

The following further particulars are available:

1 The land was revalued on 1st January, 1988 at Rs. 30,000 by an expert valuer, but no effect has been given in the books although the Directors have decided to adjust the relevant amount.

2 Provision for doubtful debt is to be adjusted to 5% on the amount of debtors.

3 Equity Share Capital is composed of Rs. 10 Shares, 3,640 fully paid and 50 on which call of Rs. 3 remains unpaid.

4 Suspense A/c represents money received from the new allottee for re-issue of 50 shares forfeited during the year for non-payment of the final call, but no entry for adjustment thereof has been passed.

5 Provision for taxation is to be made at 45%

6 Market value of investments was Rs. 18,500 on 31st March'88

7 The company is managed by the Directors who are entitled to a remuneration of 3% on the annual net profits.

8 Depreciation is to be charged on written down value of:
Building at 2%
Furniture at 10%

9 The land and buildings of the company are mortgaged in favour of the bank as security for overdraft sanctioned up to a limit of Rs. 25,000.

10 Dividend on Cumulative preference shares were in arrears for 5 years upto March 31, 1988. The Directors have recommended payment of dividend for two years.

Prepare Profit and Loss Account fot tne year ended March 31, 1988 and Balance Sheet on that date.

(**Answer:** Profit for the year Rs.5,999, Balance Sheet total Rs.66,834)

3 Ajax Co. Ltd. had an authorised capital of 5,000 equity shares of Rs. 100 each. As on December 31, 1989, 3000 shares were fully called up, and the following balances were extracted from the company's ledger accounts.

	Rs.		Rs.
Salary	4,85,000	Printing and Stationery	2,300
Purchases	3,20,000	Advertising Expenses	7,300
Stock	75,000	Sundry Debtors	52,700
Manufacturing wages	70,000	Sundry Creditors	34,200
Insurance upto 31-3-90	6,720	Plant & Machinery	83,500

	Rs.		Rs.
Rent	6,000	General Reserve	60,700
Salaries	18,500	Furniture	27,100
Discount allowed	1,050	Building	84,580
General Expenses	9,050	Cash at Bank	1,24,000
Calls in Arrear	4,800	Loans from Managing Director	3,700
Profit and Loss A/c (Cr. Bal.)	17,200	Bad Debts	12,600

The following further information is given: (i) Depreciation to be charged on Machinery and Furniture at 15% and 10% respectively; (ii) Provision for Taxation to be made Rs. 19,000; (iii) Closing Stock Rs. 1,21,000; (iv) Outstanding liabilities: Wages, Rs. 7,000; Salaries Rs. 8,200; Rent, Rs. 1,600. (v) Dividend at 5% on paid-up capital to be provided; (vi) Rs. 10,000 to be transferred to General Reserve.

Prepare Profit and Loss Account for the year ended December 31, 1989, and Balance Sheet (in proper form) as on that date.

(**Answer:** Profit for the year Rs. 20,325, total of Balance Sheet Rs. 4,79,325).

4 The following balances are extracted from the books of PQR Ltd., as on 31 March, 1988.

Share Capital	40,00,000
Cash in hand	62,000
Repairs and Maintenance	86,000
Raw Materials at cost	26,70,000
Furniture	1,22,000
Sundry Creditors	34,00,000
Directors' Fees	4,000
Plant and Machinery	43,00,000
Miscellaneous Expenses	6,10,000
General Reserve	30,00,000
Land	3,00,000
Finished Goods at cost	31,00,000
Sales	4,33,00,000
Buildings	7,41,000
Cash at Bank	80,000
Provision for Taxation	21,00,000
Sundry Debtors	14,00,000
Raw Materials Consumption	2,86,00,000
Staff Advance	53,000
Advance from customers	5,00,000
Salaries, Wages and Bonus	1,16,00,000
Cash credit from Bank	1,25,000
Power	88,000
Prepaid expenses	46,000
Rent	53,000
Travelling and Conveyance	41,000
Auditors' Fees	15,000
Miscellaneous Income	5,46,000
Income Tax Advance	30,00,000

The following further information is also given:

1 The authorised share capital of the company is 80,000. Equity Shares of Rs. 100 each which has been issued and subscribed to the extent of 50%.

2 During the year a pending income-tax assessment for an earlier year was finalised and the tax payable, after giving credit for advance tax paid for that year amounting to Rs. 7,00,000 was finalised at Rs. 8,50,000. The company did not dispute this tax assessment. A provision of Rs. 8,00,000 had been made for that year.

3 Tax provision @ 6% is to be made on current year's profits.

4 15% dividend on the paid-up share capital is recommended by the Directors.

5 The closing stock of finished goods at cost is Rs. 56,00,000

6 During the year there were no imports or exports or any transaction in foreign currency except a foreign tour by a Director on which net expenditure of Rs. 22,000 was incurred as follows:

Air Passage to and fro-tickets purchased in India	12,000
Cost of traveller cheques purchased in Pound Sterling	13,500
	23,500
Less Foreign Exchange surrendered by the Director on his return	3,500
	22,000

7 Depreciation on assets amounting to Rs. 4,30,000 on Furniture and Rs. 33,000 on Building has been debited to miscellaneous expenditure.

8 The surplus in profit and loss account is to be transferred to General Reserve Account.

Prepare Profit and Loss Account and Balance Sheet as on 31.3.1988.

(**Answer:** Net Profit Rs. 16,99,600,
Total of Balance Sheet Rs. 1,76,74,000.)

Note: These questions and exercises will help you to understand the unit better. Try to write answers for them but do not submit your answers to the University. These are for your practice only.

UNIT 17 ANALYSIS OF FINANCIAL STATEMENT

Structure

17.0 Objectives
17.1 Introduction
17.2 Nature of Financial Statement
17.3 Uses and Limitations of Financial Statements
  17.3.1 Uses
  17.3.2 Limitations
17.4 Financial Analysis and its Techniques
17.5 Meaning of Ratio Analysis
17.6 Objectives of Ratio Analysis
17.7 Classification of Ratios
17.8 Ratios to Assess Financial Soundness
  17.8.1 Liquidity Ratios
  17.8.2 Long Term Solvency Ratios
17.9 Ratios to Assess Efficiency (Turnover Ratios)
17.10 Ratios to Assess Profitability
  17.10.1 Profitability *in* relation to Sales
  17.10.2 Profitability in relation to Capital Employed (Investment)
17.11 A Comprehensive Illustration
17.12 Standards for Comparison
17.13 Usefulness of Ratio Analysis
17.14 Limitations of Ratio Analysis
17.15 Let Us Sum Up
17.16 Key Words
17.17 Answers to Check Your Progress
17.18 Tenninal Questions

17.0 OBJECTIVES

After studying this unit, you should be able to :

- describe the nature and uses of financial statements
- specify the limitations of such statements
- explain the meaning and techniques of financial analysis
- explain the meaning of ratios and ratio analysis
- classify the financial ratios
- describe the importance of standards for comparison of ratios
- explain the nature and calculation of ratios to assess financial soundness of a firm
- explain the nature and calculation cf ratios to measure the operational efficiency and profitability of a firm.
- describe the usefulness and limitations of ratio analysis

17.1 INTRODUCTION

All transactions recorded in the 'books of accounts are periodically summarised and presented in the form of two financial statements. One is the Balance Sheet (or position statement) and the other is Profit and Loss Account (or Income Statement). While the Balance Sheet shows the assets, liabilities and capital of the firm as on the last day of the accounting period, the Profit and Loss Account shows the results of operations for that period, Form the information contained in these statements it is possible to know how efficiently the business has been managed and what are its future prospects.

However, the data presented in these statements must be analysed further and interpreted before drawing any conclusion. In this unit we shall discuss the nature and purpose of financial statement, the meaning of financial analysis, and the techniques of such analysis. We shall also explain how financial ratios can be computed and interpreted for the purpose of assessing the financial soundness and profitability of an organisation.

17.2 NATURE OF FINANCIAL STATEMENTS

Financial Statements which are of vital importance to any business organisation are the Balance Sheet and Profit and Loss Account. These are periodical reports which reflect the financial position and operating results of the entire business for an accounting period, generally one year. The impact of all business transactions on the financial state of affairs and progress of the enterprise is presented in these statements. The Balance Sheet is a summarised statement of assets, liabilities and capital. It is accompanied by details of various types of assets and liabilities in separate schedules attached to the summary. The initial capital invested and additions to it along with accumulated reserves and surplus show the difference between the aggregate value of assets and that of liabilities as at the date of the Balance Sheet.

The Profit and Loss Account (income statement) presents a summary of income and expenditure classified systematically. It is a performance report of operations during the year and shows the result thereof by way of profit or loss for the period. The information provided in this account indicates the progress of a business between two balance sheet dates. The net profit or net loss may be regarded as a measure of the skill and ability of management. The first part of this income statement shows the results of operation fur the period in terms of net profit or net loss. The second part consists of items which show the disposal of profits of the current year and previous year's balance. It indicates the amount of earnings proposed to be distributed as dividend to shareholders, addition to reserves, and the amount to be carried forward.

17.3 USES AND LIMITATIONS OF FINANCIAL STATEMENTS

17.3.1 Uses

The financial statements are very useful in many ways. They are the basis of decision making for its users e.g. management, investors, creditors, government authorities, etc. Let us now discuss the usefulness of financial statements for its users.

1 Management: The Board of Directors and the executives of the film can make an overall assessment of the efficiency of operations and the financial state of affairs of the business from the information contained in the statements. The ability of the firm to meet short-term and long-term liabilities, whether the proportion of long-term borrowing in the total capital is reasonable, adequacy of profits for dividend payment, and such other matters can be clearly understood by management with the help of indicators given by the financial statements. Unfavourable conditions can thus be diagnosed and corrective measures taken.

2 Investors and shareholders: Investors and shareholders are concerned about the financial stability, earning capacity and future growth of the firm. They can form their opinion about the prospectus of investment in the business from the changes reflected in the statements about earnings and financial position over time.

3 Creditors and financiers: Short-term creditors make use of the financial statements mainly to ascertain the ability of the firm to pay its current liabilities on time and the value of stock and other asset which can be accepted as security against credits granted. Long-term creditors and financiers are more concerned about the firm's ability to repay the principal amount as and when due. From the financial data provided by the periodic statements, it is possible to make projections about the generation of funds and cash flows, which may assure the safety of investment in debentures and loans.

4 Government authorities: The financial statements form the basis of taxation of income and wealth by government. Apart from the above advantages, the growth of earnings and assets of the firm reflected in the annual statements indicate whether the business tends to be monopolistic and is there a necessity of regulating prices and monopolistic practices.

17.3.2 Limitations

The main objective of preparing financial statements is to present a periodical report on the progress of the business run by management. The statements show the results achieved during the period under review and the manner in which funds have been invested in different types of assets. But it is necessary to keep in view the limitations of financial statements which may be stated as follows:

1 Periodic nature of statements: The profit or loss arrived at in the Profit and Loss Account is for a specified period. It does not given any idea about the earning capacity over time. Similarly, the financial position as at the date of Balance Sheet is true of that point of time. The likely change in position on a future date is not depicted Liabilities which were dependent on future events (contingent liabilities) are estimated and shown in the Balance Sheet. They are not accurate figures. Similarly, revenue expenditure is sometimes partly charged to Profit and Loss Account and partly deferred or carried forward. The proportion which is deferred and shown on the asset side of Balance Sheet is based on convenience and depends on the level of earnings relatively to the expenditure. In all these respects the annual statements do not reveal the exact earning capacity or financial state of affairs.

2 The statements are not realistic: Financial statements are prepared on the basis of certain accounting concepts and conventions. As a result, the financial position depicted in the statements cannot be considered realistic. For example, fixed assets are required to be shown on the basis of their value to the business as represented by their acquisition price less depreciation, not as per the estimated resale price. Also, the Profit and Loss Account invariably includes probable losses but does not include probable income, This is according to the accounting convention of conservation,

3 Lack of objectivity due to personal judgement: Values assigned to many items are determined on the basis of the personal judgement of accountants. Hence, relevant amounts shown in the financial statements have no objectivity ahd they are not verifiable. For instance, estimates of the life of fixed assets and the method of depreciation to be used are based on the personal judgement of accountants. So is the case with valuation of inventories (stock) of materials, work in progress, stores and spare parts, etc. The method of valuation to be adopted depends on the policy at the discretion of management based on their judgement.

'4 Only financial matters are reported: The financial statements present information in terms of monetary units. There is no information relating to the non-monetary aspects of business operations. Facts which cannot be depicted in money terms are excluded from the statements. Thus, information relating to the development of skill and efficiency of employees, the reputation of management, public image of the firm, and such matters do not find a place in the financial statements. Yet these are very relevant for investors to consider while forming any opinion about the future prospects of the firm.

17.4 FINANCIAL ANALYSIS AND ITS TECHNIQUES

Financial analysis refers to the process of examining tho strengths and weaknesses of an enterprise with the help of information providsd by the Balance Sheet and Profit and Loss Account, It involves, a systematic attompt to look into the significance of data with respect to particular items or groups of items presented in the financial statements, The objective of financial analysis is to gain an insight into the profitability of business operations and financial position so as to judge whether progress is adequate or the

position has improved. For this purpose, it may be necessary to compare income, expenses and profits of one year with those of previous years. Or, it may be helpful to compare changes in expenses relatively to income, profits in relation to capital invested, short-term liabilities in relation to short-term assets, and so on.

Techniques of **Financial** Analysis

Broadly speaking there are three techniques of financial analysis which may be carried out on the basis of data in the annual statements. These **are:** (1) Comparative Statements, **(2)** Common Size Statements, and **(3)** Ratio Analysis. Let us now briefly examine these techniques.

Comparative Statements: This technique involves preparation of Comparative Balance Sheet and Comparative Income Statement so as to highlight the changes in the various assets, liabilities, income and expenditure. In the Comparative Balance Sheet, the figures of assets and liabilities are set out as at the beginning and at the end of the year along with the extent of increases or decreases between the two dates. The changes may be expressed in percentages also. The form of such a Comparative Balance Sheet is shown in Figure 17.1.

Figure 17.1: **Form of Comparative Balance** Sheet

Assets/Liabilities and capital	Amount as on 31.12.97	Amount as on 31.12.98	Increase Decrease (–)	Percentage Increase (Decrease)
	Rs.	Rs.		
Fixed Assets:				
Land and Building	18,50,000	18,00,000	(–)50,000	(2.70)
Plant and Machinery	9,46,000	10,50,000	1,04,000	10.99
Furniture & Fixtures	94,400	90,000	(–) 4,400	(4.66)
Current Assets:				
....	....	....	....	....
....	....	....	....	....

The data in a Comparative Balance Sheet may also be presented for more than two years. The figures are then compared for successive years and the trend of increase or decreases are noted. For purposes of comparison, percentage changes are more useful than absolute changes. This is because absolute increase or decrease does not reflect the relative changes in respect of various items. In the above example, for instance, absolute amount of decrease is much higher in the case of land and buildings than it is in respect of furniture and fixtures. However, the percentage decrease is found to be relatively much lower in land and buildings.

The Comparative Income Statement is aiso drawn on the same principle as the Comparative Balance Sheet. The statement is prepared in a vertical form. There are colunins, as in a comparative balance sheet, to show the amount of income and expenditure for two years or more along with the increase or decrease in amounts as also percentage increases or decreases. The percentages reflects the changes that have occurred over successive periods. Unusual changes can thus be detected and their causes determined.

Common Size Statements: In this technique of analysis, each of the items in the respective financial statements is expressed as a ratio (percentage) of the aggregate. Thus, a Common Size Balance Sheet shows the ratio (percentage) of each asset to the total assets, and that of each item af liability to the total liabilities. In other words, such a statement shows the relation of each component to the total. Comparative Common Size Balance Sheet can also be prepared for two or more years. This is illustrated below:

Common Size Balance Sheet (Assets)

Assets	As on 31.12.97		As on 31.12.98	
	Amount Rs.	Percentage	Amount Rs.	Percentage
Fixed Assets				
Land & Buildings	2,70,000	23.00	1,70,000	12.00
Plant & Machinery	3,10,000	26,41	7.86.000	56.00
Other Fixed Assets	29,000	2,47	48,000	3.40
Total Fixed Assets	6,09,000	51,88	10,04,000	71.40
Current Assets				
Inventories	2,06,000	17.54	1,89,000	13.50
Book Debts	2,41,000	20,53	2.03,000	14.40
Cash in Hand & at Bank	1,18,000	10,05	10,000	0.70
Total Current Assets	5,65,000	48.12	4,02,000	28.60
Total Assets	11,74,000	100.0	14,06,000	100.00

In the Common Size Income Statement, the items of expenditure are shown as percentages of the net sales so as to reveal the relation of each item to net sales. If such a statement is prepared for successive periods it shows the changes of the respective percentages over time.

Ratio Analysis: A ratio expresses one number in terms of another number. It is a measure of the relationship between two magnitudes. Thus, ratio analysis involves the use of financial ratios rather than absolute numbers or changes thereof as the index of financial position and progress of operations in terms of profitability, etc. This is the most widely used technique of financial analysis. A detailed discussion on the nature and usefulness of ratio analysis is provided in the subsequent sections.

Check Your **Progress** A

1 Indicate which of the following statements are True and which are False:

i) The only purpose of financial reporting is to keep the managers informed about the progress of operations.

ii) Financial statements are generally prepared at intervals of one year.

iii) Financial statements provide accurate information on all the matters as items are based on facts and figures.

iv) Analysis of data provided in the financial reports is known as financial analysis.

v) Comparative statements depict changes to the various items presented in the financial statement.

2 What is Common Size Statement?

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3 State three limitations of financial statements.

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17.5 MEANING OF RATIO ANALYSIS

A ratio is the measure of relationship between two numbers or values. The relationship may be expressed as the quotient of one number divided by another. The ratio then conveys the value of one item per unit of the value of another, or the value of one item being so many times or fraction of the other value. For instance, if the ratio of sales to stock (called stock turnover) is 3, it means that the sales value is 3 times the value of stock in hand.

A ,percentage is also a ratio by which one value is expressed per 100 of the other value, The quotient multiplied by 100 gives the per cent figures. Thus, if the ratio af gross profit to sales is 20% it implies that for every 100 rupees worth of sales, the gross profit earned is Rs. 20, or for every rupee of sale it is 20 paise.

Analysis consists of identifying particular items from a set of figures, classifying and grouping them systematically in order to present them in a convenient and easily understandable form for the purpose of interpretation. For example, data found in the financial statements may be grouped as fixed assets, investments, current assets, quick assets, proprietors' funds, long-term debt, current liabilities, fixed expenses, variable expenses, etc., so as to highlight interrelationships between them and facilitate interpretation. The relationship between two accounting figures expressed mathematically is known as a 'financial ratio' or 'accounting ratio'. Ratio analysis refers to the process of computing, determining and explaining the relationship between the component items of financial statements in terms of ratios. It involves the use of accounting ratios rather than absolute figures as the index of financial position and performance of a firm.

17.6 OBJECTIVES OF RATIO ANALYSIS

Financial statements contain a mass of data which need to be analysed to have an insight into various aspects of business operations and financial position. A purposeful ratio analysis is an extremely useful tool in this regard, The purpose of ratio analysis is to ascertain

i) whether the financial condition of the business unit is basically sound,

ii) whether the capital structure of the business unit is appropriate,

iii) Whether the profitability of the business units is satisfactory,

iv) Whether the credit policy of the business unit, in relation to sales and purchases, is sound, and

v) whether the business unit is creditworthy.

Ratio analysis can be used with respect to all types of business organisations i.e. sole proprietorship, partnership, company and co-operative society.

17.7 CLASSIFICATION OF RATIOS

As there are may ratios, they many be classified into different categories. According to some writers, there are as many as 429 business ratios. But all these ratios need not be calculated at a time. Depending upon the nature of the business, purpose of the analysis, and the particular questions to be answered from ratio an'alysis, certain ratios are generally selected.

Ratios may be classified on different bases depending on their nature, importance, source and function as discussed below.

1 **On the basis of their nature:** On the basis of the nature of items, the relationships of which are explained by the ratios, they may be classified as **Financial ratios** and **Operating Ratios**. Financial ratios deal with items which are financial (ox non-operational) in nature. Current ratio, quick ratio, debt-equity ratio etc, are examples of financial ratios. On the other hand, the operating ratios

explain the relationships between items of operations of the enterprise. Turnover ratios, earning ratios, expenses ratios, etc. are examples of this type of ratios.

2 **On the basis of their importance:** Ratios may also be classified on the basis of their importance as **primary** ratios and **secondary ratios.** Operating profit to operating capital employed is generally described as Primary Ratio. Other related ratios under this category are net sales to capital employed, operating profit to value of production, etc. On the other hand, some examples of secondary ratios are: ratio of direct materials cost to value of production, ratio of output to factory employees, etc.

3 **On the basis of source of data:** On the basis of the source from which they are calculated, ratios may also be classified into three categories: (1) Balance Sheet ratios, (2) Profit and Loss Account ratios, and (3) Combined or Composite ratios.

Balance Sheet ratios deal with the relationship between two items or groups of items contained in Balance Sheet and they generally indicate short-term or long-term financial position (i.e., liquidity and solvency) of the business unit, current ratio, quick ratio, proprietary ratio, debt equity ratio, etc., are examples of balance sheet ratios.

Profit and Loss Account ratios deal with the relationships between two items or groups of items contained in the Profit and Loss Account. They generally indicate the profitability and efficiency of control over expenses of the business unit. Examples of this type are: gross profit ratio, net profit ratio, operating ratio, expenses ratio, stock turnover ratio, etc.

Combined or composite ratios deal with the relationship between items or groups of items contained in both Profit and Loss Account and Balance Sheet. They generally indicate the operational efficiency of the business. Examples of combined ratios are net profit to total assets ratio, net profit to equity capital ratio, debtors turnover ratio, elc.

4 **On the basis of their function:** Ratios can also be classified on the basis of the purpose served or functions which the ratios are expected to perform. This basis of classification is called functional classification and the ratios are called functional ratios. In fact, this is the most commonly adopted classification of ratios. Examples of functional ratios are liquidity ratios, solvency ratios, turnover ratios and profitability ratios.

Liquidity ratios bring out the ability of the firm to honour its short-term obligations as and when they fall due. Solvency rntios indicate the firm's ability to meet long-term liabilities. Turnover or activity ratios indicate the efficiency with which funds have been employed in the business operations. Profitability ratios indicate the profit earning capacity of the business.

17.8 RATIOS TO ASSESS FINANCIAL SOUNDNESS

The Financial soundness of a firm is generally assessed in two respects, namely liquidity and solvency. Liquidity refers to the capacity of the firm to meet all its current liabilities falling due within one year. With a view to meeting current obligations, a firm may decide to hold excessive current assets. But idle current assets earn nothing, hence it is not a wise policy. On the other hand, it would also be imprudent to hold insufficient current assets. Thereby, the firm would run the risk of falling to meet the current liabilities. The firm should have' a balance between excessive liquidity and lack of liquidity, to sustain the confidence of short-term creditors. **The ratios to measure the short-term liquidity of the firm are called** 'liquidity **ratios'.** Generally, bankers, . suppliers of raw materials, etc., are interested in these ratios,

As stated above, liquidity ratios focus on the ability of the firm to meet short-term obligations. **The long-term solvency of the firm, on the other hand, is evaluated through solvency ratios, also called capital structure or leverage ratios.** These ratios measure the firm's ability to pay interest regularly and repay the principal amount in lump sum or in instalments. The purpose of these ratios is to identity the composition of borrowed capital and owners' capital in financing the assets of the firm. As a general

rule, the firm should have an appropriate mix of these two components of capital for financing the assets, since borrowed fund and owners fund have different implications. Debt or borrowings imply a contractual obligation of paying interest on the debt irrespective of profit made or loss suffered. If the firm fails to pay interest as and when it is due, the creditors or lenders may legally sue the film to recover their dues and, in an extreme situation, the fin may be declared bankrupt. Secondly, if the rate of return on borrowed capital is more than the rate of interest to be paid, it increases the return enjoyed by the shareholders. This is because debt carries a fixed charge, and the residual profit accrues to the shareholders. On the contrary, if the rate of return on debt capital is lower than the rate of interest, the shareholders' return is reduced. Thus, the use of debt in the total capital has the effect of magnifying the return to the shareholders. Thirdly, owners' finds of equity is used as a margin of safety by the creditors.

If the equity base is thin, the borrowing capacity of the firm is also reduced. A high debt-burden raises the risk of investment and the firm faces difficulty in raising funds from shareholders and lenders. The solvency ratios are thus useful to long-term creditors, financial institutions, debenture holders, etc.

Leverage ratios are computed from the information contained in the Balance Sheet. Some of these ratios are also computed from the income statements to measure the extent to which the operating profits are sufficient to cover fixed charges.

17.8.1 Liquidity Ratios

As stated earlier, liquidity ratios help in assessing the firm's ability to meet its current obligations. The following ratios come under this category:

i) Current ratio, and

ii) Quick ratio

Current Ratio

This ratio establishes the relationship between current assets and current liabilities. The difference between current assets and current liabilities is known as Working Capital. Therefore, the current ratio is also called working capital ratio. The purpose of this ratio is to find out the extent of current assets available against each rupee of current liability of the firm.

In order to calculate this ratio, the value of current assets and current liabilities must be obtained. Current assets include cash in hand, cash at bank, and'all other assets which can be converted into cash in the ordinary course of business, for instance, bills receivable, sundry debtors (good debts only), short-term investments, stock, etc. Current liabilities consist of all the obligations of payment that have to be met within a year. They comprise sundry creditors, bills payable, income received in advance, outstanding expenses, bank overdraft, short-term borrowings, provision for taxation, dividends payable, long-term liabilities to be discharged within one year, etc. The following formula is used to compute this ratio:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Illustration 1

The following are the assets and liabilities of Z Ltd. as on December 31, 1998. Calculate the Current Ratio.

Balance Sheet of Z Ltd., as on 31.12.1998

Liabilities	Amount	Assets	Amount
	Rs.		Rs.
Share Capital	10,000	Building	10,000
Reserves & Surplus	8,000	Plant & Machinery	5,000
Debentures	5,000	Stock	4,000
Sundry Creditors	5,500	Debtors	3,500
Bank Overdraft	50.0	Prepaid Expenses	1,000
Bills Payable	1,000	Scurities	6,000
Provision for Taxation	500	Cash	1,500
Outstanding Expenses	500		
	31,000		31,000

Solution

In order to calculate the current ratio, we have to ascertain the sums of current assets and current liabilities.

Current Assets		Current Liabilities	
	Rs.		Rs.
Cash	1,500	Sundry Creditors	5,500
Marketable Securities	6,000	Bank Overdraft	, 500
Prepaid Expenses	1,000	Bills Payable	1,000
Debtors	3,500	Provision for Taxation	500
Stock	4,000	Outstanding Expenses	500
	16,000		8,000

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$= \frac{\text{Rs. } 16,000}{\text{Rs. } 8,000} = 2 : 1$$

The current ratio reveals the ability of the firm to meet all the obligations maturing within a year (current obligations). Conventionally it is said that the current ratio should be 2 : 1. It means that for every one rupee of current liability the firm must have tow rupees worth of current assets. The reason for this conventional norm is that, all the current assets cannot be converted into cash immediately. For example, some of the sundry debtors may take longer time to realise, stock may not be saleable for cash immediately. The logic behind the prescription of 2 : 1 norm is that even in the worst situation where the asset values fall by fifty per cent, the firm will be able to meet its current obligations. This will act as a margin of safety to the creditors.

The ratio is a crude measure of liquidity. It places greater reliance on quantity of current assets, rather than their quality. For instance, if the firm's current assets include a large amount of non-paying debtors or non-moving stocks, then the firm's ability to meet its current liabilities is not assured. Therefore, it is desirable that the nature of current assets being held should be carefully examined.

Quick Ratio

This ratio is also called liquid ratio or acid test ratio. It establishes the relationship between quick assets and current liabilities. Quick assets are those which can be

converted into cash without any loss or delay. All the current assets, excepting stock and prepaid expenses, are considered to be 'quick assets'. The reason for excluding stock from quick assets is that, in most cases, stock cannot be sold immediately for cash. Likewise, prepaid expenses cannot be converted into cash. Sometimes, a firm having a high current ratio may find it difficult to pay the short-term creditors due to the presence of a large amount of stock in current assets. In such a case, the current ratio may be misleading. To overcome the drawback, the quick ratio is calculated to assess the liquidity of a firm in its real sense. The purpose of this ratio is to find out the extent of quick assets available for a rupee of current liability.

The following formula is used to calculate this ratio.

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

Illustration 2

Taking the' particulars of Illustration 1 calculate Quick Ratio.

Solution

In order to calculate quick ratio, we have to ascertain the amount of quick assets and current liabilities

Quick Assets		Current Liabilities.	
	Rs.		Rs.
Cash	1,500	Sundry Creditors	5,500
Marketable Securities	6,000	Bills Payable	1,000
Sundry Debtors	3,500	Outstanding Expenses	500
		Provision for Taxation	500
		Bank Overdraft	500
	11,000		8,000

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}} = \frac{11,000}{8,000} = 1.37 : 1$$

Generally, a quick ratio of 1 : 1 is considered to be satisfactory, because it takes into account only liquid assets whose realisable value is almost certain. A firm with 1 : 1 quick ratio is expected to be able discharge all its current obligations. The higher the ratio, the greater would be the capacity of the firm to meet its current commitments and vice-versa. But, a higher ratio may be an indication of utilisation of only liquid assets due to inefficiency of management. On the contrary, a lower ratio may threaten the liquidity position of the business.

17.8.2 Long-term Solvency Ratios

The long-term solvency ratios are calculated to assess the long-term financial position of the business. These ratios are also called leverage, ratios. The following ratios generally come under this category:

1 Debt-Equity Ratio
2 Proprietory Ratio
3 Debt Ratio

Debt-Equity Ratio

It shows the relationship between borrowed funds and owners' funds, or external funds (debt) and internal funds (equity). The purpose of this ratio is to show the extent of the firm's dependence on external liabilities or external sources of funds.

In order to calculate this ratio, the required components are external liabilities and owners' equity or networth. 'external liabilities, include both long-term as well as short-term borrowings. The term 'owners equity' includes paid-up share capital, reserves and surplus undistributed profits, but excludes past accumulated losses and deferred expenditure. Since there are two approaches to work out this ratio, there are two formulas as shown below:

i) $\text{Debt-Equity Ratio} = \dfrac{\text{Long-term Debt}}{\text{Owners' Equity}}$

ii) $\text{Debt-Equity Ratio} = \dfrac{\text{Total Debt}}{\text{Owners' Equity}}$

In the first formula, the numerator consists of only long-term debts. It does not include short-term obligations or current liabilities for the following reasons:

a) Current liabilities are of a short-term nature and the liquidity ratios are calculated to judge the ability of the firm to honour current obligations.

b) Current liabilities vary from time to time within a year and interest thereon has no relationship with the book value of current liabilities.

In the second formula, both short-term and long-term debts are counted in the numerator, The reasons are as follows:

a) When a firm has an obligation, no matter whether it is of short-term or long-term nature, it should be taken into account to evaluate the risk of the firm.

b) just as long-term loans have a cost, short-term loans do also have a cost.

c) As a matter of fact, the pressure from the short-term creditors is often greater than that of long-term loans.

Illustration 3

From the following Balance Sheet of Kavitha Ltd., calculate Debt-Equity Ratio:

Balance Sheet of Kavitha Ltd.
as on March 31,1989

Liabilities	Amount	Assets	Amount
	Rs.		Rs.
Equity Capital	1,50,000	Land & Buildings	1,20,000
9% Preference Capital	60,000	Plant & Machinery	2,00,000
Reserves and Surpluses	40,000	Sundry Debtors	1,10,000
8% Debentures	80,000	Cash at Bank	35,000
Long-term Loans	1,20,000	Preliminary Expenses	80,000
Creditors	30,000		
Bills Payable	65,000		
	5,45,000		5,45,000

Solution

i) $\text{Debt-Equity Ratio} = \dfrac{\text{Long-term Liabilities/Debt}}{\text{Owners' Equity}}$

Long-term liabilities = Long-term loan + 8% Debentures
= Rs. 1,20,000 + Rs. 80,000
= Rs. 2,00,000

Owners' equity (networth) = Equity Capital + Preference Capital + Reserves and Surplus — Preliminary Exp.

= Rs. 1,50,000 + Rs. 60,000 + Rs. 40,000 - 80,000

= Rs. 1,70,000

Debt-Equity Ratio $= \frac{\text{Rs. } 2,00,000}{\text{Rs. } 1,70,000} = 1.18 : 1$

ii) Total Debt-Equity Ratio $= \frac{\text{Total Debt}}{\text{Owners' Equity}}$

Total debt = Long-term Loan + 8% Debentures + Bills Payable + Creditors

= Rs. 1,20,000 + Rs. 80,000 + Rs. 30,000 + Rs. 65,000

= Rs. 2,95,000

Total Debt to Equity Ratio $= \frac{\text{Rs. } 2,95,000}{\text{Rs. } 1,70,000} = 1.74 : 1$

For analysing the capital structure, debt-equity ratio gives an idea about the relative share of 'funds of outsiders and owners invested in the business. The ratio of long-term debt to equity is generally regarded as safe if it is 2 : 1. A higher ratio may, put the firm in difficulty in meeting the obligation to outsiders. The higher the ratio, the greater would be the risk as the firm has to pay interest irrespective of profits. On the other hand, a smaller ratio is less risky and creditors will have greater margin of safety.

What ratia is ideal will depend on the nature of the enterprise and the economic conditions prevailing at that time. During business prosperity a high ratio may be favourable and in a reverse situation a low ratio is preferred. The Controller of Capital Issues in India suggests 2 : 1 as the norm for this ratio.

Check Your Progress B

1 Why is debt-equity ratio computed?

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2 What is the purpose of total debt to equity ratio?

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Proprietory Ratio

This ratio is also known as Equity Ratio or Networth to Total Assets Ratio. It is a variant of debt-equity ratio, and shows the relationship between owners' equity and total assets of the firm. The purpose of this ratio is to indicate the extent of owners' contribution towards the total value of assets. In other words, it gives an idea about the extent to which the owners own the firm.

The components required to compute this ratio are proprietors' funds and total assets. Proprietors' funds include equity capital, preference capital, reserves and undistributed profits. If there are accumulated losses they are deducted from the owners' funds. 'Total assets' include both fixed and current assets but exclude fictitious assets, such as preliminary expenses; debit balance of profit and loss account, etc. Intangible assets, if any, like goodwill, patents and copy rights are taken at the amount at which they can be realised. The formula of this ratio is as follows:

$$\text{Proprietory Ratio} = \frac{\text{Proprietors' Funds}}{\text{Total Assets}}$$

Illustration 4

Taking the information from Illustration 3, calculate the Proprietory Ratio as follows:

Solution

Proprietors' **Funds**		**Total Assets**	
	Rs.		**Rs.**
Equity Capital	1,50,000	Land and Building	1,20,000
8% Preference Capital	60,000	Plant and Machinery	2,00,000
Reserves and Surpluses	40,000	Debtors	1,10,000
	2,50;000	Cash at Bank	35,000
Less : Preliminary Exp.	1,80,000		4,65,000
	1,70,000		

$$\text{Proprietory Ratio} = \frac{\text{Propriertors' Funds}}{\text{Total Assets}}$$

$$= \frac{1,70,000}{4,65,000} = .3656 = 36.56\%$$

There is no definite norm for this ratio. Some financial experts hold the view that proprietors' funds should be 33% to 50% of the total capital employed and outsiders' funds (debt funds) should be from 67% to 50% of the total assets. **The higher** the ratio, **the lesser** would **be the** reliance on debt funds. A high proprietory ratio implies that the firm is not using debt funds as much as would maximise the rate of return on the proprietor's funds. For instance, if a firm earns 20% return on investment and the rate of interest on such funds is 10%, the proprietors would be able to gain to the extent of 10% on the debt funds. This increases the earnings of the shareholders,

Debt Ratio

It shows the relationship between debt and total assets of the firm. The purpose of this ratio is to indicate the extent af creditors' contribution to the total assets of the firm. Like debt-equity ratic, this ratio' can also be worked out in two ways: (1) long-term debt to total assets (debt-ratio), and (2) total debt to total assets (total debt ratio).

Taking the information from illustration 3, the long-term debt, the total debt and the total assets of Kavitha Ltd., as calculated earlier, are Rs. 2,00,000; and Rs. 2,95,00; and Rs. 4,65,000. The two debt ratios will be worked out as follows:

i) Long-term Debt to Total Assets (Debt Rntio)

$$= \frac{\text{Long-term Debt}}{\text{Total Assets}}$$

$$= \frac{2,00,000}{4,65;000}$$

$$= 0.43 \text{ or } 43\%$$

ii) Total Debt to Total Assets (Total Debt Ratio)

$$= \frac{\text{Total Debt}}{\text{Total Assets}}$$

$$= \frac{2,95,00}{4,65,000}$$

$$= 0.6344 \text{ or } 63.44\%$$

Thus we observe that in case of Kavitha Ltd., the total capital employed has been funded 43% by debt. If we use the total debt concept, it will be **63%** by debt and 37% by proprietor's funds, proprietary ratio being **0.3656.**

Illustration 5

From the following particular compute liquidity and leverage ratios:

Balance Sheet of Raja Ltd.
as on **December 31, 1998**

Liabilities		Assets	
	Rs.		Rs.
Equity Share Capital	40,000	Land	22,000
8% Preference Share Capital	20,000	Building	24,000
Reserves	10,000	Plant and Machinery	38,000
Profit and Loss Account	5,000	Furniture	5,000
10% Debentures	45,000	Sundry Debtors	22,000
Trade Creditors	9,000	Stock	13,000
Outstanding Expenses	2,000	Cash	14,000
Provision for Taxation	3,000	Prepaid Expenses	2,000
Proposed Dividend	6,000		
	1,40,000		1,40,000

Solution

Liquidity Ratios

1 *Current Ratio* = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$

Current Assets = Debtors + Stock + Cash + Prepaid Expenses

= 22,000 + 13,000 + 14,000 + 2,000

= Rs. 51,000

Current **Liabilities** = Trade Creditors + Outstanding Expenses + Provision for Taxation + Proposed Dividend

= 9,000 + 2,000 + 3,000 + 6,000

= Rs. 20,000

Current Ratio = $\frac{51,000}{20,000}$ = 2.55 : 1

2 *Quick Ratio* = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$

Quick Assets = Debtors + Cash

= 22,000 + 14,000

= Rs. **36,000**

Current Liabilities = Creditors + **Outstanding** Liabilities + Provision for Taxation + **Proposed** Divident

= 9,000 + 2,000 + 3,000 + 6,000

= Rs. 20,000

Quick Ratio = $\frac{36,000}{20,000}$ = 1.8 : 1

Leverage Ratios

1 *Debt Equity Ratio* = $\frac{\text{Long-tern Debt}}{\text{Owners' Equity}}$

Long-term Debt = 10% Debentures

= Rs. 45,000

Owners' Equity = Equity Share Capital + 8% Preference Share Capital + Reserves + Profit & Loss Account

= 40,000 + 20,000 + 10,000 + 5,000

= Rs. 75,000

Debt Equity Ratio $= \frac{45,000}{75,000} = 0.6 : 1$

2 *Proprietory Ratio* $= \frac{\text{Proprietor's Funds}}{\text{Total Assets}}$

Proprietor's fund is same as Owner's equity **i.e.**, Rs. 75,000 as calculated in Debt Equity Ratio

Total Assets = Land + Building + Plant & machinery + Furniture + Current Assets

= 22,000 + 24,000 + 38,000 + 5,000 + 51,000

= Rs. 1,40,000

Proprietory Ratio $= \frac{75,000}{1,40,000} = 0.54 : 1$

3 Total Debt ratio $= \frac{\text{Total Debt}}{\text{Total Assets}}$

Total Debt = 10% Debentures + Trade Creditors + Proposed Dividend

= 45,000 + 9,000 + 2,000 + 3,000 + 6,000

= Rs. 65,000

Total Assets are Rs. 1,40,000 as calculated in Proprietory Ratio.

Total Debt to Total Assets Ratio $= \frac{65,000}{1,40,000} = 0.46 : 1$

Check Your Progress C

1 If the proprietory ratio of a company is 0.70 or 70%. What does it indicate?

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2 What is meant by debt ratio?

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17.9 RATIOS TO ASSESS EFFICIENCY (TURNOVER RATIOS)

These ratios are known as velocity ratios, activity ratios, performance ratios, **efficiency** ratios, or turnover ratios. The funds of both owners and creditors are used

to finance various assets of the firm. The efficiency of the firm depends on the speed with which these assets are turned over or generate sales. The relationships between various assets and sales are reflected in the activity turnover ratios. As we have various assets, so we have various activity ratios. The more important of these ratios are:

1 Stock/Inventory turnover ratio
2 Debtors' turnover ratio
3 Creditors' turnover ratio
4 Total assets turnover ratio (Investment Turnover Rate)
5 Net assets turnover ratio

Stock Turnover Ratio

This ratio establishes the relationship between cost of goods sold and average value of inventory or stock. It gives an indication of the efficiency of inventory management. The purpose of this ratio is to show the number of times the inventory of a firm is rotated in a year. The information required for the computation of this ratios are cost of goods sold and average inventory. The cost of goods sold can be ascertained by deducting gross profit from sales, or deducting closing stock from the sum of opening stock, purchases and manufacturing expenses (direct expenses). The average stock is ascertained by dividing the sum of opening and closing stock by two. The formula of this ratio is as under:

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Goods sold}}{\text{Average Stock/Inventory}}$$

Where the details of cost of gobds sold and average stock are not available, this ratio can be computed by dividing the sales by stock at the end of the year.

$$\text{Stock Turnover Ratio} = \frac{\text{Sales}}{\text{Closing Stock/Inventory}}$$

Of the two versions stated above, the first one is more realistic as the two components of the ratios are dependent on cost price. In the second version one component is based on the selling price (i.e., sales) and the other one usually on cost price (closing stock).

Illustration 6

From the following particulars of Sanjeev & Co., calculate Stock Turnover Ratio

i) Net Sales Rs. 2,00,000
ii) Margin of Gross Profit 25%
iiii) Opening Stock Rs. 5,000
iv) Closing Stock Rs. 15,000

Solution

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Goods sold}}{\text{Average Stock}}$$

Cost of Goods Sold = Sales − Gross Profit

Gross profit is 25% on sales = Rs. 2,00,000 x $\frac{25}{100}$ = Rs. 50,000

Cost of Goods Sold = Rs. 2,00,000 − Rs. 50,000 = Rs. 1,50,000

$$\text{Average Stock} = \frac{\text{Opening Stock + Closing Stock}}{2}$$

$$= \frac{\text{Rs. 5,000 + Rs. 15,000}}{2} = \text{Rs. 10,000}$$

$$\text{Stock Turnover Ratio} = \frac{\text{Rs. 1,50,000}}{\text{Rs. 10,000}} = \text{Rs. 15 times}$$

A high inventory/stock turnover ratio is an index of efficient inventory management and a low ratio stands for inefficient inventory management. A low ratio also implies that the finn has excess stock in relation to production and sales. Further, it may be an indication of the presence of non-moving or slow moving or obsolete stock. A very high ratio is also not a healthy sign as it may be the result of low level of stocks. This may lead to frequent stock-out situations. Hence, this ratio should he neither too high nor too low.

Debtors' Turnover Ratio

This ratio is also known as 'Receivables Turnover ratio'. It shows the relationship between sales and dcbtors. Generally, with a view to pushing up sales, business firms sell goods on credit. These credit sales result in the creation of debtors and bills receivables. Both debtors and bills receivables are converted into cash within a year and as such they are shown as part of current assets. Since debtors and bills receivables come under current assets, the liquidity position of the firm, to a great extent, depends on the speed at which these items are converted into cash. **In order to assess the quality of debtors and bills receivables, this ratio can be calculated in two ways: (i) debtors turnover ratio, and (ii) average collection period.** The debtors turnover ratio indicate the number of times on an average the debtors have been turnover in a year. The average collection period indicates, the average number of days that the firm has to wait for collecting the money after goods are sold on credit. Average debtors can be obtained by dividing the sum of opening and closing balances of debtors (including bills, receivable) by two. The formula of this ratio is as under:

$$\text{Debtors Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average debtors \& bills receivables}}$$

The second version of this ratio is known as Average Collection Period. As a matter of fact, it is dependent on the first version. The formula is as follows:

$$\text{Average Collection Period} = \frac{\text{Days/Months in a year}}{\text{Debtors turnover ratio}}$$

or

$$= \frac{\text{Debtors}}{\text{Credit sales}} \times \text{Days/Months in a year}$$

Illustration 7

The total sales of Devi & Brothers for the year 1998 were Rs. 2,00,000, of which Rs. 50,000 were cash sales. The opening and closing balances of debtors of that year were Rs. 10,000 and Rs. 20,000 respectively. Calculate Debtors Turnover Ratio and Average Collection Period.

Solution

i) $$\text{Debtors Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average Debtors}}$$

$$\text{Credit Sales} = \text{Total Sales} - \text{Cash Sales}$$

$$= \text{Rs. } 2,00,000 - \text{Rs. } 50,000 = \text{Rs. } 1,50,000$$

$$\text{Average Debtors} = \frac{\text{Opening balance of debtors} + \text{Closing balance of debtors}}{2}$$

$$= \frac{\text{Rs. } 10,000 + \text{Rs. } 20,000}{2} = \text{Rs. } 15,000$$

$$\text{Debtors Turnover Ratio} = \frac{\text{Rs. } 1,50,000}{\text{Rs. } 15,000} = 10 \text{ times}$$

ii) $$\text{Average Collection Period} = \frac{\text{Days in a Year}}{\text{Debtors Turnover Ratio}}$$

or

$$\frac{\text{Debtors}}{\text{Credit Sales}} \times \text{Days in a Year}$$

$$= \frac{365}{10} \text{ or } \frac{\text{Rs. } 15{,}000}{\text{Rs. } 1{,}50{,}000} \times 365 = 36.5 \text{ days}$$

A high debtors turnover ratio reflects short collection period and indicates that debtors are prompt in their payment. On the contrary, a low debtors **turnover** ratio or a high collection period implies that debtors pay their dues very slowly.

In the above illustration the debtors turnover is 10 times, and the average collection period is 36.5 days. Whether 10 times or 36.5 days is good or bad depends on the credit policy of the firm. For instance, if the firm allows 2 months credit to the debtors, then this ratio should be 6 times or 60 days. It means that the debtors have paid their dues in advance by 23.5 days (i.e., 60 days –36.5 days). On the other hand, if the credit allowed to debtors is one month, then this ratio should be 12 times or 30 days. In such a case, taking the above illustration, we can say that the debtors have taken longer time to pay their dues.

Creditors Turnover Ratio

It establishes the relationship between credit purchase and average creditors (including bills payable). The purpose of this ratio is to know the speed with which payments are made to the creditors (for credit purchases). Here also there are two versions: (i) creditors turnover ratio, and (ii) average payment period. The average payment period gives an idea about the number of days that the firm can postpone, on an average, its payments to the creditors. The average creditors may be obtained by adding the opening and closing balance of creditors and dividing the sum by two. The formulas are as follows:

$$\text{Creditors Turnover Ratio} = \frac{\text{Credit Purchases}}{\text{Average Creditors}}$$

The second version of this ratio is average payment period.

$$\text{Average Payment Period} = \frac{\text{Number of days/months in a year}}{\text{Creditors turnover ratio}}$$

or

$$= \frac{\text{Creditors}}{\text{Credit Purchase}} \times \text{Days/Months in a year}$$

Illustration 8

In a firm the purchases for the year 1998 were Rs. 5,00,000 and the opening and closing balances of creditors were Rs. 80,000 and Rs. 1,20,000 respectively. Calculate Creditors Turnover ratio and Average Payment Period.

Solution

i) $$\text{Creditors Turnover ratio} = \frac{\text{Credit Purchases}}{\text{Average Creditors}}$$

$$\text{Average Creditors} = \frac{\text{Opening balance of creditors} + \text{Closing balance of creditors}}{2}$$

$$= \frac{\text{Rs. } 80{,}000 + \text{Rs. } 1{,}20{,}000}{2} = \text{Rs. } 1{,}00{,}000$$

$$\text{Creditors Turnover Ratio} = \frac{\text{Rs. } 5{,}00{,}000}{\text{Rs. } 1{,}00{,}000} = 5 \text{ times}$$

ii) Average Payment Period = $\frac{\text{Number of days in a year}}{\text{Creditors turnover ratio}}$

$$= \frac{365}{5} = 73 \text{ days}$$

The shorter the turnover ratio, the longer would be the average payment period and vice versa. In the above example, the creditors turnover is 5 times in a year or the average payment period is 73 days. It means that the firm can delay its payment, on an average, 73 days from the date of purchase. Of course, it all depends on the credit policy of creditors.

Total Assets Turnover Ratio

This ratio establishes the relationship between sales and total assets. **The purpose is to judge whether the firm is generating adequate sales from the total assets employed.** Further, it is also used to determine whether there is adequate investment, or over-investment or under-investment in assets of the firm. The formula of this ratio is as under:

Total 'Assets Turnover Ratio = $\frac{\text{Sales}}{\text{Total Assets}}$

Illustration 9

The total assets of Reddy & Sons are Rs. 9,00,000 and sales are Rs. 18,00,000 Calculate Total Assets Turnover Ratio.

Solution

Total Assets Turnover Ratio = $\frac{\text{Sales}}{\text{Total Assets}}$

$$= \frac{\text{Rs. } 18,00,000}{\text{Rs. } 9,00,000} = 2 \text{ times}$$

A high ratio is an indication of efficient utilisation of assets in generating sales and a low ratio is an index of inefficient utilisation of assets. We can also workout the fixed assets turnover rate and working capital turnover ratio in the same way.

Net Assets Turnover Ratio

This ratio establishes relationship between net asset (total assets - current liabilities) and sales. It reflects the overall efficiency with which the assets of the firm are utilized to generate sales revenue. Since the net assets is equal to capital employed (shareholders funds + debt funds) this ratio is also known as **capital employed turnover ratio or investment turnover rate.** It is calculated by the following formula:

Net Assets Turnover Ratio = $\frac{\text{Sales}}{\text{Net assets}}$

Taking the information from illustration 9 and assuming current liabilities are Rs. 3,00,000, the net assets turnover ratio will be worked out as follows:

Sales Rs. 18,00,000

Net Assets Rs. 6,00,000
(TA-CA)

Net Assets Turnover Ratio = $\frac{18,00,000}{6,00,000}$

= 3 times

A firm's ability to produce a large volume of sales for a given amount of capital employed is the most important aspect of operational performance and profitability.

Check Your Progress D

1 What does stock turnover ratio indicate?

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2 What does average collection period reveal?

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3 The share capital of Amitha Ltd. is Rs. 10,00,000 and reserves and Surplus are Rs. 2,50,000. Sundry debtors at the beginning and at the end of 1998 amounted to Rs. 10,00,000 and Rs. 12,00,000 respectively. The value of fixed assets at the end of 1998 was Rs. 10,00,000. Calculate Debtors' turnover and Fixed assets turnover ratios if the credit sales (also the total sales) of the company amounted to Rs. 33,00,000 during the year. Also calculate the average collection period?

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17.10 RATIOS TO ASSESS PROFITABILITY

The operating efficiency of a firm and its ability to ensure adequate return to its shareholders are reflected in the profits earned by it. Therefore, tho firm has to earn reasonable profits so as to survive and grow. Firms which fail to make reasonable profits have no future. Profitability ratios are designed to measure the earning power and profitability records of the firm. Profitability ratios can be computed either in relation to sales or in relation to investment.

17.10.1 Profitability in Relation in Sales

Profits earned in relation to sales give the indication that the firm is able to meet all operating expenses and also produce a surplus. In order to judge the efficiency .of management with respect to production and sales, profitability ratios are calculated in relation to sales. These are:

i) Gross Profit Margin

ii) Net Profit Margin

iii) Operating Profit Margin

iv) Operating Ratio

Gross Profit Margin

This is also known gross profit ratio or gross profit to sales ratio. This ratio is useful particularly in the case of wholesale and retail trading firms. It establishes the relationship between gross profit and net sales. Its purpose is to show the amount of gross profit generated for each rupee of sales. Gross profit margin is computed as follows:

$$\text{Gross Profit} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

The amount of gross profit is the difference between net sales income and the cost of goods sold which includes direct expenses.

Illustration 10

From the particulars given below, calculate Gross Profit Margin.

Trading Account of Godavari & Company for the year ended December 31, 1998

	Rs.		Rs.
To Opening Stock	2,000	By Net Sales	32,000
To Net Purchases	21,000	By Closing Stock	2.000
To Direct Expenses	3,000		
To Gross Profit	8,000		
	34,000		34,000

Solution

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

$$= \frac{8{,}000}{32{,}000} \times 100 = 0.25 \text{ or } 25\%$$

A high margin enables all operating expenses to be covered and provides a reasonable return to the shareholders. In order to keep the ratio high, management has to minimise cost of goods sold and improve sales performance. Higher the ratio, the greater would be the margin to cover operating expenses, and vice versa.

Net Profit Margin

This ratio is also called net profit to sales ratio and explains the relationship between net profit after taxes and net sales. The purpose of this ratio is to reveal the amount of sales income lets for shareholders after meeting all costs and expenses of the business. The following formula is used to cucullate this ratio.

$$\text{Net Profit Margin} = \frac{\text{Net Profit after taxes}}{\text{Sales}} \times 100$$

Illustration 11

The Gross Profit Margin of Ganga, Kaveri & Company is Rs. 12,00,000 and the operating expenses are Rs. 4,50,000. The taxes to be paid are Rs. 4,80,000. The sales for the year are Rs. 27,00,000. calculate the Net Profit Margin.

Solution

$$\text{Net profit Margin} = \frac{\text{Net Profit After taxes}}{\text{Sales}} \times 100$$

$$\text{Net Profit after taxes} = \text{Gross Profit} - \text{Expenses} - \text{Taxes}$$

$$= 12{,}00{,}000 - 4{,}50{,}000 - 4{,}80{,}000$$

$$= 2{,}70{,}000$$

$$\text{Net Profit Margin} = \frac{2{,}70{,}000}{27{,}00{,}000} \times 100 = 0.10 \text{ or } 10\%$$

It is a measure of overall profitability of the firm. The higher the ratio, the greater would be the return to the shareholders and vice versa, A net Profit Margin of 10% is considered normal. This ratio is very useful to control costs and to increase the sales.

Operating Profit Margin

This ratio is a modified version of Net Profit Margin. **It studies the relationship between operating profit** (also known as PBIT — Before Interest and Taxes) **and** sales. The purpose of computing this ratio is to find out the amount of operating' profit for each rupee of sale. While calculating operating profit, non-operating expenses such as interest, (loss on sale of assets etc.) and non-operating income (such as profit on sale of assets, income on investment etc.) have to be ignored. The formula for this ratio is as follows:

$$\text{Operating Profit Margin} = \frac{\text{Operating Profit}}{\text{Sales}} \times 100$$

Illustration 12

From the following particulars of Vandana & Co., calculate Operating Profit Margin.

Profit and Loss Account of Vandana & *Co.* Ltd.
as on December 31, 1998

	Rs.		Rs.
Opening Stock	1,500	Sales	18,000
Purchases	11,000	Closing Stock	5,000
Manufacturing Expenses	4,500		
Gross Profit c/d	6,000		
	23,000		23,000
Operating Expenses	2,000	Gross Profit b/d	6,000
Administrative Expenses	1,000		
Interest on Debentures	500		
Net Profit	2,500		
	6,000		6,000

Solution;

$$\text{Operating Profit Margin} = \frac{\text{Operating Profits}}{\text{Sales}} \times 100$$

Operating Profits = Net Profit + Interest on Debenture (non-operating expenses)

= Rs. 2,500+ Rs. 500 = Rs. 3,000

$$\text{Operating Profit Margin} = \frac{\text{Rs. } 3{,}000}{\text{Rs. } 18{,}000} \times 100 = 0.167 \text{ or } 16.7\%$$

A high ratio is an indicator of the operational efficiency and a **low** ratio stands for operational inefficiency of the firm.

Operating Ratio

This ratio establishes the **relationship between** total costs incurred and sales. It may be calculated as follows;

$$\text{Operating Ratio} = \frac{\text{Cost of goods sold} + \textbf{Operating expenses}}{\textbf{Sales}} \times 100$$

Illustration 13

From the following particulars, calculate the Operating Ratio:

	Rs.
Sales	10,00,000
Opening Stock	2,00,000
Purchases	4,00,000
Manufacturing Expenses	50,000
Closing Stock	60,000
Selling Expenses	10,000
Office Expenses	40,000

Solution

$$\text{Operating Ratio} = \frac{\text{Cost of goods sold} + \text{Operating expenses}}{\text{Sales}} \times 100$$

Cost of Goods Sold = Opening Stock + Purchases + Manufacturing expenses — Closing Stock.

= Rs. 2,00,000 + Rs. 4,00,000 + Rs. 50,000 – Rs. 60,000
= Rs. 5,90,000

Operating Expenses = Selling Expenses + Office Expenses

= Rs. 10,000 + Rs. 40,000 = Rs. 50,000

$$\text{Operating Ratio} = \frac{\text{Rs. } 5{,}90{,}000 + \text{Rs. } 50{,}000}{\text{Rs. } 10{,}00{,}000} = 0.64 \text{ or } 64\%$$

High operating ratio is undesirable as it leaves a small portion of income to meet other non-operating expenses like interest on loans. A low ratio is better and reflects the efficiency of management. The lower the ratio, the higher would be the profitability. If operating ratio is 64%, it indicates that 64% of sales income has gone to meet cost of goods sold and operating expenses and 36% is left for other expenses and dividend.

The operating ratio shows the overall operating efficiency of the business. In order to know how individual items of operating expenses are related to sales, individual expenses ratios can also calculated. These are calculated by taking operational expenses like cost of goods sold, administrative expenses, selling distribution, individually in relation to sales (net).

Check Your Progress E

1 Indicate the purpose of calculating Gross Profit Margin.

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2 What is the purpose of calculating net profit margin?

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3 What is the purpose of operating ratio?

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4 A firm's sales are Rs. 12,00,000. Its opening stock, purchases, direct expenses and closing stock are Rs. 1,50,000, Rs. 9,00,000, Rs. 80,000 and Rs. 2,00,000, respectively. The operating expenses of the firm are Rs. 2,40,000, of which Rs. 80,000 me administration expenses and the rest are selling and distribution expenses:

Calculate Inventory Turnover Ratio, Gross Profit Ratio and Operating Ratio.

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17.10.2 Profitability in Relation to Capital Employed (Investment)

As stated earlier, profitability ratio can also be computed by relating profits to capital or investment. This ratio is popularly known as rate of Return on Investment (ROI). The term investment may be used in the sense of capital employed or owners' equity. Two ratios are generally calculated:

i) Return on Capital Employed (ROCE);

ii) Return on Shareholders' Equity; and

iii) Earning Per Share (EPS)

Return on Capital Employed (ROCE)

This ratio establishes the relationship between total capital and profit before interest and tax. The purpose of this ratio is to find out whether return on capital employed is reasonable or not. This ratio is also known as Return on Investment (ROI)

The term capital employed represents long-term funds including owners' capital and borrowed capital.

The ratio may be calculated as follows:

$$\text{Return on Capital Employed} = \frac{\text{Net Profit before Interest and Tax}}{\text{Capital employed}}$$

Illustration 14

From the following information, calculate Return on Capital Employed:

Balance Sheet of X Ltd.
as on March 31, 1998

Liabilities		Assets	
	Rs.		Rs.
Equity Share Capital (25,000 shares)	2,50,000	Plant and Machinery	5,00,000
9% Preference Share Capital	1,00,000	Goodwill	50,000
Reserves and Surpluses	1,50,000	Current Assets	1,50,000
8% Long-term Loans	1,50,000		
Current Liabilities	50,000		
	7,00,000		7,00,000

The net profit before interest and tax was Rs. 78,000.

Solution

Capital Employed = Equity Share Capital + Preference Share Capital + Reserves and Surplus + Long-term Loans = 6,50,000

$$\text{ROCE} = \frac{\text{Net Profit before Interest and Tax}}{\text{Total Capital Employed}} = \frac{\text{Rs. } 78,000}{\text{Rs. } 6,50,000} = 0.12 \text{ or } 12\%$$

This ratio is very significant as it reflects the overall efficiency of the firm. The higher the ratio, the greater is the return on long-term funds invested in the firm. It is also an indication of the effective utilisation of capital employed.

Return on Shareholders' Equity

This ratio shows the relationship between net profit after taxes (PAT) and shareholders' equity. It reveals the rate of return on owners'/shareholders' funds. The **term shareholders'** equity is also known as 'net worth' and includes equity capital, preference capital, share premium and reserves and surplus. This ratio is also known as worth (RONW). The formula for this ratio is as follows:

$$\text{Return on shareholders' Equity} = \frac{\text{Net Profit after Taxes}}{\text{Shareholders' Equity}} \times 100$$

Illustration 15

Calculate Return on Shareholders' Equity of Kismath Ltd., with the details given below:

	Rs.
Equity Share Capital	5,00,000
9% Preference Share Capital	2,00,000
Reserves and Surplus	1,00,000
P & L Account Balance (Net Profit after Taxes)	2,00,000

Solution

$$\text{Return on Shareholders' Equity} = \frac{\text{Net Profit after Taxes}}{\text{Shareholders Equity}}$$

Shareholders' Equity = Rs. 5,00,000 + Rs. 2,00,000 + Rs. 1,00,000
= Rs. 8,00,000

$$\text{Return on Shareholders Equity} = \frac{\text{Rs. } 2{,}00{,}000}{\text{Rs. } 8{,}00{,}000} \times 100 = 0.25 \text{ or } 25\%$$

The higher the ratio, the greater is **the efficiency** of the firm in generating profits on shareholders' funds and vice versa. This ratio is very important for the investors (present and future) to judge whether their investment in the firm generates a reasonable return or not. This ratio is also important to the management as it proves their efficiency in employing the funds profitably.

Earning **Per** Share

Earning per share (EPS) is an important ratio from the point of view of equity shareholders as this rate affects the market price of shares and the amount of dividend to be given to the equity shareholders. The earning per share is calculated as follows:

$$\text{EPS} = \frac{\text{Net Profit after Tax — Preference Dividend}}{\text{Number of Equity Shares}}$$

Taking the information from illustration 14, the earning per share for X Ltd. will be worked out as follows;

PAT = Rs. 78,000

Preference Dividend (9% of Rs. 1,00,000) = Rs. 9,000

$$\text{EPS} = \frac{78{,}000 - 9{,}000}{25{,}000}$$

$$= \frac{69{,}000}{25{,}000}$$

= Rs. 2.76,

17.11 A COMPREHENSIVE ILLUSTRATION

Now let us take a compreheusive illustration and work out various ratios to asses the liquidity, long-term solvency, operating efficiency and the profitability of an orgnisation.

Illustration 16

Following is the Profit and Loss Account of Shriram Company Ltd., for the year ending December 31, 1998 and the Balance Sheet as on that date. You are required to compute liquidity, long-term solvency, turnover ratios, and profitability ratios both in relation to capital and sales.

**Profit and Loss Account of Shriram Company Ltd.
for the year ending December 31, 1998**

		Rs.		Rs.
To Opening Stock		'90,000	By Sales	12,60,000
To Purchases		9,00,000	By Closing Stock	1,50,000
To Direct Expenses		20,000		
To Gross Profit c/d		4,00,000		
		14,10,000		14,10,000
To Operating Expenses:			By Gross Profit bld	4,00,000
Administrative Expenses	40,000			
Selling & Distribution expenses	60,000	1,00,000		
To Non-operating Expenses:				
Loss on the sale of shares. .	10,000			
Interest	30,000	40,000		
To Provision for Taxation		40,000		
To Net Profit		2,20,000		
		4,00,000		4,00,000

Balance Sheet of Shriram Company Ltd. as oh December 31, 1998

	Rs.		Rs.
Equity Share Capital (60,000 shares of Rs. 10 each)	6,00,000	Land & Buildings	4,00,000
Reserves & Surplus	50,000	Plant & Machinery	3,20,000
Profit & Loss Account	1,60,000	Stock	1,50,000
10% Debentures	3,00,000	Cash at bank	1,20,000
Creditors	1,80,000	Debtors	3,00,000
	12,90,000		12,90,000

1 Liquidity **Ratios**

i) Current *Ratio* $= \frac{\text{Current Assets}}{\text{Current Liabilities}}$

Current Assets = Stack + Debtors + cash at bank

= 1,50,000 + 3,00,000 + 1,20,000

= Rs. 5,70,000

Current Liabilities = Creditors

= Rs. 1,80,000

Current Ratio = $\frac{5,70,000}{1,80,000}$ = 3.17: 1

ii) ***Quick Ratio*** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$

Quick Assets = Debtors + Cash at-bank

= 3,00,000 + 1,20,000

Quick Ratio = $\frac{4,20,000}{1,80,000}$ = 2.33 : 1

2 Long-term Solvency Ratios

i) ***Debt-Equity Ratio*** = $\frac{\text{LT. Debt}}{\text{Owners Equity}}$

LT Debt = Debentures

= 3,00,000

Owners Equity = Equity Share Capital + Reserve & Surplus + Profit & Loss Account

= 6,00,000 + 50,000 + 1,60,000

= Rs. 8,10,000

Debt-Equity Ratio = $\frac{3,00,000}{8,10,000}$ 0.37 : 1

ii) ***Proprietory Ratio*** = $\frac{\text{Proprieror's Funds}}{\text{Total Assets}}$

= $\frac{8,10,000}{12,90,000}$ = 0.63 : 1

iii) ***Total Debt Ratio*** = $\frac{\text{Total Debt}}{\text{Total Assets}}$

Total Debt = Debenture + Creditors

= 3,00,000 + 1,80,000

= 4,80,000

Total Debt Ratio = $\frac{4,80,000}{12,90,000}$ = 0.37 : 1

3 Turnover, Ratios

i) ***Stock Turnover Ratio*** = $\frac{\text{Cost of goods sold}}{\text{Average Stock}}$

Cost of Goods Sold = Opening Stock + Purchases + Direct **Expenses** – Closing Stock

= 90,000 + 9,00,000 + 20,000 – 1,50,000

= Rs. 8,60,000

$$\text{Average Stock} = \frac{\text{Opening Stock + Closing Stock}}{2}$$

$$= \frac{90,000 + 1,50,000}{2} = \frac{2,40,000}{2}$$

$$= 1,20,000$$

$$\text{Stock turnover Ratio} = \frac{8,60,000}{1,20,000} = 7.17 \text{ times.}$$

ii) ***Debtor's Turnover Ratio*** $= \frac{\text{Credit Sales}}{\text{Average Debtors}}$

$$= \frac{12,60,000}{3,00,000} = 4.2 \text{ times.}$$

Note: In case credit sales and opening and closing debtors are not given the sales are taken as credit sales and the closing debtors are taken as average debtors.

iii) ***Creditor's Turnover Ratio*** $= \frac{\text{Credit Purchases}}{\text{Average Creditors}}$

$$= \frac{9,00,000}{1,80,000}$$

$$= 5 \text{ times}$$

Note: In case credit purchases and opening and closing creditors are not given then total purchases are taken as credit purchases and the closing creditors are taken as the average creditors.

iv) ***Total Assets Turnover Ratio*** $= \frac{\text{Sales}}{\text{Total Assets}}$

$$= \frac{12,60,000}{12,90,000} = 0.98 \text{ times}$$

v) ***Net Assets Turnover Ratio*** $= \frac{\text{Sales}}{\text{Net Assets}}$

Net Assets = Total Assets – Current Liabilities

$$= 12,90,000 - 1,00,000$$

$$= 11,10,000$$

$$\text{Net Assets Turnover Ratios} = \frac{12,60,000}{11,10,000}$$

$$= 1.14 \text{ times}$$

4 Profitability Ratios

A In relation to sales

i) ***Gross Profit Ratio*** $= \frac{\text{Gross Profit}}{\text{Sales}} = \frac{4,00,000}{12,60,000} \times 100 = 31.75\%$

ii) ***Net Profit Ratio*** $= \frac{\text{Net Profit after Taxes}}{\text{Sales}} = \frac{2,20,000}{12,60,000} \times 100$

$$= 17.46\%$$

iii) ***Opening Profit Ratio*** $= \frac{\text{Operating Profit}}{\text{Sales}} \times 100$

Operating Profit = Net Profit + Non Operating Expenses + Provision for Taxation (same as PBIT)

= 2,20,000 + 40,000 + 40,000 – 30,0000

Operating profit ratio $= \frac{30,00,000}{12,60,000} \times 100$

= 23.89%

iv) ***Operating Ratio*** $= \frac{\text{Cost of goods sold + Operating Expenses}}{\text{Sales}}$

Cost of goods sold is Rs. 8,60,000 as calculated in Stock

. Turnover ratio

Operation expenses = Administrative Expenses + Selling & Distribution Expenses

= 40,000 + 60,000 = 1,00,000

Operating Ratio $= \frac{8,60,000 + 1,00,000}{12,60,000} = \frac{9,60,000}{12,60,000} \times 100$

= 76.19%

B In relation to investment

i) ***Return on Capital Employed*** $= \frac{\text{Net Profit After Taxes and Interest}}{\text{Capital Employed}}$

Net Profit after Taxes and Interest= 2,20,000 – 40,000 – 40,000

= 1,40,000

Capital Employed = Equity Share Capital + Reserves + Profit & Loss A/c

= 6,00,000 + 50,000 + 1,60,000 = 8,10,000

Return on Capital Employed $= \frac{1,40,000}{8,10,000}$ = .1728 = **17.28%**

ii) ***Return on Shareholder's Equity*** $= \frac{\text{Net Profit after Taxes}}{\text{Shareholders' Fund}}$

Shareholders' Fund = Equity Share Capital + Reserves + Profit & Loss A/c

= 6,00,000 + 50,000 + 1,60,000

= 8,10,000

Return on Shareholder's Equity $= \frac{2,20,000}{8,10,000}$ = .2716 = 27.16%

iii) ***Earning*** Per ***Share*** $= \frac{\text{PAT – Preference Dividend}}{\text{No. of Shares}}$

$= \frac{2'20,000}{60,000}$ = Rs. 3.67

17.12 STANDARDS FOR COMPARISON

Ratios are measures which show the relationship between two numbers or values. They enable the analyst to draw conclusions regarding the financial operations of the enterprise. But, a single ratio by itself does not mean anything unless it is compared with something else. Hence, to have meaningful interpretation of the ratios calculated, they should be compared with some standards. For example, a student getting 50 per cent marks does not indicate whether he has passed or failed. Suppose it is said that 40 per cent is the pass mark, then by comparing 50 with 40, we can conclude that the student has passed. Similarly, ratios also are to be compared with some norms and conclusions drawn. Generally, there are three types of **comparisons:** (1) Intra-firm comparison, (2) **Inter-firm** comparison, and (3) Comparison against set standards or targets.

1 **Intra-firm comparison:** It means comparing the present performance of the firm with that of its own performance in the **past.** For example, the position in 1998 may be compared with that of say 1996, or 1997, or a trend analysis may be attempted by horizontally noting the ratios over a period of time, say, 1995, 1996, 1997 and **1998.** The figures may then be examined to find out whether there is a rising or declining trend or there is little change over time. It is also possible to work out the average ratios of a few years, say 1995 to 1997, and a ratio of **1998** can be compared with that of its average over 1995 to 1997.

2 Inter-firm comparison: It means comparing the performance of a particular firm, say A, with that of a similar firm say B. The performance of A may also be compared with its close **rival(s)** or with the performance of the leader in the industry. Sometimes, the average ratios of the industry as a whole may be calculated and the present performance of a particular firm may be compared with the **industry** averages. For example, the position of **Ramakrishna** Cement Works. Ltd., **may** be compared with that of the average position of cement industry in India.

3 Comparison against set standards: If there are any pre-determined standards or **planned** targets, then the present performance can be compared with those standards. If there are any ratios which are prescribed by the Government or some authority like RBI, or IDBI, or as a matter of convention, such ratios are followed as ideal or model. Then ratios calculated for a particular firm can be compared with those stipulated or conventional ratios.

From the above, it is **clear** that the standards adopted may be internal or external. Internal standards are standards set on the basis of past performance against which the present **performance is compared.** The external standards are used for comparison of the individual firm's results and positions with those of other firms. Internal standards are of course, easier to set an more reliable than external ones.

17.13 USEFULNESS OF RATIO ANALYSIS

The importance of ratio analysis is widely recognised on account of its usefulness in different ways as outlined below:

1 Since the ratios convey the inter relationship between different items of the Balance Sheet and Profit and Loss Accqunt, they reflect the financial state of affairs and efficiency of operations more clearly than the **absolute** accounting figures. For example, the net profit earned by a firm may appear to be quite satisfactory if the amount is large, say Rs. 5 lakh. But, the profit earned cannot be regarded as good unless it is related to the total investment. If the capital invested is say Rs. 2 crore, the amount of profit expressed as a percentage of investment comes to be only 2.5%. The cannot be said to be a satisfactory performance. However, if the capital invested was **Rs. 50** lakh, profit earned would be 10% of the capital investment which may be considered reasonably good.

2 Efficiency of performance of **management** and the overall financial position are revealed by means of financial ratios which may not be otherwise apparent from a

set of accounting figures. The index of efficiency reflected in the ratios can be used as the basis of management control. The trend of ratios over a period of time can also be used for planning and forecasting purposes.

3 The creditworthiness of a film, its earning power, ability to pay interest and debt, prospects of growth, and similar information are revealed by ratio analysis. These are required by creditors, financiers, investors as well as shareholders. The ratio of competing firms in the same line of activity or the average ratios of firms in the same industry may be kept in view while analysing the performance of a particular firm, This comparative view enables shareholders and investors. to make appropriate investment decisions,

17.14 LIMITATIONS OF RATIO ANALYSIS

The technique of ratio analysis is not a perfect tool for evaluating the efficiency of operations. Its usefulness deponds to a large extent on the care and skill with which ratios are interpreted. The limitations of financial ratios are of practical relevance in that connection. The limitations are outlined below:

Limitations of accounting figures: As the ratios are calculated on the basis of figures drawn from accounting records they are subject to the limitations of accounting practices. Management has wide discretion regarding recognition of income, treatment of expenses, valuation of assets, etc. Accounting concepts and conventions, which form the basis of accounting records, leave a wide scope for management to exercise their judgement in practice as regards adjustments and valuations. The figures disclosed in the financial statements may not reveal the true state of affairs with the result that ratios will also not given the true picture,

2 Non-monetary aspects are left out: Financial ratios reflect only the monetary aspects of the functions of an organisation. The efficiency of operations and health of a business firm can be analysed through ratios only as reflected in the financial data. Non-financial aspects of the organisational environment and health, like morale and loyalty of employees, quality of supervision, human relations, and such elements are not revealed by financial ratios.

3 A particular ratio or even a set of ratios cannot be regarded as indicators of good or bad performance of management: They only provide clues which must be further looked into carefully to ascertain the underlying conditions producing the ratios. A favourable indication niay even be found on closer examination to have resulted from factors which may lead to adverse consequence in course of time. For instance, ratios indicating highly satisfactory earning capacity of a firm may have been caused by high-headed management causing. In turn, low employee morale.

4 Problems regarding standards for comparison: Ratios of any particular period or as of a certain date cannot be taken as a significant index of performance unless they are compared with ratios of previous periods, or with corresponding ratios of other firms; or with conventional standard ratios. Comparison with past ratios at best shows whether the present ratios are better or worse than the past. Whether the past ratios were good enough is not generally considered. Similarly, if ratios of other firms are taken into account for comparison, the comparability of firms cannot be easily established. No two firms can be assumed to have exactly similar characteristics. Standards laid down by Government and public financial institutions are useful only for particular ratios and under particular conditions.

5 Differences caused by varying accounting practices: Changes in ratios from year to year are often caused by the adoption of different accounting practices by the firm. Thus, ratios for successive years cannot be interpreted to draw reliable conclusions unless changes in accounting treatment of items are also known, Similarly, inter-firm comparison of ratios cannot be useful unless differences in accounting practices between the firms are known.

17.15 LET US SUM UP

Financial statement (Balance Sheet and Profit and Loss Account) are periodical reports which reflect the financial position and operating performance of the entire business for an accounting period generally one year. They provide valuable data to management, investors, shareholders, creditors, financiers and government authorities. But they are also subject certain limitations.

Financial analysis refers to the process of systematically examining the significance of data with respect to particular items or groups of items presented in the financial statements. The main objectives of financial analysis is to gain an insight into the profitability of business operations and financial positions so ,as to judge whether progress is adequate or the position has improved.

Broadly speaking, there are three techniques of financial analysis on the basis of data in the annual statements: (1) Comparative Statements, (2) Common-size Statement, and (3) Ratio Analysis.

The technique of comparative statement involves preparation of comparative balance sheet and comparative income statement so as to highlight changes in the various assets, liabilities income and expenditure, and the resulting profit or loss. The changes may be expressed in absolute amounts or percentages. The data may be presented for two years or for a number of successive years so as to examine the trend.

In the common size statements, each of the items in the respective financial statements is expressed as a ratio (percentage) of the total assets (in the case of Balance Sheet) and net sales (in the case of Income Statement);

Ratio Analysis is a technique which involves the use of financial ratios as the index of financial position and progress of operations. A ratio is a measure of relationship between two values. It may be expressed as the quotient as a percentage, or as the proportionate relationship, between two magnitudes.

Ratios may be classified on different bases. On the basis of their nature, ratios may be classified as Financial Ratios and Operating Ratios. On the basis of their importance, the ratios may be Primary ratios and Secondary ratios. They may be classified on the basis of the sources of data as : Balance Sheet Ratios, Profit and Loss A/c Ratios, and Combined Ratios. Functionally classified ratios may be: Liquidity Ratios, Solvency Ratio, Turnover Ratios and Profitability Ratios.

Liquidity ratios are 'calculated"' to measure the ability of the firm to meet its short-term liabilities as and when they become due. Solvency ratios are used to measure the extent of debt financing by the firm and its ability to pay interest regularly and repay the debts over time. Two measures of liquidity are generally found useful. (1) Current Ratio i.e., the ratio of quick assets to current liabilities, and (2) Quick ratio i.e., the ratio of quick assets. to current liabilities. Quick assets refer to all current assets except stock. Assessment of solvency is undertaken on the basis of Leverage **ratios.**

Leverage ratios included (i) Debt-Equity ratio, (ii) Total Debt ratio, and (iii) Proprietory ratios. Debt-Equity ratio explains the dependence of outsiders' funds relatively to owners' funds. On the other hand, **total** debt **ratio** is measure of total debts and total assets. The **proprietory ratio** shows the relationship between owners' equity and total assets of the firm.

Turnover ratios (Ratios **to assess** efficiency **of** activities): The 'turnover ratios indicate how efficiently different categories of assets and liabilities have been managed in relation to sales or purchases, The more important turnover ratios are (i) Stock turnover Ratio (ii) Debtor's Turnover Ratio, (iii) Creditors Turnover ratio (iv) Total Assets Turnover ratio and (v) Total Assets Turnover Ratio.

The operating efficiency of a firm is reflexed in the profits earned, Profits earned in relation to sales and in relation to capital are the two ways by which the profitability .or earning power of an orgnisation can be measured, **Profitability in** relation to **Sales** is generally assessed by calculating (i) Gross Profit Margin, (ii) Net Profit Margin, (iii) Gross Operating Margin and (iv) Operating ratios. Profitability in rclntion to capital, also

known as return on Investment (ROI), is measured in term of three ratios viz., (i) Return on Capital employed (ROCE) which indicates the percentage of profits after tax to the total amount of long-term funds including owners' equity and borrowed funds, (ii) Return on shareholders' Equity (ROE) showing the percentage of profits after tax to owners' equity, and (iii) Earning per share showing the amount of profit earned per equity share.

Name of Ratio	Formulae for Calculation
A) Liquidity Ratios	
i) Current Rntio	Current Assets/Current Liabilities
ii) Quick Ratio	Quick Assets/Current Liabilities
B) Long-Term Solvency Ratios	
i) Debt-Equity Ratio	Long-term Debt/Owner's Equity
ii) Proprietory Ratio	Proprietors' Funds/Total Assets
iii) Total Debt Rntio	Total Debt to Total Assets
C) Turnover Ratios	
i) Stock Turnover Ratio	Cost of Goods Sold/Average Stock
ii) a) Debtor's Turnover Ratio	Credit Sales/Average Debtors + B/R
b) Average Colleclion Period	Days in a year/Debtor's Turnover Ratio
iii) a) Creditor's Turnover Ratio	Credit Purchases/Average creditors + B/P
b) Average Payment Period	Days in a year/Creditor's Turnover Ratio
iv) Total Assets Turnover Ratio	Sales/Total Assets
v) Net Assets Turnover Ratio	Sales/Net Assets
D) Profitability in relation to Sales	
i) Gross Profit Margin	Gross Profit/Sales
ii) Net Profit Margin	Net Profit After taxes/Sales
iii) Gross Operating Margin	Operating Profit/Sales
iv) Operating Ratios	Cost of Goods Sold + Operating Expenses/Sales
E) Profitability in relation to Capital	
i) Return on Capital Employed	Net Profit After taxes/Total Capital Employed
ii) Return on Shareholder's Equity	Net Profit after taxes/Shareholder's Equity
iii) Earning Per Share	Net Profit after tax and performance dividend/ Number of equity shares.

For a meaningful interpretation of financial ratios, it is necessary to compare the ratios with some standards. Such a comparison may be intra-firm or inter-firm. Ratios of a firm may also be compared against conventional standard ratios or ratios stipulated by Government or financial institutions.

Financial ratios reflect the financial state of affairs and the efficiency of business operations more clearly than absolute accounting figures. The index of efficiency revealed by the ratios can be used as the basis of management control. The trend of ratios can also be used for planning and forecasting purposes. The creditworthiness of a firm, its earning power, prospects of growth, and similar information revealed by ratio analysis are extremely useful to creditors, financiers, investorb and shareholders.

The ratios are subject 'to the limitations of accounting practices which are adopted by management on the basis of convenience and judgement. Non-monetary aspects of organisational health and environment are not revealed by financial ratios. Unless the underlying conditions producing the ratios are looked into the interpretation of ratios cannot be reliable. Also the standards for comparison may not be appropriate for interpreting the ratios. Besides, differences in ratios may be caused by varying accounting practices.

17.16 KEY WORDS

Accounting Ratio : Ratio of accounting figures presented in financial statements.

Common Size Balance Sheet: Statement of assets and liabilities showing each item as a ratio (percentage) of the aggregate value of assets/liabilities.

Common Size Income Statement : Statement of income and expenditure showing each item as a ratio (percentage) of net sales.

Comparative Balance Sheet : Statement presenting changes in the value of assets, liabilities and capital investment between two Balance Sheet dates.

Comparative Income Statement : Statement presenting changes in income and expenditure over successive years.

Capital Employed : Long-term funds including owners' capital and borrowed capital.

Capital Structure : Financial mix plan of debt and equity.

Financial Analysis : Process of examining the financial position and operating performance with the help of information provided by the financial statements.

Financial Reporting : Communicating information based on financial data in the form of reports.

Financial Statements : Annual statements of assets and liabilities (Balance Sheet) and of income and expenditure (Profit and Loss Account)

Inter-firm Comparison : Comparing financial data of one firm with the corresponding data of comparable firm(s).

Intra-firm Comparison : Comparison of the financial data relating to one period with those of previous periods in respect of the same firm.

Owners's Equity : Shareholders funds including share capital (bdth preference and equity) P & L A/c balance, reserves minus fictitious assets. It is also called net worth.

Ratio : Measure of one value or number in relation to another.

Ratio Analysis : Computing, determining and explaining the relationship between the component items of financial statements in terms of ratios.

Leverage ratios : Ratios that evaluate the long-term solvency of a firm. These are also called solvency ratios.

Liquidity Ratios : Ratios that assess the capacity of a firm to meet its short-term liabilities.

17.17 ANSWERS TO CHECK YOUR PROGRESS

A 1 i) False ii) True iii) False iv) True v) True

D 3 Debtors Turnover Ratio $= \dfrac{33,00,000}{11,00,000} = 3 : 1$

Fixed Assets Turnover Ratio $= \dfrac{33,00,000}{10,00,000} = 3.3 : 1$

Average Collection Period = 365/3 = 122 days

E 4 Inventory Turnover Ratio $= \dfrac{9,30,000}{1,75,000} = 5.31 : 1$

Gross Profit Ratio $= \dfrac{2,70,000}{12,00,000} \times 100 = 22.5\%$

$$\text{Operating Ratio} = \frac{11,70,000}{12,00,000} \times 100 = 97.5\%$$

17.18 TERMINAL QUESTIONS

1 Explain briefly the meaning and nature of financial statements.

2 Discuss the usefulness and limitations of financial statements.

3 Explain briefly the following two techniques of **financial** analysis:

(i) Comparative statements **(ii)** Common size statements.

4 Describe the various ratios that are likely to help the management in forming its opinion about the **solvency** position of the firm.

5 Explain the purpose and procedure of calculating the following ratios:

i) Current Ratio

ii) Quick Ratio

iii) Debt-Equity Ratio

iv) **Priprietory** Ratio

v) Total Debt Ratio

6 Explain and illustrate the important profitability ratios.

7 "Return **on** Investment (ROI) **is** considered to be the master ratio which reflects 'the overall performance of the firm". Elucidate.

8 How do you find the following:

i) Whether the company is using the total assets properly.

ii) Whether there is deficient collection of debts.

iii) Whether the firm is accumulating too much stock.

iv) Whether the company is earning a reasonable return on investment.

v) Whether yield on company's share is adequate or not.

9 How do you **compute** the following ratios? Indicate their significance.

i) Debtors' turnover ratio

ii) Stock velocity ratio

iii) Operating ratio

iv) Operating profit ratio

10 Explain the following:

i) . **Gross** profit **margin**

ii) ROCE

iii) **EPS**

11 Discuss the uses and limitations of ratio analysis from the point of view of shareholders and investors.

12 Describe the standards used for **intra-firm** and **inter-firm** comparison of financial ratios.

Exercises

1 The following is the Balance Sheet of Sanjeev Ltd. as on December 31, 1998. Calculate the liquidity ratios.

Liabilities		Assets	
	Rs.		Rs.
Share Capital	50,000	Plant and Machinery	60,000
Profit and Loss A/c	10,000	Stock	20,000
10% Debentures	30,000	Debtors	14,000
Sundry Creditors	14,000	Bills Receivables	5,000
Outstanding Expenses	6,000	Short-term Securities	8,000
Provision for Taxation	3,000	Cash	6,000
	1,13,000		1,13,000

(Answer: Current Ratio = 2.304, Quick Ratio = 1.43)

2 From the following details, 'calculate leverage ratios.

Balance Sheet of Devi Ltd.
as on December 31, 1998

Liabilities		Assets		
	Rs.			Rs.
Equity Share Capital	1,00,000	Land		60,000
8% Preference Share Capital	40,000	Plant and Machinery	1,50,000	
Reserves & Surpluses	30,000	Less:		
		Accumulated depreciation	30,000	1,20,000
9% Long-term Loan	50,000	Stock		40,000
10% Debentures	60,000	Debtors		70,000
Creditors	20,000	Prepaid Expenses		5,000
Bills Payable	15,000	Marketable Securities		20,000
Accrued Expenses	5,000	Cash		5,000
	3,20,000			3,20,000

(Answer: Debt Equity Ratio = 0.647 : 1
Proprietory Ratio = 0.531 : 1
Total Debt Ratio = 0,469 : 1

3 Bharat Ltd. submitted the following Balance Sheet as on December 31, 1998. You are required to compute the following:

a) Current Ratio
b) Quick Ratio
c) Debt-Equity Ratio
d) Proprietory Ratio
e) Total Debt Ratio

Liabilities		Assets	
	Rs.		Rs.
Equity Capital	10,00,000	Fixed Assets	17,00,000
7% Preference Capital	3,00,000	Stock	4,00,000
Reserves and Surpluses	1,50,000	Debtors	3,00,000
6% Debentures	8,00,000-	Rank	1,50,000
Overdraft	50,000	Cash	50,000
Creditors	3,00,000		
	26,00,000		26,00,000

(Answer: a) Current Ratio = 2.57 : 1
b) Quick Ratio = 1.47 : 1
c) Debt-Equity Ratio = 0.55 : 1
d) Proprietory Ratio = 0.558 : 1
e) Total Debt Ratio = 0.442 : 1)

4 From the following Profit and Loss Account for the year ended March 31, 1998, calculate, gross profit ratio, operating profit ratio and net profit ratio.

	Rs.		Rs.
To Opening expenses	1,20,000	By Gross Profit	8,00,000
To Interest	1,60,000		
To Provision for Income Tax	1,60,000		
To Net Profit c/d	3,60,000		
	8,00,000		8,00,000
To Preferences dividend	80,000	To Net Profit b/d	3,60,000
To Equity dividend	1,20,000		
To Balance c/d	1,60,000		
	3,60,000		3,60,000

Sales were Rs. 40,00,000

(Answer: Gross Profit Ratio = 20%
Operating Profit Ratio = 17%
Net Profit Ratio = 9%)

5 From the following details of Z Ltd., you are required to compute:

(i) Current Ratio; ii) Operating Ratio; iii) Stock Turnover Ratio;

(iv) Total Assets Turnover Ratio; and v) Return on Shareholders' Equity

(v) Net Profit Ratio.

Profit and Loss Account for the year ended December 31, 1998

	Rs.		Rs.
To Opening Stock	1,00,000	By Sales	10,00,000
To Purchases	6,80,000	By Closing Stock	60,000
To Incidental Expenses	40.000		
To Gross Profit c/d	2,40,000		
	10,60,000		10,60,000
To Operating Expenses:		By Gross Profit b/d	2,40,000
Belling and		By Non-operating Income:	
Distribution 40,000			
Administrative 60,000	1,00,000	Interest 4,000	
To Non-operating Expenses:		Profit on sale of shares 6,000	
Loss on Sale of assets	5,000		10,000
To Net Profit	1,45,000		
	2,50,000		2,50,000

Balance Sheet as on December 31, 1998

	Rs.		Rs.
Share Capital:		Land and Building	1,00,000
20,000 ordinary shares of Rs. 10 each	2,00,000	Plant & Machinery	2,00,000
		Debtors	70,000
Reserves	45,000	Stock	60,000
Current Liabilities-	90,000	Bank	5,000
Profit and Loss A/c	1,00,000		
	4,35,000		4,35,000

(**Answer: i)** Current Ratio = 15:1 ii) Operating Ratio = 0.86:1 iii) Stock Turnover Ratio = 9.5 times iv) Net Assets Turnover Ratio = 2.9 times v) Return on Shareholders' Equity = 42% vi) Net Profit Ratio = 14.5%

6 The following is the Balance Sheet of Lakshmi Ltd, for the year ended December 31, 1998.

	Rs.			Rs.
Equity Capital				
(5000 shares of Rs. 100 each)	5,00,000	Fixed Assets	18,00,000	
7% Preference capital	1,00,000	Less: Depreciation	5,00,000	
Reserve & Surpluses	4,00,000			13,00,000
6% Debentures	7,00,000			
Current Liabilities		Current Asset.		
Creditors	60,000	Cash	50,000	
Bills Payable	1,00,000	10% Investments	1,50,000	
Accrued Expenses	10,000	Debtors	2,00,000	
Provision for Taxation	1.30,000	Stock	3,00,000	7,00,000
	20,00,000			20,00,000

Additional Information	Rs.
Net Sales .	30,00,000
Purchases	16,00,000
Cost of Goods Sold	25,80,000
Profit before Tax	2,93,000
Profit after Tax	1,00,000
Operating Expenses	1,00,000
Market Value per Share	150

Calculate activity ratios and profitability ratios:

(**Answer:** **Activity Ratios:** Total Assets Turnover = 1.5 Nmcs Stock Turnover = 10 times, Debtors Turnover = 1.5 times

Creditors Turnover = 16 times. Net Assets Turnover = 1.765 : 1

Profitability Ratio: Gross Profit Margin = 14%, Net Profit

Margin = 6.43%Gross Operating Margin = 10.67%, Operating Ratio = 89.33%.

ROCE = 18.82%, Return on Shareholders' Equity = 10%

EPS = Rs. 18-60)

Note : These questions and exercises will help you to understand the unit better. Try to write answers for them, but do not submit your answers to the University. These are for your practice only.

UNIT 18 STATEMENT OF CHANGES IN FINANCIAL POSITION – I

Structure

18.0 Objectives
18.1 Introduction
18.2 What is Statement of Changes in Financial Position ?
18.3 Meaning of Fund
18.4 Flow of Funds
18.5 Sources and Uses of Funds
18.6 Steps involved in Preparation of Fund Flow Statement
18.7 Schedule of Changes in Working Capital
18.8 Funds from Operations
  18.8.1 Depreciation
  18.8.2 Profit or Loss on Sale of Fixed Asset
  18.8.3 Profit or Loss on Sale of Long-term Investments
  18.8.4 Amortisation of Expenses and Writing off Intangible Assets
  18.8.5 Provision for Taxation
  18.8.6 Proposed Dividends
  18.8.7 Provision for Doubtful Debts
  18.8.8 Items representing Appropriation of Profits
  18.8.9 Statement of Funds from Operation
18.9 Let Us Sum Up
18.10 Key Words
18.11 Answers to Check Your Progress
18.12 Terminal Questions/Exercises

18.0 OBJECTIVES

After studying this unit, you should be able:

- Describe the nature of statement of changes in financial position
- explain the concepts of fund and flow of funds
- list the sources and uses of funds
- prepare schedule of changes in working capital by identifying current and non-current items
- ascertain funds from operations

18.1 INTRODUCTION

You know there are various techniques used for analysing the financial statements. In Unit 17 you studied about the most important technique viz., ratio analysis. In this unit, you will study about another equally important technique called fund flow analysis. This involves the preparation of fund flow and cash flow statements, also known as statement of changes in financial position, It is observed that profit and loss account and balance sheet do not provide answers to some of the key questions like how funds were raised during the year, how, were they utilized, and how is it that despite high profits the company's liquidity is low. Hence, there is need for preparing a statement showing the details of inflows and outflows of funds during an accounting year. Now a days, it has gained so much importance that many companies provide this statement as a part of their annual report. In this unit, you will learn about the meaning of terms 'funds' and 'flow of funds' the various sources and uses of funds, and the method and importance of preparing the funds flow statement

18.2 WHAT IS STATEMENT OF CHANGES IN FINANCIAL POSITION?

Statement of changes in financial position is a statement which outlines the causes of a change in the financial position of a company during an accounting period. These causes are reflected in the movement of funds viz., inflows and outflows of funds, during the period. Therefore, it is also called Funds Mow Statement in which the inflows are shown as sources of funds and the outflows as application or uses of funds. The difference between the two (inflows and outflows) indicates the net change (increase or decrease) in the position of funds during the accounting period.

18.3 MEANING OF FUNDS

The term 'funds' has different meanings. In the narrow sense, it is defined as cash resources of the business. In the broader sense, it includes all economic resources of the business whether these are in the form of material, money, or machinery. But, in the context of funds flow statement, we use the third interpretation of the term 'funds: i.e., working capital because it reflects the true level of the liquidity of a firm. There are, however, two concepts of the term working capital viz., gross working capital and net working capital. The term gross working capital refers to the total of current assets while the term net working capital refers to excess of current assets over current liabilities. Let us assume, for example, that a firm has the current assets consisting of sundry debtors, stock and cash in hand and at bank amounting to Rs. 55,000, and the current liabilities consisting of sundry creditors and outstanding expenses amounting to Rs. 41,000. In this case, the gross working capital of the firm will be Rs. 55,000 while its net working capital is Rs. 14,000 (Rs. 55,000-Rs. 41,000). For purposes of fund flow statement we use the 'net working capital' concept as this is the amount which is funded by the long term (non-current) sources.

18.4 FLOW OF FUNDS

Flow of funds means 'change in funds position' or change in net working capital'. Whenever there is a change in the funds, it is presumed that flow of funds has taken place. The flow of funds can be in the form of an inflow or an outflow. An inflow of funds increases the working capital and an outflow of funds decreases the working capital.

Flow of funds will takes place if a transaction involves a change in a current item and change in a non-current item. A non-current item means either a non-current asset. (fixed asset) or a non-current liability (long-term liability) There will be no change in net working capital (flow of funds) if a transaction involves : (i) only the current items or (ii) only the non-current items. In other words, a transaction, involving a fixed asset/ fixed liability on the one hand and a current asset/current liability on tho other, will alone result in flow of funds. Let us understand these rules by taking up some examples.

1 **Transactions involving items from both current and non-current categories which result in flow of funds**

i) **Purchased machinery for Rs. 30,000 :** This transaction increases machinery (a non-current asset) and reduces cash(a current assets). The reduction in cash reduces current assets without any corresponding reduction in current liabilities. As a result, the net working capital gets reduced.

ii) **Shares issued for Rs. 2,00,000 :** In this case, a non-current liability (i.e., share capital) has increased and a current asset (i.e., cash) has increased. Thus the current asset have increased without any corresponding change in current liabilities. As a result, the net working capital gets increased.

2 Transactions affecting items in the current category only which do not result in flow of funds

i) Cash collected from debtors Rs. 4000 : This transaction results in an increase in cash (a current asset) and a decrease in debtors (a current asset, again) by the same amount. Thus the total current assets remain the same and there will be no change in the net working capital.

ii) Acceptance given to creditors Rs. 3,000 : Both creditors and bills payable are current liabilities. By giving acceptance to creditors, the amount of creditors decreases and that of bills payable increases by the same amount. Since this transaction does not affect the total amount of current assets as also the total amount of current liabilities, the difference between current assets and current liabilities remains unchanged. Thus, there is no flow of funds and no change in the net working capital.

iii) Paid creditors Rs. 1,000: By paying the creditors, cash (a current asset) is reduced and the amount of creditors (a current liability) is also reduced by the same amount. Therefore, the difference between the current assets and current liabilities will be the same as it was before. So there will be no flow of funds, which means no change in the net working capital.

3 Transactions affecting items in the non-current category only which do not result in flow of funds

i) Land exchanged for machinery Rs. 10,00,000 : Both land and machinery are non-current assets. By exchanging land for machinery, the book value of land is reduced and that of machinery is increased, but the total of non-current assets remains unaffected. Further, it does not effect any change in the current assets or the current liabilities. Hence, there will be no change in the net working capital position.

ii) Preference shares are converted into equity shares Rs. 10,00,000 : Both preference share capital and equity share capital are non-current items. As a result of conversion, the equity share capital stands increased and the preference share capital gets reduced by the same amount. As no current item is affected, there will be no change in net working capital.

iii) Purchased land worth Rs. 50,000 and issued shares in consideration thereof: This transaction increases the debit balance of the land account and credit balance of share capital account. Both land and share capital are non-current items. Since no current items is involved, the net working capital remains unaffected.

We can summarise the above analysis as follows:

1 There will be no change in the funds (net working capital) position if (a) both aspects of a transaction belong to non-current category items (non-current assets and non-current liabilities) only, or (b) both aspects of a transaction belong to current category (current assets and current liabilities) only.

2 Of the two aspects of a transaction, if one affects the non-current category items and the other affects the current category items (one aspect affects current asset or current liability and the other a non-current asset or non-current liability) there will be a change in the funds net working capital) position.

In order to facilitate the identification of non-current and current items, the list is given in Figure 18.1.

Figure 18.1 Presentation of Balance Sheet
with Details of Current and Non-current Items

Balance Sheet

Non-Current Liabilities	Non-Current Assets
Equity Share Captial	Goodwill
Preference Share Capital	Plant and Machinery
Debentures Furniture	Furniture
Share Premium	Trade Marks, Patents, Copyrights
Forfeited Shares	Land and Buildings
Current Liabilities	**Current Assets**
Bank Overdraft	Stock
Bills Payable	Debtors
Creditors	Bills Receivable
Outstanding Expenses	Income Outstanding.
Incomes received in advance	Cash at bank
	Cash in hand

Check Your Progress A

1 What do you mean by the term fund in the context of fund flow statement?

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....

....

2 Distinguish between gross working capital and net working capital.

....

....

....

3 Match the items in Column A with items in Column B.

	Column A		Column B
i)	Income received in Advance	a)	Non-current asset
ii)	Bank balance	b)	Current liability
iii)	Goodwill	c)	Non-current liability
iv)	Share premium	d)	Current asset

18.5 SOURCES AND USES OF FUNDS

You have learnt that, in the context of fund flow statement, the term 'funds' is interpreted to mean the net working capital which represents the excess of current assets over current liabilities, In other words, funds represent that portion of current assets which is not financed by current liabilities but is financed from the long-term/non-current sources. You have also learnt that as and when a change takes place in current items resulting from a change in non-current items the net working capital will .be affected. This means that it will increase or decrease as and when there is a change in non-current items, i.e., when there is increase ar decrease in any non-current liability (say, share capital or debentures) or a nan-current asset (say, machinery or long term investment). Thus, it can be concluded that increases and decreases in only non-current (long-term) assets and liabilities alone will act as a source or an application (use) of funds. Let us now identify the sources and uses of funds.

Sources of Funds : The sources of funds can be classified as external sources and internal sources. External sources of funds refer to sources of funds from outside the business. These are (a) raising additional capital, (b) increasing long-term borrowings and (c) sale of fixed assets and long term investments. Internal sources consist of func that are generated internally by the organisation. Every profitable sale brings in funds tc the extent of the excess of sales revenue over cost of goods sold. Such profits, called funds from operation, are also an important internal sources of funds.

Uses of Funds : It may be noted that all funds raised through long term sources are not necessarily applied for financing the increase in net 'working capital. A substantial part of this amount may be utilized for purchasing the fixed assets, redemption of debentures or preference shares, payment of dividends and meeting losses from operations, if any, In fact whatever is left the application of funds for these purposes, will be the amount used for financing the increase in working capital. Uses of funds thus are : (I) purchase of fixed assets or long term investments, (ii) redemption of debentures and preference shares, (iii) repayment of long term loans, (iv) payment of dividends (v) meeting losses from operations (net loss), and (vi) financing the increase in working capital.

18.6 STEPS INVOLVED IN PREPARATION OF FUND FLOW STATEMENT

As you know, the balance sheet is a position statement as on a certain date and reveals the financial position as at a point of time. On the other hand, fund flow statement is a dynamic statement intended to explain the magnitude, direction and the causes of changes in the position of funds (net working capital) that took place during the two balance sheets dates. Thus, it highlights the basic changes in the financial structure, asset structure and the liquidtiy position of a business between two balance sheet dates. But, primarily, it reveals changes in the financial position of the company by identifying the sources and application of funds resulting from financing and investing decisions that took place during a particular period.

Before we prepare the fund flow statement giving details of various sources and uses of funds in an accounting year, we must ascertain the amount of change that has taken place in the net working capital. For this purpose, we prepare a statement called 'schedule of changes in working capital' from the data available in two balance sheets. Let us assume that at the beginning of the year 1998 i.e., on 1-1998, the net working capital was Rs. 2,00,000. The balance sheet as on 31-12-1998 reveals that the net working capital has increased to Rs. 3,00,000. This increase of Rs. 1,00,000 in the net working capital must have accured as a result of increases and decreases in various items of current assets and current liabilities. This statement will show the change in each item of current assets and current liability and tally the net effect of all these changes with the increase or decrease in the net working capital. Similarly, we may also have to work out the exact amount of profits that could be treated as the source of funds. You know that the profit and loss account includes certain items such as depreciation which do not cause any outflow of funds, these are only book adjustments. Hence, in order to amve at the exact amount of inflow of funds resulting from profits some adjustments will have to be made in the figure of net profit as revealed by profit and loss account. For this purpose, the preparation of another statement called 'statement of funds from operations' becomes necessary.

Thus, the preparation of fund flow statement involves essentially the following three steps :

1 Preparing schedule of ,changes in working capital to ascertain the item-wise increase or decrease in the net working capital,

2 Determining funds from operations by adjusting the figure of profit or loss, as revealed by the profit and loss account in respect of certain non-cash items.

3 Preparing the funds flow statement (on working capital basis) showing details of sources and uses of funds to corroborate the change in net working capital as revealed by the schedule of changes in working capital.

18.7 SCHEDULE OF- CHANGES IN WORKING CAPITAL

As explained earlier, first of all, we have to prepare the schedule of changes in working capital in order to calculate the increase or decrease in net working capital. For this purpose, all non-current items are to be ignored as the net working capital is simply the difference between current assets and current liabilities.

In order to ascertain the amount of increase or decrease in the net working capital, it should be noted that :

1 an increase in any current asset, between the two balance sheet dates, results in an increase in the net working capital and a decrease in any current asset result in a decrease in net working capital; and

2 an increase in any current liability, between the two balance sheet dates, decreases the net working capital whereas a decrease in any current liability increases the net wnrking capital.

Study Illustration 1, 2 and 3 carefully to understand how is the schedule of changes in working capital prepared and the amount of increase or decrease in net working capital ascertained

Illustration 1

Prepare a schedule of changes in working capital from the summary of balance sheets given below:

Liabilities	31.12.97	31.12.98	Assets	31.12.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Share Capital	80,000	95,000	Fixed Assets	90,000	1,00,000
Reserves	20,000	25,000	Current Assets	30,000	50,000
Current Liabilities	20,000	30,000			
	1,20,000	1,50,000		1,20,000	1,50,000

Solution

Schedule of Changes in Working Capital

	1997	1998	Changes in Working Capital	
			Increase (+)	Decrease (–)
	Rs.	Rs.	Rs.	Rs.
Current Assets	30,000	50,000	20,000	—
Current Liabilities	20,000	30,000	—	10,000
Increase in Net Working Capital			—	10,000
			20,000	20,000

Note : Though there is an increase in both current assets and current liabilities, tho increase in current assets is more than the increase in current liabilities. This resulted in an increase in net working capital.

Illustration 2

The following particulars are drawn from the balance sheet of ABC Ltd. for 1997 and 1998. Prepare a statement of changes in working capital.

Particulars	1997	1998
	Rs.	Rs.
Fixed Assets	5,90,000	5,20,000
Current Assets	4,10,000	3,80,000
	10,00,000	9,00,000
Equity Capital	5,00,000	5,00,000
Reserves	2,75,000	2,00,000
Current Liabilities	2,25,000	2,00,000
	10,00,000	9,00,000

Solution

Schedule of Changes in Working Capital

	1997	1998	Changes in Working Capital	
			Incrense (+)	Decrease (–)
	Rs.	Rs.	Rs.	Rs.
Current Assets	4,10,000	3,80,000	—	30,000
Current Liabilities	2,25,000	2,00,000	25,000	—
			25,000	30,000
Decrease in Net Working Capital			5,000	—
			30,000	30,000

Note : Though there is a decrease in both current assets and current liabilities, the decrease in current assets is more than the decrease in current liabilities. This resulted in a decrease in the net working 'capital

Illustration 3

The following are the summarised balance assets of X Y Ltd. As on 31st December, 1997 and 1998. Prepare a schedule showing changes in working capital.

Liabilities	1997	1998	Assets	1997	1998
	Rs.	Rs.		Rs.	Rs.
Equity Share Capital	80,000	80,000	Fixed Assets	60,000	50,000
Preference Share Capital	—	20,000	Debtors	80,000	48,000
General Reserves	4,000	4,000	Stock	20,000	70,000
Profit & Loss Account	8,000	10,800	Prepaid Exps.	2,600	1,000
Debentures	22,000	25,600	Cash	400	7,000
Creditors	24,000	26,000			
Bank Overdraft	25,000	9,600			
	1,63,000	1,76,000		1,63,000	1,76,000

Solution

Schedule of Changes in Working Capital

	1997	1998	Change in Working Capital	
			Increase (+)	Decrease (–)
Current Assets	Rs.	Rs.	Rs.	Rs.
Debtors	80,000	48,000	—	32,000
Stock	20,000	70,000	50,000	—
Prepaid expenses	2,600	1,000	—	1,600
Cash	400	7,000	6,600	—
Current Liabilities				
Creditors	24.000	26,000		2,000
Bank Overdraft	25,000	9,600	15,400	—
			72,000	35,600
Increase in Net Working Capital				36,400
			72,000	72,000

Check Your Progress B

1 What is a schedule of changes in working capital?

....

....

....

2 Which of the following statements are True and which are False ?

i) A decrease in current liabilities increases the working capital.

ii) An increase in current assets decreases working capital.

iii) Working capital is the difference between non-current assets and current liabilities.

iv) Excess of current liabilities over current assets is negative net working capital.

v) A schedule of changes in working capital shows the changes in the non-current segment of the balance sheet.

3 Fill in the blanks.

i) Net working capital is the difference between .... and ....

ii) Prepaid expense is an example of ....

iii) Bank balance at the beginning of the year was Rs. 40,000. Bank overdraft at the end of the year was Rs. 30,000. There is .... in working capital to the extent of ....

iv) Income received in advance but not earned at the beginning of the year was Rs. 20,000. Income earned but not received at the end of the year was Rs. 35,000. This results in an .... in working capital to the extent of ....

v) A cross transaction results in ....

vi) Increase in the net working capital indicates the .... of funds and decrease in the net working capital, n ....of funds.

18.8 FUNDS FROM OPERATIONS

You know that profit is an important source of funds. It is the result of excess of revenue over expenses. When goods costing Rs.1,000 are sold for Rs. 1,400, to the extent of Rs. 1,000 a decrease in stock is compensated by an increase in cash,. Thus, to the extent of Rs. 1,000, there is no effect on net working capital. But to the extent of Rs. 400, which is the profit in this transaction, the net working capital gets increased. Thus, profit earned increases the net working capital and constitutes an important component of the funds provided by operations. However, profit as shown by the profit and loss account, as stated earlier, requires certain adjustments in order to arrive at the amount of funds from operations.

Certain items of expenses charged and revenues earned actually do not involve any flow of funds during the current period. For example, deprecation written off during the current period is merely a method of showing the expired cost of the asset concerned and it does not involve any outflow of funds provided by operations. Similarly, certain items of deferred revenue expenses like preliminary expenses, ,discount on issue of shares etc., may be partly written-off during the current period. Such a write off does not involve any outflow of funds. Hence, these items are added back to the net profit as per profit and loss account in order to arrive at the amount of funds from operations.

There are also certain other transactions like profit/loss on the sale of fixed assets, non-operating income like dividends from investment, etc., which cannot strictly be called as profit/losses arising out of regular operations of business. Hence, the effect of these items must be excluded while calculating funds from operations. If, for example, profit on sale of fixed asset had been included in profit and loss account, it must be subtracted from the net profit to determine funds from operations. Similarly, if there was a loss on sale of fixed asset and the loss had been charged to profit and loss account, it must be added back to the net profit to ascertain the amount of funds from operations.

When all details are available, it is relatively easy to calculate the amount of 'funds from operations'. Sometimes, however, full information is not available and it becomes necessary to dig out the hidden information on the basis of clues provided. Let us now study a few situations involving such items and learn how will these be ascertained and adjusted for determining the amount of funds from operations.

18.8.1 Depreciation

Fixed assets have finite life. As time passes, the estimated useful life of the fixed assets decreases. In order to recognise the reduction in the estimated useful life, a part of the original cost is charged to profit and loss account. This step results in determining the true cost of production besides permitting the assets to be shown in the balance sheet at its reduced value. You know that an outflow of funds had taken place when the fixed asset was bought. But, when depreciation is charged to profit and loss account, it does not result in any fresh outflow of funds. In fact, depreciation is an important non-cash cost and has to be added back to the net profits for ascertaining funds from operations. .For example, there are two different firms A and B, and both purchased machinery costing Rs. 1,00,000 each. Firm A decided to depreciate machinery by Rs. 20,000 per annum whereas firm B decided its annual depreciation charge to be Rs. 25,000. Their net profits before charging depreciation amounted to Rs. 45,000 and Rs. 40,000 respectively, but the funds from operations for both the firms would be identical i.e., Rs. 65,000 as shown below.

	Firm A	Firm B
	Rs.	Rs.
Net Profit before depreciation	45,000	40,000
Add : Depreciation (being a non-cash.cost)	20,000	25,000
Funds from operations	*65,000*	*65,000*

Thus, charging more or less depreciation affects the net profit and not the funds from operations because whatever amount was charged as depreciation is being added back to the net profit. It should also be noted that depreciation is not a source of funds because it is the operations that constitute the source, and not the depreciation. If depreciation were to be really a source of funds, more and more depreciation can be charged and funds provided by operations increased accordingly. From the above example, it is evident that even when a higher amount was charged as depreciation, the amount funds from operations remained unchanged.

When the profit and loss account is given, whether in full or as a summary thereof, the amount charged as depreciation can be easily ascertained. But, when any details regarding the income statement are not given, the depreciation amount has to be ascertained from the data given in the balance sheet and the other available information. If the figures given in two balance sheets show the opening and closing balances of the asset concerned at their depreciated value (cost less depreciation till date) and there is no mention of purchase and sale of the asset during that year, the difference between the opening and closing balances may be considered as the depreciation charged during the year. Sometimes, the fixed assets are shown at cost on the assets side and the depreciation, as a provision for depreciation or as accumulated depreciation, is either shown as a deduction from the fixed asset-concerned or appears on the liabilities side. In such a situation, the increase in the amount of accumulated depreciation during the year (assuming that there were no purchases and sales of fixed assets) must be taken as the amount of depreciation charged during that year. Study Illustrations 4 and 5 and learn how will the amount of depreciation be ascertained.

Illustration 4

Ascertain the amount of depreciation charged during the year 1998 from the details given below:

Balance Sheet (Assets side only)]

Assets	As on 31-12-1997	As on 31-12-1998
	Rs.	Rs.
Machinery	6,80,000	5,60,000

Solution

It is clear from the above, that the value of machinery decreased from Rs. 6,80,000 to Rs. 5,60,000 between the two balance sheet dates. Assuming there was no purchase or sale of machinery during the year, the difference between the two figures can be taken as the amount of depreciation charged during the 1998.

	Rs.
Machinery as on 31-12-1997	6,80,000
Less : Machinery as on 31.12. 1998	5,60,000
Depreciation charged during 1998	1,20,000

This amount can also be ascertained by preparing the Machinery Account for the year as follows:

Machinery Account

	Rs.		Rs.
To Balance b/d	6,80,000	By Deprecation (balancing figure)	1,20,000
		By Balance c/d	5,60,000
	6,80,000		6,80,000

Illustration 5

Given the following, ascertain the amount of depreciation charged during the year.

Balance Sheet (Assets side only)

Assets	As on 31.12.1997	As on 31.12.1998
Machinery at Cost 10,00,000	10,00,000	10,00,000
Less : Accumulated Depreciation	3,20,000	4,40,000
Depreciated Value of Machinery	6,80,000	5,60,000

Solution

The increase in the accumulated depreciation must be considered as the amount of depreciation charged during the year. It can be ascertained as follows :

Accumulated depreciation as on 31.12.1998	4,40,000
Less : Accumulated depreciation as on 31.12. 97	3,20,000
Depreciation charged during the year 1998	1,20,000

This information can also be found out by preparing accumulated depreciation account as follows :

Accumulated Depreciation Account

	Rs.		Rs.
To Balance c/d	4,40,000	By Balance b/d	3,20,000
		By Depreciation charged (balancing figure)	1,20,000
	4,40,000		4,40,000

Hitherto, we have assumed that there were no purchases and/or sale of fixed assets during the year. Now, let us take up the situation where some addition had also been made during the year. Look at Illustration 6 and 7, and see how have the amounts of purchase of fixed asset and the depreciation thereon been ascertained.

Illustration 6

Given the following, ascertain the amount of furniture the year 1998.

Balance sheet (assets side only)

	As on 31.12.1997	As on 31.12.98
	Rs.	Rs.
Furniture at cost less depreciation	40,000	50,000

Other Information : Depreciation charged during the year on furniture Rs. 4,000.

Solution

Furniture Account

	Rs.		Rs.
To Balance b/d	40,000	By Depreciation	4,000
To Bank (purchases) (balancing figure)	14,000	By Balance c/d	50,000
	54,000		54,000

Note: Though the difference between the figures of the asset on two balance sheet dates is Rs. 10,000, the value of furniture bought during the year is Rs. 14,000 and not Rs. 10,000. This has been worked out after taking into account the amount of Rs. 4,000 as depreciation.

Hlustration 4

Given the following, ascertain the amount of depreciation charged during the year 1998.

Balance sheet (assets side only)

	As on 31.12.1997	As on 31.12.98
	Rs.	Rs.
Furniture at cost less depreciation	40,000	50,000

Other Information : Furniture purchased during the year Rs. 14,000.

Solution

Furniture Account

	Rs.		Rs.
To Balance b/d	40,000	By Depreciation (balancing figure)	4,000
To Bank (purchases)	14,000	By Balance c/d	50,000
	54,000		54,000

It may be noted that preparation of the concerned asset account helps in ascertaining not only the amount of depreciation but also the amount of purchase of the asset made during the year.

18.8.2 Profit or Loss on Sale of Fixed Assets

When a fixed asset is sold at a price which is higher than its book value, the profit on its sale is credited to profit and loss account. Hence, this amount will have to be deducted from the net profit in order to ascertain the amount of funds from operations. Similarly, when a fixed asset is sold st a loss (price is less than its book value); the loss is charged to profit and loss accopnt and it becames necessary to add back this amount to the net profit so as to show the correct amount of funds from operations. The purpose of adjusting the amounts of profit or loss on sale of fixed assets in the net proflt is to avoid double counting of such profit or loss as tho same is already

included/excluded in the amounts **from** the sale **of** fixed assets which **would be** shown separately as a source of **find.** **Thus,** the actual sale proceeds from the sale **of** fixed assets are shown as a source of funds, and, if there is a profit on sale it must be subtracted from the net profit, and, if there is a loss the same must be added back to the net profit. This adjustment is necessary for ascertaining the correct amount of funds provided by operations. Study illustration 8 and 9 to note the procedure of making the necessary adjustment in the net profit for working out funds from operations.

Illustration 8

A machinery whose book value was Rs. 1,20,000 was sold for Rs. 1,68,000. The gain on sale of machinery was taken to profit and loss account which ultimately showed net profit for the year as Rs. 1,50,000. Calculate funds from operations.

Solution

Gain on sale of machinery	Rs. 1,68,000 — Rs. 1,20,000 = Rs. 48,000
Net profit	Rs. 1,50,000
Less : Gain on sale of machinery included earlier	Rs. 48,000
Funds from Operations	Rs. 1,02,000

Total sale proceeds of Rs. 1,68,000 will be shown as a source of funds which is inclusive of the gain of Rs. 48,000, and-which has been deducted for ascertaining the correct amount of funds from operations.

Illustration 9

Machinery with a book value of Rs. 1,20,000 was sold for Rs. 1,10,000. The net profit after charging the loss on sale of machinery was Rs. 92,000 for that year. Calculate funds from operations.

Solution

Loss on sale of machinery	Rs. 1,20,000 – Rs.1,10,000 = Rs. 10,000
Net Profit	Rs. 92,000
Add : Loss on sale of machinery, included earlier	Rs. 10,000
Funds from operations	Rs. 1,02,000

Total net sale proceeds of Rs. 1,10,000 will be shown as a source of funds, and the loss of Rs. 10,000 is like an additional amount of depreciation which has been added back for ascertaining the correct amount of funds from operations.

If complete information is available with regard to purchase and sale of fixed assets, it will not be a problem to ascertain: (a) deprecation charged during that year, (b) value of asset purchased, (c) sale proceeds of the fixed asset, (d) book value of the asset as on the date of sale, (e) gain/loss on such sale, and (f) depreciation charged till the date of sale on the assets sold. However, if detailed information is not available, you may have to prepare the relevant accounts to ascertain the hidden information Look at Illustration 10 and see how these figures are worked.

Illustration 10

Extracts of Balance Sheet

Liabilities	As on 31.12.97	As on 31.12.98	Assets	As on 31.12.97	As on 31.12.98
	Rs.	Rs.		Rs.	Rs.
Accumulated Depreciation	20,000	30,000	Machinery	15,000	40,000

Net profit for the year was Rs. 30,000. Machinery with an original cost of Rs. 5,000 was sold (accumulated depreciation on it being Rs. 2,000) for Rs. 4,000. Ascertain the amounts of depreciation, funds from operations, and asset purchased.

Solution

Accumulated Deprecation Account

	Rs.		Rs.
To Depreciation on Machinery sold	2,000	By Balance b/d	20,000
To Balance c/d	30,000	By P & L A/c – depreciation charged (balancing figure)	12.000
	32,000		32,000

Machinery Account

	Rs.		Rs.
To balance b/d	15,000	By Accumulated Depreciation	2,000
To P & L A/c (gain on sale)	1,000	By Cash (sale)	4,000
To Cash - purchase (balancing figure)	30,000	By balance c/d	40,000
	46,000		46,000

Gain on Machinery Sold

Book Value	5,000
Less : Depreciation	2,000
Depreciated value	3,000
Sale price	4,000
Gain on sale	1,000

Funds from Operations

Net profit as reported	30,000
Add : Depreciation charged	12,000
	42,000
Less : Gain on sale	1,000
Funds from operations	41,000

Note : The total sale proceeds of Rs. 4,000 will be shown as a source of fund in the fund flow statement.

If we had merely compared the opening and closing balances of the accumulated deprecation account, we would have wrongly concluded that depreciation charged during the yew was only Rs, 10,000. The sale of an old asset required that the accumulated depreciation in respect thereof should be transferred from the accumulated depreciation account to the concerned asset account, and it is only after incorporating this entry that the actual depreciation charged during the year can be correctly ascertained, Thus, the depreciation charged,during the year works out to Rs. 12,000 and not Rs. 10,000. This amount of depreciation charged during the year has been added back to the net profit, in order to ascertain funds from operations as the same must have been debited to profit and loss account earlier.

18.8.3 Profit or Loss on Sale of Long term Investments

If a company purchases shares in some other company with the intention of acquiring control, it would consider such investment as 'trade' or long term investment. In such cases, investment must be treated as non-current item i.e., just like a fixed asset. The changes in this item, if any, would appear in the funds flow statement directly as the purchase or sale of investments, as the case may be. However, if there is any profit or loss on their sale, it will be dealt with in the same manner as the profit or loss on the sale of fixed assets.

Sometimes, some surplus liquid funds are available for short periods and these are invested outside in marketable securities or some other short tenn investments. In such a situation, the investments must be treated as an item of current asset. It may be noted that the changes in such investments will appear in the schedule of changes in working capital, and not in fund flow statement.

18.8.4 Amortisation of Expenses and Writing Off of Intangible Assets

Sometimes, a firm decides to write off a portion of its intangible assets like goodwill, patents, copy rights, etc., by charging it to the profit and loss account. Similarly, it may decide to write off deferred revenue expenses like preliminary expenses. discount on issue of shares, etc., by charging some amount to the profit and loss account, These written off amounts, like depreciation, are' non-cash costs and reduce the amount of profit. But they do not affect flow of funds. For this reason, such amounts must be added back to the net profit to determine the amount of funds provided by operations as shown in Illustration 11.

Illustration 11

From the following extracts of Balance Sheet ascertain the amount of funds from operations.

	As on 31.12.97	As on 31.12.98
	Rs.	Rs.
Preliminary Expenses	40,000	30,000
Profit for the year	—	25,000

Solution

Funds from Operations

Profit for the year	25,000
Add : Preliminary Expenses Written off (Rs. 40,000 – Rs. 30,000)	10,000
Funds from Operations	35,000

18.8.5 Provision for Taxation

Provision for taxation represents the amount likely to be paid as tax after the assessment is complete during the next accounting period. Thus, provision for taxes is shown as a current liability in the balance sheet, and if, for purposes of preparing fund flow statement it is treated as such, this would appear in the schedule of changes in working capital, and the amount of tax paid during the year will not be shown as an application in the fund flow statement. However, as per practice, tax on profits is normally treated as a non-current item For purposes of preparing the fund Bow statement. Hence, this will not be taken to the statement of changes In working capital. In fact,

the provision made during the current year will have to be added back to net profit to find out the amount of funds from operations, as the same must have been debited to profit and loss account earlier. As' for the amount of tax paid, it must be shown as an application of fund in the fund flow statement. It may be noted that if no additional information is available, the provision for tax shown in the previous year's balance sheet shall be taken as the tax paid during the year, and the provision for tax shown in current year's balance sheet shall be treated as the amount of tax provided during the current year by debiting it to the current year's profit and loss account. Of course, this amount will have to be added back to net profit for ascertaining funds from operations. This treatment of taxation is in strict conformity with the requirements of the Accounting Standard on State of Changes in Position of Funds (AS-3).

In case some information is given while some is missing, you may prepare provision for tax account as given in Figure 18.2 and find out the missing figure.

Figure 18.2 Provision for Tax Account

To Bank (tax paid)	....	By Balance b/d	....
To Balance c/d	....	By Profit & Loss A/c (balancing figure - provision made during the year)	....
	....		....

18.8.6 Proposed Dividends

Proposed dividend, as in the case of provision of taxation, can be treated either as a current liability or as a non-current liability and its treatment will differ accordingly. In case it is treated as a current liability, it will appear as one of the items in the schedule of changes in working capital and the amount of dividend paid will not be shown as an application of funds in fund flow statement. But, as per the requirement of AS-3, the proposed dividends are also to be treated as a non-current item for purposes of fund flow statement. As such, proposed dividends will not find a place in the schedule of changes in working capital. The amount of proposed dividends relating to current year if already deducted from profits, shall be added back for ascertaining the amount of funds from operations, and the dividends actually paid during the year will be shown as an application of funds. It may be noted that, just like provision for tax, if no details are available, the proposed dividends shown in the previous year's balance sheet shall be taken as dividends paid during the year and the proposed dividends shown in current years's balance sheet shall be treated as the amount of dividends provided during the current year by debiting it to the current year's profit and loss appropriation account.

In case some details are available while some are not, we may prepare the proposed dividend account as given in figure 18.3 and find out the missing information.

Figure 18.3 : Proposed Dividend Account

	Rs.		Rs.
To Bank (dividend paid)	....	By balance b/d	....
To Balance c/d	....	By Profit & Loss App. A/c (balancing figure-provision made during the year)	....
	....		....

Interim Dividend: Sometimes, companies pay an interim dividend between two usual annual dividends. Such interim dividend must be added back if profit made during the year is estimated on the basis of the difference between the opening and closing balanc of profit and loss accounts as given in balance sheets. The intermit dividend paid will also have to be shown as an application of funds in the fund flow statement. Look at Illustration 12 and see how interim dividend is treated for purposes of preparing the fur flow statement.

Illustration 12

From the following extract of Balance Sheet ascertain the amount of profit before charging interim dividend

	As on 31.12.99	As on 31.12.98
	Rs.	Rs.
Profit & Loss Appropriation Account	1,00,000	1,50,,000
Interim Dividend Paid	20,000	

Solution

Profit for the year

	Rs.
Closing Balance of P & L Appropriation Account	1,50,000
Less: Opening Balance of P & L Appropriation A/c	1,00,000
Difference being Net Profit	50,000
Add: Interim Dividend Paid	20,000
Profit before charging interim dividend (funds from Operation)	70,000

When profit for the year is clearly given, it must be presumed that it represents the amount of profit earned before deducting interim dividend. Hence, interim dividend should not bc added back to the net profit for purposes of funds from operations. However, it would be necessary to show the interim dividend paid as application of funds in the fund flow statement.

18.8.7 Provision for Doubtful Debts

As the entire amount of outstanding debtors may not be realised, based on past experience, a certain proportion of debtors is provided as Provision for Doubtful Debts to meet the loss when bad debts actually arise. Usually, provision for doubtful debts is subtracted from sundry debtors on the assets side of balance sheet. Sometimes, provision for doubtful debts account is shown on the liabilities side of the balance sheet. Irrespective of the difference in presentation, this item must be treated as a current item only, and should appear in the schedule of changes in working capital. Somebody may argue that since this, provision does not lead to any outflow of fund why not add it back to not profits for purposes of ascertaining the amount of funds from operations. But it is simply not done because it relates to an item of current asset (debtors) and is not like depreciation which relates to non-current assets.

18.8.8 *Items Representing Appropriation of* Profit.

Net profits earned during the year and the balance of profits brought forward from the previous year are generally subject to appropriation for several purposes such as, providing for proposed dividends, transfer to general reserve, transfer to debenture redemption reserve etc. The balance sheet generally shows the net balance of profit as per profit and loss appropriation account to be carried forward to the next year, and the respective reserve accounts are shown indicating the accumulated amounts under the various heads. .

To calculate fund from operations, the starting point is the net balance of profit as per the profit and loss appropriation account as shown in the current year balance sheet. The same must be adjusted with respect to depreciation charges, profit/loss on sale of fixed assets, and the amounts appropriated towards addition to general reserve, debenture redemption reserve, etc., in order to arrive at the correct amount of funds from opcrations. The difference between the accumulated opening and closing balances of general reserve, etc., may indicate increase or decrease in the amount during the year. If there is increase, it should be added back to the end of year net balance of profit and loss appropriation account. Conversely, if there is decrease it should be deducted from the net balance. Further the opening balance of profit and loss appropriation account as given in the balance sheet should be deducted to arrive at the net amount of funds from operations.

Check Your Progress C

1 Which of the following statements are True and which are False?

i) Credit purchase of stock-in-trade is an application of funds.

ii) Cash purchase of stock in trade is not an application of funds.

iii) Purchase of fixed assets is a use of funds.

iv) Amortisation of preliminary expenses is a use of funds.

v) Increase in capital owning to the issue of bonus shares does not increase the working capital.

vi) Depreciation is a source of funds.

vii) Intangible assets written off does not involve any outflow of funds.

viii) Funds from operations is an internal source of funds.

ix) When the provision for tax is treated as a non-current liability, tax paid during the year is taken as use of funds.

2 Fill in the blanks

i) Assets arc .... of funds.

ii) Liabilities .... of funds.

iii) A 'where got and where gone statement' shows changes in .... and between .... dates.

iv) Funds flow mean inflow of funds and outflow of funds and the former indicates .... of funds and the latter of .... of funds.

v) Increase in an asset dde to purchase is ....

vi) Net profit Rs. 50,000. Gain on sale of furniture Rs. 3,000. Loss on sale of machinery Rs. 2,000. Funds from operations will be Rs. ....

vii) Net profit Rs. 75,000. Preliminary expenses written off during the year Rs. 25,000. Funds from operations will be' ....

viii) Net profit Rs. 80,000. Depreciation charged during the year Rs. 30,000. Funds from operations will be ....

ix) Fixed assets costing Rs. 50,000 on which accumulated depreciation was Rs. 20,000 is sold for Rs. 24,000. This results in a .... on sale of the asset and must be .... to net profit, to ascertain funds from operations.

x) Increase in working capital is ....

xi) Decrease in working capital is ....

3 What are 'funds from operations'.

....

....

....

4 How will you treat the following items while calculating the amount of funds from operations ?

a) Depreciation charged during the year.

....

....

....

b) Deferred revenue expenditure written off.

....

....

....

c) Gain on sale of fixed assets.

....

....

....

d) Loss on sale of fixed assets.

....

....

....

18.8.9 Statement of Funds from Operations

We have discussed various items that are relevant for determining funds from operations, and learnt how to dig out the hidden information in respect thereof and make necessary adjustments in the net profit for the purpose. Let us now learn how to prepare a statement of funds from operations or an adjusted profit and loss account, as the case may be, for ascertaining the amount of funds from operations for purposes of fund flow statement.

The form of statement which may be prepared to arrive at funds from operations is shown below in Figure 18.4

Figure 18.4 : Proforma of Statement of Funds from Operations

Net profit as per P & L A/c		....
Add : i) Amount of depreciation charged	....	
ii) Amount written off (intangible assets like goodwill, patents, etc.)	....	
iii) Amount written off (deferred revenue expenses like preliminary expenses, discount on issue of shares, etc.)	....	
iv) Loss on sale of fixed assets/ long term investments	....	
v) Provision for tax made	....	....
Less : Profit on sale of fixed assets/ long term investments		....
Funds from Operations		....

While preparing the above statement, the items of expenses added back or subtracted are those which, as discussed earlier, needed adjustment in the net profit for purposes of ascertaining the amount of fund from operalion and which had actually been debited or credited to profit and loss account while working the amount of net profits. Look at Illustration 13 and see how funds from operations are ascertained by preparing this statement.

Illustration 13

Ascertain Funds from Operations from the following Profit and Loss Account.

Profit and Loss Account

	Rs.		Rs.
To Sundry Expenses	25,000	By Gross Profit	1, 25,000
To Salaries	40,000	By Profit on sale of machinery	40,000
To Goodwill written off	22,000		
To Preliminary Expenses	8,500		
To Loss on sale of furniture	4,000		
To Depreciation	9,000		
To Net Profit	56,500		
	1,65,000		1,65,000

Solution

Statement of Funds from Operations

	Rs.	Rs.
Net Profit as per P & L A/c		56,500
Add : Goodwill written off	22,000	
Preliminary expenses written off	8, 500	
Loss on sale of furniture	4,000	
Depreciation	9,000	43,500
		1,00,000
Less : Profit on sale of machinery		40,000
Funds from Operations		60,000

Sometimes, the figure of net profit is not available because neither the income statement (profit and loss account) is given nor its amount is mentioned by way of additional information. In such a situation you may prepare this statement with the help of opening and closing balances of P & L A/c as'given in the balance sheets. While doing so you should remember that the P & L A/c balances given in the balance sheets reprecent the Closing balances of the Profit and Loss Appropriation Accounts which are arrived at after debiting items like transfer to general reserve, provision for proposed dividend and interim dividend paid, etc. Hence, these items will also have to be added back as already explained In section 18.4.8 above, Look at Illustration 14 and see how statement of funds from operations will be prepared if the figure of net profit is not clearly given,

Illustration 14

Ascertain funds from operations from the following information :

	1997	1998
	Rs.	Rs.
Profit and Loss Account (credit balance)	3,50,000	4,50,000
General Reserve	1,50,000	2,00,000
Accumulated depreciation	50,000	70,000
Goodwill	60,000	40,000
Preliminary expenses	30,000	25,000
Prepaid dividends	20,000	25,000

Solution

Statement of Funds from Operations

	Rs.	Rs.
Closing balance of P & L A/c (1998)		4,50,000
Add : Transfer to General Reserve	50,000	
Deprecation	20,000	
Goodwill written off	20,000	
Preliminary expenses written off	5,000	
Proposed Dividend	25,000	
		1,20,000
		5,70,000
Less : Opening Balance of P & L A/c *(1997)*		3,50,000
Funds from Operations		2,20,000

Notes: 1 The amounts of all items (except proposed dividends) have been ascertained by comparing the opening and closing balances of respective items

2 In the absence of any other information, the proposed dividends of 1997 are supposed to have been paid fully in 1998 and the whole amount of proposed dividends of 1998 would represent the amount that must have been debited to the P&L Appropriation Account in 1998.

An alternative method of ascertaining funds from operations, in such a situation, is by preparing an adjusted Profit and Loss Account. The opening balance of P & L A/c is shown on the credit side as the first item and the closing balance of P & L A/c on the credit side as the last item. All items which are to be added back such as depreciation, transfer to reserves, etc., will be shown on the debit side of the adjusted P & L A/c and all those which are to be extracted such as profit on sale of fixed asset, will be shown on its credit side. The balancing figure in this account will represent the amount of funds from operations. If for Illustration 14, instead of preparing a statement of funds from operations, we prepare the Adjusted Profit and Loss Account, it shall appear as follows:

Adjusted Profit and Loss Account

	Rs.		Rs.
To Transfer to Gen. Reserve	50,000	By Balance b/d (1997)	3.50.000
To Depreciation	20,000	By Funds from operations	2,20,000
To Goodwill written off	20,000	(balancing figure)	
To Preliminary Expenses	5,000		
To Proposed Dividend	25,000		
To Balance c/d (1998)	4,50,000		
	5,70,000		5,70,000

It is possible that even the balances of Profit and Loss Account may not be separately given in the balance sheet. In such a situation, it can be assumed that it is included in Reserves and Surpluses (retained profits), and while preparing the Adjusted Profit and Loss Account we should show the opening balance of Reserves and Surpluses as the first item on the credit side and the closing balance of Reserves and Surpluses as the last item on the debit side. The remaining items will be shown as usual with just one exception i.e., transfer to reserves. This need not be shown in the Adjusted Profit and Loss Account as the same will now be automatically accounted for.

To summarise, it can be stated that for purpose of **Fund** Flow Statement, the amount of profit which acts as a source of funds (termed as funds from operations) is the profit before charging depreciation, **amortisation** (write off), loss on sale of fixed **assets/long** term investments, transfer to reserves and providing for **tax** and dividends, and before crediting profit on sale of fixed **assets/long** term investments.

18.9 LET US SUM UP

Profit and loss account and balance sheet depict the results of operations and the financial position of the business and do not throw light on the changes in the financial position between two balance sheet dates. This information is made available by preparing a statement of changes in financial position also known as 'fund flow statement'. The word 'funds' has different meanings. In the context of fund flow statement it means net working capital. Flow of funds'in this sense means 'change in funds position' or 'change in net working capital'.

Working capital refers to that part of capital which is required for recurring operations of a business as distinguished from the capital invested in fixed assets, There are two concepts relating to working capital : (i) gross working capital i.e., total current assets and (ii) net working capital i.e., the excess of current assets over current liabilities. In the context of fund flow statement working capital refers to net working capital.

Only the transactions involving a fixed asset/liability on the one hand and a current asset/liability on the other, result in the flow of funds or a change in the net working capital. There is no change in funds position if a transaction affects (a) only items in the current category, or (b) only items in the non-current category,

The technique of preparing of fund flow statement involves three steps :

1 Preparing schedule of changes in working capital to determine the increase or decrease in working capital,

2 Determining funds from operations by adjusting the profit and loss in respect of certain items (like depreciation),

3 Preparing fund flow statement (on working capital basis) with changes in items in the non-current category to corroborate the net change in working capital as revealed by the schedule of changes in working capital.

The schedule of changes in working capital is prepared from the current items given in the balance sheet. It should be noted that : (i) an increase in any current asset results in an increase in the net working capital, while a decrease in any current asset results in a decrease in the net working capital; (ii) an increase in any current liability leads to a 'decrease in the net working capital, while a decrease in any current liability results in an increase in the net working capital.

Profits are an important source of funds. But, the figure of net profit as given in the profit and loss account requires certain adjustments so as to arrive at the amount of profits that act as a source of funds called funds provided by operations. These adjustments relate to :

1 Items of losses charged to profit and loss account which do not involve any outflow of funds e.g., depreciation charged, loss on sale of fixed assets or long term investments.

2 Expenses written off discount on issue of shares/debentures etc.

3 Intangible assets amortised e.g., goodwill, patents, copyrights, etc., to the extent written off.

4 Profit on sale of fixed assets or long term investments as the same is already included in the sale proceeds shown as a source of fund.

The first three items should be added back to the net profit as shown by the profit and loss account and the fourth category of items should be deducted therefrom so as to arrive at the amount of so as 'funds from operations'.

The provision for taxation and proposed dividends which, by nature, happen to be current items and are shown as such to the balance sheet, are treated as non-current items for purposes of fund flow statement. Hence, the amount of tax provided during the current year should be added back to net profit to arrive at the amount of funds from operations, and the tax actually paid will be treated as an outflow or use of funds, The proposed dividends are also to be treated in the same manner and if any interim dividend has been paid, it must also be shown as an outflow or use of funds.

However, dividends and items like transfer to general reserve, debentures redemption reserve, etc. which represent nppropriation of profits, should be added back only when the statement of funds from operation is proposed with the help of P & L Appropriation Account balances as given in the balance sheet.

18.10 KEY WORDS

Funds : Cash or net working capital.

Flow of funds : Movement or change in the net working capital.

Fund Flow Statement : Statement which shows the sources (inflows) and uses (outflows) of funds between two balance sheet dates.

Funds from Operations : The amount of net profit that acts as a source of fund i.e., profit before charging certain non-cash costs and before crediting items like profit on sale of fixed assets,

Gross Working Capital : Total of current assets

Net Working Capital : Excess of current assets over current liabilities.

on-current Items : Long term assets and long-term liabilities,

Schedule of Changes in Working Capital : Statement which reveals the effect of item-wise change in current asset and current liabilities on the net working capital between two balance sheet dates.

Working Capital : That part of the capital which is required for recurring operations of a business as distinguished from capital invested in fixed assets.

181111 ANSWERS TO CHECK YOUR PROGRESS

A 3 i) b ii) d iii) a iv) c

B 2 i) True ii) False iii) False iv) True
v) False

4 i) Current assets, Current liabilities
ii) Current assets
iii) decrease; Rs. 70,000
iv) increase; Rs. 55,000
v) Flow of funds (or change in working capital)
vi) Use or Application, source

C 1 i) False ii) True iii) True iv) False
v) True vi) False vii) True. viii) True
ix) True

2 i) Uses ii) Sources iii) Assets, Iiabilities, two
iv) sources, uses v) use of funds vi) Rs. 49,000
vii) Rs. 1,00,000 viii) Rs. 1,10,000 ix) loss, added
x) use of funds xi) source of funds

18.12 TERMINAL QUESTIONS/EXERCISES

Qnestions

1 What is working capital? What do you mean by gross working capital and net working capital?

2 What are current and non-current items? Give five examples of each.

3 What arc funds? What do you mean by flow of funds?

4 Why and how is a schedule of changes in working capital prcpared?

5 Enumerate the steps in the preparation of a fund flow statement.

6 Explain why and how net profits are converted into fund from operations?

7 Discuss how are the provision for tax and the proposed dividends treated while ascertaining the amount of funds from operations and preparing the fund flow stalement.

8 Enumerate the major sources and uses of funds.

Exercises

1 From the following balance sheets, prepare a Schedule of Changes in Working Capital.

Balance Sheet

Liablities	1.1.97	31.12.98	Assets	1.1.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Capital	67,200	1,18,000	Fixed Assets	60,000	1,14,200
Current Liabilities			**Current Assets**		
Trade Creditors	28,700	31,000	Debtors	45,500	50,000
Overdraft	33,500	32,000	Stock	40,000	36,800
Bills Payable	43,000	44,000	Expenses paid in advance	27,600	20,000
Tax payable	27,600	25,000	Bank balance	26,900	29,000
	2,00,000	2,50,000		2,00,000	2,50,000

(**Answer :** Decrease in Working Capital Rs. 3,400)

2 From the following balance sheets, prepare a Schedule of Changes in Working Capital.

Balance Sheet

Liabilities	1.1.97	31.12.98	Assets	1.1.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Capital	160,000	2,20,000	Fixed Assets	1,00,000	1,80,000
Current Liabilities			**Current Assets**		
Trade Creditors	60,000	90,000	Debtors	70,000	90,000
Short-term loan	40,000	60,000	Stock	50,000	52,000
Tax payable	25,000	18,000	Investments	45,000	48,000
Income received in advance	15,000	12,000	Cash in hand	35,000	30,000
	3,00,000	4,00,000		3,00,000	4,00,000

(**Answer:** Decrease in Working Capital Rs. 20,000).

Notes : Tax payable has been taken as provision for tax and has been treated as non-current item for the purpose, and Investment is given clearly as current item.

3 From the following balance sheets, prepare a Schedule of Changes in Working Capital.

Balance Sheet

Liabilities	1.1.97	31.12.98	Assets	1.1.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Capital	1,00,000	1,20,000	Fixed Assets	75,000	1,02,000
Reserves	44,000	57,600			
Current Liabilities			**Current Assets**		
Trade Creditors	40,000	40,800	Debtors	52,000	45,000
Overdraft	51,000	48,800	Stock	40,000	48,000
Bills Payable	15,000	9,400	Marketable Securities	46,000	49,000
Tax payable	20,000	23,400			
			Cash balance	57,000	56,000
	2,70,000	3,00,000		2,70,000	3,00,000

(**Answer :** Increase in Working Capital Rs. 6,600.)

Note : **Tax** payable has been taken as provision for tax and has been treated as a non-current item for this purpose,

4 Calculate Funds from Operations from the following Profit and Loss Account

	Rs.		Rs.
Expenses paid and outstanding	6,000	Gross Profit	9,000
Deprecation	1,400	Gain on sale of land	1,200
Loss on sale of machine	80		
Discount allowed	4		
Goodwill	400		
Net Profit	2,316		
	10,200		10,200

(Answer : Rs.2,996).

Note: Discount allowed is supposed to be the discount allowed to debtors on prompt payment.

5 Calculate Funds from Operations from the following Profit and Loss Account

	Rs.		Rs.
Depreciation	90,000	Gross Profit	8,50,000
Discount on issue of shares	20,000	Profit on sale of plant	4,00,000
Loss on sale of machine	40,000		
Goodwill (written off)	2,20,000		
Preliminary expenses	65,000		
Sundry expenses	2,50,000		
Net Profit	5,65,000		
	12,50,000		12,50,000

(Answer : Rs. 6,00,000)

6 From the following details find out the Funds from Operation

		Rs.			Rs.
Salaries		60,000	Gross profit		1,50,000
Rent		22,000	Profit on sale of		
Provision for bad debts		7,500	buildings		
Preliminary expenses			Sold for	15,000	
Written off		15,000	Book value	7,500	7,500
Goodwill written off		7,500			
Depreciation on					
Machinery		7,500			
Loss on sale of plant					
Book value	15,000				
Sold for	- 12,000				
		3,000			
Provision for tax		7,500			
Net Profit		27,500			
		1,57,500			1,57,500

(Answer: Rs. 60,000).

7. Calculate the Funds from Operations from the following Profit and Loss Appropriation Account.

	Rs.		Rs.
Salaries	25,000	Gross profit	1,50,000
Rent	9,000	Profit on sale of	
Depreciation on plant	15,000	buildings	
Preliminary expenses		Sold for 30,000	
Written off	6,000	Book value 45,000	
Printing and stationery	9,000		15,000
Goodwill written off	9,000		
Provision for tax	12,000		
Proposed dividends	8,000		
Net Profit	72,000		
	1,65,000		1,65,000

(Answer : Rs. 1,07,000).

Note : Provision for tax treated as a non-current item.

8 Calculate fund/loss from operations from the following data :

	Rs.
P & L A/c (credit balance) as on April 01, 1998	70,600
P & L A/c (credit balance) as on March 31, 1998	30,000
Loss on issue of debentures	12,000
Operating expenses	28,000
Premium of expenses written off	13,000
Transfer to general reserve	15,000

(Answer : Operating Loss : Rs.600) No adjustment is needed for operating expenses,

9 From the following Balance Sheets prepare Statement of Changes in Working Capital and Adjusted Profit and Loss A/c for ascertaining funds from operations.

Liabilities	31.3.97	31.3.98	Assets	31.3.97	31.3.98
	Rs.	Rs.		Rs.	Rs.
Share Capital	1,50,000	2,00,000	Goodwill	57,500	45,000
8% Redeemable			Buildings	1,00,000	85,000
Preference Share			Plant	40,000	1,00,000
Capital	75,000	50,000	Debtors	80,000	1,00,000
General Reserve	20,000	35,000	Stock	38,500	54,500
Profit & Loss A/c	15,000	24,000	Bills Receivable	10,000	15,000
Proposed Dividend	21,000	25,000	Cash	7,500	5,000
Creditors	27,500	41,500	Bank	5,000	4,000
Bills Payable	10,000	8,000			
Provision for Tax	20,000	25,000			
	3,38,500	4,08,500		3,38,500	4,08,500

Additional Information :

a) Depreciation of Rs. 10,000 and Rs. 15,000 has been charged on Plant and Buildings respectively.

b) Income-tax of Rs. 17,500 has been paid during the year.

(Answer : Increase in Working Capital : Rs. 25,500; Funds from operations Rs. 1,09,000).

10 Prepare a statement of funds from operations and the schedule for changes in working capital

Liabilities	31.3.98	31.3.97	Assets	31.3.98	31.3.97
	Rs.	Rs.		Rs.	Rs.
Shore Capital	25,00,000	20,00,000	Rxed Assets	15,50,000	15,00,000
Reserves & Surplus	7,50,000	2,50,000	Investments	75,000	—
Proposed Dividend	5,00,000	6,00,000	Stock	37,50,000	39,37,500
			Debtors	20,00,000	17,50,000
Secured loans	12,50,000	14,00,000	Cash & bank	1,25,000	62,500
Current liabilities	25,00,000	30,00,000			
	75,00,000	72,50,000		75,00,000	72,50,000

Additional Information :

a) Dividend paid during 1997-98 Rs. 2,50,000.

b) Depreciation on fixed assets for the year Rs. 1.5 lakh.

(**Answer**: Decrease in Working Capital : Rs. 6,25,000; Funds from operations Rs. 8,00,000).

Note: These questions and exercises will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the university for assessment. These are for your practice only.

UNIT 19 STATEMENT OF CHANGES IN FINANCIAL POSITION – II

Structure

19.0 Objectives
19.1 Introduction
19.2 Preparation of Fund Flow Statement
19.3 Importance of Fund Flow Statement
19.4 Cash Flow Statement
  19.4.1 Sources and Uses of Cash
  19.4.2 Ascertaining Cash From Operations
  19.4.3 Preparation of Cash Flow Statement
  19.4.4 Uses of Cash Flow Statement
19.5 Distinction between Cash Flow Analysis and Fund Flow Analysis
19.6 Let Us Sum Up
19.7 Answers to Check Your Progress
19.8 Terminal Questions/Exercises

19.0 OBJECTIVES

After studying this unit, you should be able to :

- prepare fund flow statement
- describe the uses of fund flow statement
- ascertain cash flow statement
- prepare cash flow statement
- explain the difference between fund flow and cash flow statements.

9 . INTRODUCTION

In Unit 18 you have studied that the preparation of fund flow statement involves three steps. You have already studied the first two steps of (1) preparing, the schedule of changes in working capital to ascertain the increase or decrease in working capital between two balance sheet dates, and (2) ascertaining the amount of funds from operations. In this unit you will study the third step i.e., the preparation of fund flow statement, and also the need and method of preparing cash flow statement.

19.2 PREPARATION OF FUND FLOW STATEMENT

Having learnt the preparation of schedule of changes in working capital and method of ascertaining funds from operations, let us now understand how to prepare the fund flow statement. You know that this statement is required to show the sources of (inflows) and uses (outflows) of funds in proper form and reiterate the amount of increase/ decrease in the net working capital. This can be prepared (i) in a statement form as given in Figure 19.1 or (ii) in an account form as given Figure 19.2.

Statement form

Figure 19.1 : **Proforma** of Fund Flow Statement

Fund Plow Statement for the year ending ....

		Rs.	Rs.
A.	Sources of Funds		
1	Funds from operations	....	
2	Issue of share capital	....	
3	Issue of debentures	....	
4	Long-term loans raised	....	
5	Sale of fixed assets	....	
			....
			....
B.	Uses of **Funds**		
1	Operating. loss, if any	....	
2	Redemption of preference share capital	....	
3	Redemption of debentures	....	
4	Repayment of long-term liabilities	....	
5	Purchase of fixed assets	....	
6	Payment of dividends (final and interim)	....	
7	Payment of taxes	....	
			....
	Increase/Decrease in Working Capital '(A–B)		....

Account Format

Figure 19.2: **Proforma** of **Fund** Flow Statement

Fund Flow Statement of the year ending ....

Sources	Rs.	Uses	Rs.
Funds from operations	....	Operating loss, if any	....
Issue of Share capital	....	Redemption of preference share capital	....
Issue of debentures	....	Redemption of debentures	....
Long Term loans raised	....	Repayment of long term loans	....
Sale of fixed assets	....	Purchase of fixed assets	....
Decrease of Net		Payment of dividends (final and interim)	....
Working Capital	....	Payment of tax	....
		Increase in Net Working Capital	....
	....		....

You will observe that in the fund flow statement as shown above, you have 'funds from operations' as the first item of source of funds and 'operating loss' as the **first** use of funds, In fact, of the two only one **will** be involved and, hence, both will not be **shown** simultaneously in the **fund** flow statement, Of course, normally it will be 'funds from operations' shown as a source of funds. But if fund from operations has a negative figure, it reflect an operating loss and, in that case, it will be shown as such as a use of funds,

Fund flowstatement is usually prepared from the given balance sheet and the additional information. To ascertain the exact amount of each sources and application, we shall have to compare the opening and closing balances, as given in the balance sheets, in respect of all the non-current items such as share capital, debentures, fixed assets, investments etc. The required amounts can also be ascertained by preparing the accounts concerned as explained in the context of ascertaining funds from operations in Unit 18. Look at Illustrations 1 to 5 and see how are the required amounts worked out and the funds flow statements prepared.

Illustration 1

Prepare a Fund Flow Statement from the following information:

Comparative Balance Sheets

Liabilities	31.12.97	31.12.98	Assets	31.12.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Capital	80,000	1,00,000	Fixed Assets:		
Reserves	30.000	45,000	Machinery	60,000	70,000
Accumulated Depreciation on Machinery	10,000	15,000	Furniture	40,000	40,000
Current Liabilities:			Current Assets:		
Creditors	25,000	30,000	Stock	20,000	30,000
Bills Payable	10.000	2,000	Debtors	15,000	25,000
Expenses Payable (Outstanding)	20,000	8,000	Cash in hand and at bank	40,000	35,000
	1,75,000	2,00,000		1,75,000	2,00,000

Note: Net profit for the year was Rs. 15,000.

Solution

Schedule of **Changes** in **Working Capital**

	31.12.97	31.12.98	Changes in Working Capital	
			Increase	Decrease
	Rs.	Rs.	Rs.	Rs.
Current Assets:				
Stock	20,000	30,000	10,000	—
Debtors	15,000	25,000	10,000	—
Cash	40,000	35,000	—	5,000
Current Liabilities:				
Creditors	25,000	30,000	—	5,000
Bills Payable	10,000	2,000	8,000	—
Expenses Payable	20,000	8,000	12,000	—
			40,000	10,000
Increase In Working Capital			—	30,000
			40,000	40,000

Accumulated Depreciation Account

	Rs.		Rs.
To Balance c/d	15,000	By Balance b/d	10,000
		By Depreciation charged (balancing figure)	5,000
	15,000		15,000

Machinery Account

	Rs.		Rs.
To Balance bld	60,000	By Balance c/d	~70,000
To Cash (purchase) (balancing figure)	10,000		
	70,000		70,000

Reserves Account

	Rs.		Rs.
To Balance c/d	45,000	By Balance b/d	30,000
		By Net Profit	15,000
	45,000		45,000

Funds from **Operations**

	Rs.
Net Profit	15,000
Add: Depreciation Charged	5,000
Funds from Operations	20,000

Fund Flow Statement
for the Year Ended 31.12.1998

	Rs.
A. **Sources:**	
Funds from Operations	20,000
Issue of Shares	20,000
	40,000
. **Uses:**	
Purchasc of Machinery	10,000
	10,000
. Increase in Working Capital (A - B)	30,000

Illustration 2

From the following Profit & Loss **Account and Balance Sheets, you are required to prepare:**

a) **A schedule of changes in working capital, and**

b) **A fund flow statement.**

Profit and Loss Account for the Yenr Ended 31.12.1998

	Rs.		Rs.
To Cost of Sales	19,80,000	By Sales on Sale of Equipment	25,20,000
To Expenses	4,08,000	By Profit on Sale of Equipment	12,000
To Depreciation on Building & Equipment	60,000		
To Administrative Expenses	72,000		
To Net Profit	12,000		
	25,32,,000		25,32,000

Comparative Balance Sheets

Liabilities	31.12.97	31.12.98	Assets	31.12.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
			Fixed Assets:		
Capital	3,60,000	4,44,000	Land	48,000	96,000
Reserves	1,51,800	1,63,800	Building & Equipment	3,60,000	5,76,000
Accumulated Depreciation on Building and Equipment	1,20,000	1,32,000			
Current Liabilities:			**Current Assets:**		
Sundry Creditors	2,40,000	2,34,000	Cash	60,000	72,000
Outstanding Expenses	24,000	48,000	Debtors	1,68,000	1,86,000
Bills Payable	12,000	13,200	Stock	2,64,000	96,000
			Advance	7,800	9,000
	9,07,800	10,35,000		9,07,800	10,35,000

Note: Cost of Equipment sold, during 1998 was Rs. 72,000.

Solution

Schedule of Changes in Working Capital

	31.12.97	31.12.98	Change in Working Capital: Increase	Change in Working Capital: Decrease
	Rs.	Rs.	Rs.	Rs.
Current Assets:				
Cash	60,000	72,000	12,000	—
Debtors	1,68,000	1,86,000	18,000	—
Stock	2,64,000	96,000	—	1,68,000
Advances	7,800	9,000	1.200	—
Current Liabilities				
Creditors.	2,40,000	2,34,000	6,000	—
Outstanding Expenses	24,000	48,000	—	24,000
Bill Payable	12,000	13,200	—	1,200
			37,200	1,93,200
Decrease in Working Capital			1,56,000	—
			1,93,000	1,93,200

Building & Equipment Account

	Rs.		Rs.
To Balance b/d	3,60,000	By Bank (sale)	36,000
To Profit & Loss A/c (gain)	12,000	By Accumulated Depreciation (on equipment sold)	48,000
To Bank (balancing figure)	2,88,000	By Balance c/d	5,76,000
	6,60,000		6,60,000

Note: Calculation of Sale Value of Equipment has been work out as under:

	Rs.
Cost of Equipment Sold	72,000
Less: Depreciation on Asset Sold	48,000
Book Values	24,000
Add: Gain on Sale	12,000
Sale Proceeds	36,000

Accumulated Depreciation Account

	Rs.		Rs.
To Depreciation (on Building & Equipment Sold) (balancing figure)	48,000	By Balance b/d	1,20,000
		By Profit & Loss A/c (depreciation charged)	60,000
To Balance c/d	1,32,000		
	1,80,000		1,80,000

Funds from Operations

	Rs.
Net Profit	12,000
Add: Depreciation	60,000
	72,000
Less: Gain on Sale of Equipment	12,000
Funds from Operations	60,000

Fund Flow Statement for the Year Ended 31.12.1998

		Rs.
A.	**Sources:**	
	Funds from Operations	60,000
	Sale of Equipment	36,000
	Issue of Shares	84,000
		1,80,000
B.	**Uses:**	
	Purchase of Land	48,000
	Purchases of Equipment	2,88,000
		3,36,000
	Decrease in Working Capital (B - A)	1,56,000

Illustration 3

From the following Balance Sheets, prepare Fund Flow Statement.

Comparative Balance Sheets

Liabilities	31.12.97	31.12.98	Assets	31.12.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
			Fixed Assets:		
Share Capital	90,000	1,10,000	Land	80,000	1,00,000
Profit & Loss Account	80,000	95,000	Plant & Machinery	40,000	66,000
General Reserve	40,000	50,000			
Current **Liabilities**			**Current Assets:**		
Creditors	51,000	25,000	Stock	40,000	60,000
Provision for Doubtful Debts	4,000	2,000	Debtors	40,000	35,000
			Cash	50,000	20,000
Bills Payable	20,000	18,000	Preliminary Expenses	25,000	15,000
			Discount on Issue of Shares	10,000	4,000
	2,85,000	3,00,000		2,85,000	3,00,000

Note: Depreciation provided **on** machinery was **Rs.** 8,000.

Solution

Schedule of Changes in Working Capital

	31.12.97	31.12.98	Change in Working Capital	
			Increase	Decrease
	Rs.	Rs.	Rs.	Rs.
Current Assets:				
Stock	40,000	60,000	20,000	—
Debtors	40,000	35,000	—	5,000
Cash	50,000	20,000	—	30,000
Current **Liabilities:**				
Creditors	51,000	25,000	26,000	—
Provision **for** Doubtful Debts	4,000	2,000	2,000	—
Bills Payable	20,000	18,000	2,000	—
			50,000	35,000
Increase in Working Capital			—	**15,000**
			50,000	50,000

Land Account

	Rs.		Rs.
To Balance b/d	80,000	By Balance c/d	1,00,000
To Bank (purchase) (balancing figure)	20,000		
	1,00,000		1,00,000

Machinery Account

	Rs.		Rs.
To Balance b/d	40,000	By Depreciation	8,000
To Bank (purchase) (balancing figure)	34,000	By Balance c/d	66,000
	74,000		74,000

General Reserve Account

	Rs.		Rs.
To Balance c/d	50,000	By Balance b/d	40,000
		By P & L Account (net profit) (balancing figure)	10,000
	50,000		50,000

Adjusted Profit & Loss Account

	Rs.		Rs.
To Preliminary Expenses	10,000	By Balance b/d	80,000
To Discount on Shares	6,000	By Funds from Operations (balancing figure)	49,000
To Depreciation	8,000		
To General Reserve	10,000		
To Balance c/d	95,000		
	1,29,000		1,29,000

Fund Flow Statement for the Year Ended 31.12.1998

		Rs.
A.	Sources:	
	Funds from Operations	49,000
	Issue of Shares (1,10,000–90,000)	20,000
		69,000
B.	Uses:	
	Purchase of Land	20,000
	Purchase of Machinery	34,000
		54,000
Increase in Working Capital (A-B)		15,000

Illustration 4

The balance sheets of X Co. as at the end of 1997 and 1998 are given below.

Comparative Balance Sheets

Liabilities	1997	1998	Assets	1997	1998
	Rs.	Rs.		Rs.	Rs.
Share Capital	1,00,000	1,50,000	Land	1,00,000	1,00,000
Share Premium	—	5,000	Plant	1,04,000	1,00,000
General Reserve	50,000	60.000	Furniture	7,000	9,000
Profit and Loss Account	10,000	17,000	Investment	60,000	80,000
6% Debentures	70,000	50,000	Stock	60.000	65,000
Accumulated Depreciation	55,000	62,000	Debtors	30,000	70,000
			Cash	30,000	45,000
Provision for Taxation	20,000	30,000			
Sundry Creditors	86,000	95,000			
	3,91,000	4,69,000		3,91,000	4,69,000

A plant purchased far Rs, 4,000 (Depreciation Rs. 2,000) was sold for cash for Rs. 800, An item of furniture was purchased for Rs. 2,000. You are required to prepare a fund flow statement.

Solution

Schedule of Changes in Working Capital

	31.12.97	31.12.98	Change in Working Capital: Increase	Change in Working Capital: Decrease
	Rs.	Rs.	Rs.	Rs.
Current Assets:				
Stock	60,000	65,000	5,000	—
Debtors	30,000	70,000	40,000	—
Cash	30,000	45,000	15,000	—
Current **Liabilities:**				
Sundry Creditors	86,000	95,000	—	9,000
			60,000	9,000
Increase In Working Capital				51,000
			60,000	60,000

Note: Provision for taxation is treated as a non-current liability. It is assumed that last years' (1988) provision for taxation is paid in the current year (1998).

Plant Account

	Rs.		Rs.
To Balance b/d	1,04,000	By Cash (sale)	800
		By Accumulated Depreciation	2,000
		By Profit & Loss Account (loss on sale)	1,200
		By Balance c/d	1,00,000
	1,04,000		1,04,000

Loss on sale of Plant is worked out as follows:

	Rs.
Cost of Plant	4,000
Depreciation on Plant Sold	2,000
Book Value of Plant Sold	2,000
Sale Proceeds	800
Loss on Sale	1,200

Accumulated Depreciation Account

	Rs.		Rs.
To Depreciation on Plant Sold	2,000	By Balance b/d	55,000
To Balance c/d	62,000	By Depreciation charged to Profit & Loss Account (balancing figure)	9,000
	64,000		64,000

Furniture Account

	Rs.		Rs.
To Balance bid	7,000	By Balance c/d	9,000
To Bank (purchase)	2,000	By Depreciation	—
	9,000		9,000

Investment Account

	Rs.		Rs.
To Balance *bid*	60,000	By Balance c/d	80,000
To Bank (purchases) (balancing figure)	20,000		
	80,000		80,000

General Reserve Account

	Rs.		Rs.
To Balance c/d	60,000	By Balance bld	50,000
		By Profit & Loss Account (balancing figure)	10,000
	60,000		60,000

Adjusted Profit & Loss Account

	Rs.		Rs.
To Transfer to General Reserve	10,000	By Balance b/d	10,000
To Depreciation Charged	9,000	By Funds from Operations (balancing figure)	57,200
To Loss on Sale of Plant	1,200		
To Provision for Tax	30,000		
To Balance c/d	17,000		
	67,200		67,200

Provision for Taxation

	Rs.		Rs.
To Bank (tax paid for last years)	20,000	By Balance b/d	20,000
To Balance c/d	30,000	By Profit & Loss Account (provision made) (balancing figure)	30,000
	50,000		50,000

Note: Provision for taxation is treated as a non-current liability. It is assumed that last years' (1997) provision for taxation is paid in the current year (1998).

Fund Flow Statement
for the Year Ended 31.12.1998

		Rs.
A.	Sources:	
	Funds from Operations	57,200
	Issue of Shares Including Premium	55,000
	Sale of Plant	800
		1,13,000
B.	Uses:	
	Purchases of Furniture	2,000
	Purchases of Investment	20,000
	Payment of Tax	20.000
	Redemption of Debentures	20,000
		62,000
Increase in Working Capital (A-B)		51,000

Illustration 5

From tho Balance Sheets given below, prepare a fund flow statement,

Comparative Balance Sheets

Liabilities	1397	1998	Assets	1997	1998
	Rs.	Rs.		Rs.	Rs.
			Fixed Assets:		
Share Capital	60,000	70,000	Land	60,000	80,000
Reserves	40,000	65,000	Buildings	40,000	50,000
Debentures	10,000	15,000	Furniture	20,000	15,000
proposed Dividends	12,000	9,000			
Accumulated Depreciation	11,000	10,000	**Current Assets:** Stock	10,000	17,000
Current Liabilities:			Debtors	15,000	12,000
Creditors	20,000	15,000	Cash	8,000	10,000
	1,53,000	1,84,000		1,53,000	1,84,000

Additional Information:

Old furniture costing Rs. 5,000 (accumulated depreciation Rs. 3,000) is sold for Rs. 1,200. Dividends paid Rs. 6,000.

Solution

Schedule of Changes in Working Capital

	31.12.97	31.12.98	Change in Working Capital	
			Increase	Decrease
	Rs.	Rs.	Rs.	Rs.
Current Assets:				
Stock	10,000	17,000	7,000	—
Debtors	15,000	12,000	—	3,000
Cash	8,000	10,000	2,000	—
Current Liabilities:				
Creditors	20,000	15,000	5,000	—
			14,000	3,000
Increase in Net Working Capital			—	**11,000**
			14,000	14,000

Furniture Account

	Rs.		Rs.
To Balance b/d	20,000	By Cash (sale)	1,200
		By Accumulated Depreciation	3,000
		By Loss tfd. to P & L A/c	800
		By Balance c/d	15,000
	20,000		20,000

Note: Loss on sale of furniture has been worked out as under:

	Rs.
Cost	5,000
Less: Depreciation	3,000
Book Value	2,000
Less: Sale Value	1,200
Loss an Sale	800

Accumulated Depreciation Account

	Rs.		Rs.
To Depreciation on Furniture Sold	3,000	By Balance b/d	11,000
To Balance c/d	10,000	By Depreciation Charged to Profit & Loss Account (balancing figure)	2,000
	13,000		13,000

Proposed Dividends Account

	Rs.		Rs.
To Dividend paid	6,000	By Balance c/d	12,000
To Balance c/d	9,000	By P & L A/c (balancing figure)	3,000
	15,000		15,000

Reserve Account (Adjusted)

	Rs.		Rs.
To Depreciation Charged	2,000	By Balance c/d	40,000
To Loss on Sale of Furniture	800	By Funds from Operations (balancing figure)	30,800
To Proposed Dividend	3,000		
To Balance c/d	65,000		
	70,800		70,800

Note: This account is the place Adjusted P & L A/c as the P & L A/c balance is not given separately in the balance sheet.

Fund Flow Statement

		Rs.
A.	**Sources:**	
	Funds from Operations	30,800
	Issue of Shares	10,000
	Issue of Debentures	5,000
	Sale of Old Furniture	1,200
		47,0[illegible]
B.	**Uses:**	
	Purchases of Land	20,0[illegible]
	Purchase of Buildings	10,000
	Payment of Dividends	6,000
		36,000
Increase in Working Capital (A-B)		11.000

19.3 IMPORTANCE OF FUND FLOW STATEMENT

Generally a business concern prepares two financial statements: (1) income statement or profit and loss account, which reveals the net result of trading operations over a period of time (2) a position statement or balance sheet which reflects the state of asses and liabilities of a company on a particular date. These two statements fulfil the important function of depicting the results of operations and the financial position of the business. However, they do not throw light on the changes in the financial position that took place between two balance sheet dates. They also do not reveal the sources and uses of funds. This information is made available by preparing a 'statement of sources and uses (application) of funds' also called 'where got where gone statement'. or 'fund flow statement'. This statement clearly highlights the sources and uses of working capital and reveals changes in the financial position of the business between two balance sheet dates.

The important purposes of fund flow statement are:

1 To understand and flow of funds in a business in terms of (a) cash, or (b) net working capital, or (c) total financial resources.

2 To appreciate the role of working capital

3 To understand and interpret the changes that have taken place in working capital and analyse the causes thereof.

4 To ascertain the sources and uses of working capital

5 To point out the financial strengths and weaknesses of the business concern, particularly of its financing policies.

Uses

Fund flow slatement is very useful and helpful to management, shareholders, creditors, bankers, and financial institutions. The uses of the 'statement' are as follows:

1 **It explains the financial consequences of business operations** : this stalement answers questions such as:

i) Where have the profits gone?

ii) Why is there an imbalance between liquidity and profitability position of the enterprise? In spite of profits, why is the liquidity position is bad, or in spite of losses how is the business in a comfortable liquid position'?.

iii) Bow was it possible for the concern to distribute dividends in excess of earnings or in the presence of net loss.

The answers to the above questions enable the management to direct the funds in the more profitable channels and improve the liquidity and profitability position of the business.

2 **Forecasting** funds **position:** There should be optimum utilisation of available resources for the overall growth of an enterprise. This objective. can be achieved by preparing a projected fund flow statement and allocating the resources properly.

3 **Testing** value : The fund flow statement tests the efficiency with which the working capital has been used by the management. The adequacy or inadequacy of working capital is revealed by the fund flow statement. The possible steps which are to be taken by management for effective use of surplus working capital or make arrangements for providing funds in case of inadequacy of working capital, will also be revealed.

4 **Decision-making value :** The fund flow statement reveals the credit-worthiness of the enterprise, funds raised from loans, funds generated through normal business operations, arid how has management utilised the funds. Further, it indicates the likely uses of funds in future. As a result, outsiders like creditors can assess the desirability of providing loans. The shareholders can also assess whether management has been effective in managing the funds. Further, mismanagement can also be identified and prevented. The information revealed can be used by management to shape its future financing policies and capital expenditure programmes.

However, one important limitation of funds flow statement is that it is prepared from the data available in the balance sheets and profit and loss account and therefore, suffers from the same limitations as these two financial statement suffer from.

19.4 CASH FLOW STATEMENT?

Flow means movement and cash flow means movement of cash in the business. When amounts are received by the business, cash flows into the business. Hence cash receipts by the business are called cash inflows. Similarly, when payments are made, cash flows out of the business. Hence cash payments by the business are called cash outflows. A cash flow statement is a statement which shows (1) cash inflows (sources) **and** cash outflows (uses of cash), and **(2)** the resulting change in the cash balances, between two balance sheet dates, Depending on the size and level of flows, cash outflows during a period may be more or less than the cash inflows. Excess of cash outflows over cash inflows decreases the cash balance. On the other hand, if the cash inflows are more than outflows, there would be an increase in the cash balance. Net cash flow, thus, refers to the difference between cash inflows and outflows leading to an increase or decrease in cash balance. It may noted that **cash,** in **this context, includes cash as well as** bank **balances.**

Availability of cash, generally, determines the ability to meet the maturing obligations. If cash is not readily available and current obligations cannot be met, it may result in technical insolvency. Hence, an organisation is seriously interested in maintaining a desirable level of liquidity. The business concern may be interested to understand the pattern and size of each inflow and outflow during a particular period, and to evaluate and effectiveness with which it pursued its financial. policies. For this purpose, we prepare cash flow statement showing tho sources and application during the year and the resultant increase or decrease in the cash balance.

19.4.1 Sources and Uses of Cash

The various sources and uses of cash are as follows:

Sources of Cash:

1 Cash from operations
2 Issue of shares
3 Issue of debentures

4 Long-term loans raised
5 Sale of fixed assets

Uses of **Cash:**

1 Redemption of preference shares
2 Redemption of debentures
3 Repayment of loans
4 Purchase of fixed assets
5 Payment of dividends
6 Payment of taxes

You will **observe that sources** and uses of cash are the same as those of funds flow statement. **The only** item which is different is cash from operations as against **'funds from operations'.**

19.4.2 Ascertaining Cash from Operations

You have learnt that the main purpose of preparing a cash flow statement is to explain the **increase/decrease** in the cash balance between the two balance sheet dates and that it is prepared on the same pattern as the fund flow statement. Just as the net profit is adjusted to acertain the amount of funds from operations, the funds from operations are now adjusted to asertain the cash from operations. **For** this purpose, you have to look at the changes in current assets **and** current liabilities that have taken'place during the year.

Conversion of 'funds from **operations'** to 'cash from operations' is necessary because, under the working capital concept, funds from operations are based on accrual concept of accounting, and total sales (whether credit or cash) **and** total purchases (whether credit or cash) are recognised as sources and uses of working capital respectively. But under a cash concept of funds only cash sales and receipts from debtors **are** treated as sources of cash, while cash purchases and payment to creditors are regarded as uses of cash. The same holds good for **the** other incomes and expenses, Therefore, funds from operations (based on **the** accrual concept) require conversion into cash from operations (based on cash accounting). For example, let us assume that a business was started on 1-1-1997 and the sales during **the year** were Rs. **3,00,000.** Also assume **that** there **were** no closing debtors. As there are no opening and closing debtors, it must be assumed that the entire amount of Rs. **3,00,000** was realised by way of cash. Now assume that the closing debtors on 31-12-1997 were **Rs.** 40,000, This would mean **that** the entire amount of **sales** were **not** collected during the year, Since Rs. 40,000 **(closing** debtors) was still be realised, the cash **from sales** would be Rs. **2,60,000** (Rs. **3,00,000 -** Rs. 40,000).

The closing **debtors** on 31-12-1997 would become opening debtors on 1-1-998, Assume further that sales during 1998 were Rs. **4,00,000** and the closing debtors on 31.12-1998 were Rs, 50,000, In **that** case, the cash received from sales during the year 1998 would be **ascertained** as follows:

	Rs.
Opening Debtors as on 1-1.1998	40,000
Add : Sales during the year	**4,00,000**
	4,40,000
Less : Closing Debtors as on 31-12-1998	50,000
Cash from Sales **during** the year	**3,90,000**

The **same** result can also be obtained by subtracting the increase in debtors from the sales during the year as shown hereunder.

	Rs.
Sales during the year 1998	4,00,000
Less : Increase in Debtors during the year (Closing debtors **Rs.** 50,000 less opening debtors Rs. 40,000)	10,000
Cash from Sales during the year	**3,90,000**

You are aware that in the context of fund flow statement increase in any current asset is considered as increase in working capital. While it is true that an increase in any current asset increases the working capital, it is also true that it reduces the cash inflow to that extent. Similarly, while an increase in current liability decreases the working capital, it, on the other hand improves the cash position. Hence, after ascertaining funds from operations, the following further adjustments may be made in order to ascertain the amount of cash from operations as shown in Figure 19.3.

Figure 19.3: Statement of **Gash** from Operations

		Rs.	Rs.
Funds from Operations			....
Add :	Increase in each item of current liability	....	
	Decrease in each item of current asset (except cash and bank balance)	....	....
Less :	Increase in each item of current asset (except cash and bank balance)	....	
	Decrease in each item of current liability	....	....
Cash from Operations			....

Notes : Change in cash and bank balances has been excluded because the purpose of preparing the cash flow statement is to explain how the cash and bank balance increase or decreased.

Lqok at Illustration 6 and note the procedure of ascertaining cash from operations for purposed of preparing cash flow statement

Illustration 6

From the following information and extracts of balance sheets, calculate (1) funds from operations, and (2) cash from operations.

Net profit for the year Rs. 90,000.

Preliminary expenses written off during the year Rs. 5,000.

Discount on issue of shares written off during the year Rs. 3,000

Depreciation charges during the year Rs. 8,000

Furniture costing Rs. 30,000 (accumulated depreciation Rs. 10,000) was sold for Rs. 28,000.

Extracts of **Balance Sheets**

Liabilities	31.12.97	31.12.98	Assets	31.12.97	31.12.98
Current Liabilities			Current Assets		
Creditors	40,000	35,000	Stock	60,000	80,000
Bills Payable	25,000	28,000	Debtors	40,000	47,000
Income received in advance	15,000	18,000	Prepaid Expenses	13,000	9,000
			Bills Receivable	12,000	18,000
Expenses outstanding	13,000	17,000	Cash and Bank Balances	25,000	30,000

Solution

Statement of Funds from Operations

		Rs.	Rs.
Net Profit			90,000
Add:	Depreciation	8,000	
	Preliminary.expenses written off	5,000	
	Discount on issue of shares written off	3,000	
			16,000
			1,0,6,000
Less:	Profit on sale of furniture		8,000
Funds from Operations			98,000

Note: Profit on sale of furniture has been worked out as follows:

Cost of furniture sold	30,000
Less: Depreciation on furniture sold	10,000
Book value of furniture	20,000
Sale value	28,000
Profit on sale of furniture	8,000

Statement of Cash from Operations

		Rs.	Rs.
Funds from Operations			98,000
Add :	Decrease in prepaid expenses	4,000	
	Increase in bills payable	3,000	
	Increase in income received in advance	3,000	
	Increase in expenses outstanding	4,000	
			14,000
Less :	Increase in stock	20,000	
	Increase in debtors	7,000	
	Increase in bills receivable	6,000	
	Decrease in creditors	5,000	
			38,000
Cash from Operations			74,000

Cash from operations can also be worked out directly i.e., without preparing the statement of funds from operations. All that one has to do to take net profit as the starting point and add all those items that were added to net profit while preparing the statement for funds from operations and also all those that were added to funds from operations while preparing the statement of cash from operations, and then deduct all those items that were deducted in case of both the statements. The resultant figure will be treated as the amount of cash from operations. Let us prepare a statement of cash from operations directly (i.e., without preparing statement of funds from operations) from the information given in Illustration 6.

Statement of Cash from Operations

			Rs.
Net Profit			90,000
Add :	Depreciation	8,000	
	Preliminary expenses written off	5,000	
	Discount on issue of shares written off	3,000	
	Decrease in prepaid expenses	4,000	
	Increase in bills payable	3,000	
	Increase in income received in advance	3,000	
	Increase in expenses outstanding	4,000	
			30,000
			1,20,000
Less :	Profit on sale of furniture	8,000	
	Increase In stock	20,000	
	Increase in debtors.	7,000	
	Increase in bills receivable	6,000	
	Decrease in creditors	5,000	
			46,000
Cash from Operations			74,000

19.4.3 Preparation of Cash Flow Statement

The cash flow statement is similar to fund flow statement. You have learnt in Section 19.4.1 that, apart from cash from operations, the source and uses of cash are the same as those shown in the fund flow statement. Usually, cash flow statement starts with the opening cash balance followed by the details of sources and uses of cash. The opening balance plus the sources of cash minus the uses of cash should be exactly equal to the closing balance of cash which is shown as the last item in the cash flow statement, Look at Figure 19.3 for the proforma of cash flow statement.

Figure 19.3: Proforma of Cash Flow Statement Cash flow Statement

for the year ending ....

		RE,	Rs.
Cash Balance as on 1.1.19...........			....
Add :	**Sources of Cash**		
	Cash from Operations	....	
	Issues of shares	....	
	Raising of long-term loans	....	
	Sale of fixed assets	....	
			....
Loss :	**Uses of Cash**		....
	Redemption of redeemable preference shares	....	
	Redemption of debentures	....	
	Repayment of long-term loans	....	
	Purchase of fixed assets	....	
	Payment of tax	....	
	Payment of Dividends	....	
			....
			....
Cash Balance as on 31-12-19,.....			

The cash flow statement can also be shown in an account form starting with an opening balance of cash on its debit side and ending with the closing balance of cash on its credit side (see Illustration 7)

Study Illustration 7 and 8 carefully, and note the procedure of preparing cash flow statement.

Illustration 7

Following is the balance sheet and income statement of A Ltd. Prepare the cash flow statement.

Liabilities	31.12.97	31.12.98	Assets	31.12.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Share Capital	2,00,000	3,03,100	**Fixed Assets**		
P & L A/c	—	63,600	Plant	2,20,000	3,30,000
Reserves	86,100	86,100	**Current Assets**		
Secured Loans	50,000	60,000	Inventories ..	1,70,000	1,96,000
Accumulated			Book Debts	78,400	54,200
Depreciation	25,000	29,600	Cash and Bank	52,500	73,600
Current Liabilities					
Creditors for Goods	1,42,800	1,08,400			
Outstanding Expenses	17,000	3,000			
	5,20,900	6,53,800		5,20,900	6,53,800

Income Statement for the year ended 1998

			Rs.
Sales			1,66,000
Less: Cost of sale s (including depreciation Rs. 4,600)			68,000
			98,000
Gross Profit			
Less :	Selling & Administration Expenses	26,400	
	Other Expenses	2,000	
	Interest on Loans	6,000	
			34,400
Net Profit for the year			63,600

Solution

Statement of Cash from Operations

		Rs.	Rs.
Operational profit (net profit as per income statement)			63,600
Add:	Depreciation	4,600	
	Decrease in debtors	24,200	
			28,800
			92,000
Less:	Decrease in creditors	34,400	
	Decrease in outstanding expenses	14,000	
	Increase in stock	26,000	
			74,400
Cash from Operations			18,000

Cash flow statement for the year ended 31.12.1998

		Rs.	Rs.
Cash Balance as on 1.1.1998			52,500
Add :	Sources of **Cash**		
	Cash from operations	18,000	
	Loan taken	10,000	
	Issue of Share Capital	1,03,100	1,31,100
			1,83,600
Less :	Uses of Cash		
	Purchases of plant		1,10,000
Cash balance as ori 31.12.1998			73,600

Alternative method (Account Form)

Cash Flow Statement for the year ended 31.12.1998

	Rs.		Rs.
Cash balance as on 1.1.98	52,500	Purchase of plant	1,10,000
Cash from operations	18,000	Balance c/d	73,600
Secured loans	10,000		
Share capital	1,03,100		
	1,83,600		1,83,600

Illustration 8

Prepare cash flow statement from the following balance sheet of XYZ Ltd.

Liabilities	31.12.97	31.12.98	Assets	31.12.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Share Capital	3,50,,000	4,40,000	Fixed Assets	4,00,000	5,00,000
Debentures	60,000	40,000	Stock in hand	4,000	5,,000
Proposed Dividends	40,000	35,000	Debtors	70,000	60,000
Profit & Loss Account	50,000	65,000	Bills Receivable	40,000	30,000
Creditors	34,000	40,000	Cash	20,000	25,000
	5,34,000	6,20,000		5,34,000	6,20,000

Note : Dividends paid during the year Rs. 15,000

Solution

Proposed Dividend Account

	Rs		Rs.
To Dividend paid	15,000	By balance b/d	40,000
To balance c/d	35,000	By Profit & Loss Account	10,000
	50,000		50,000

Adjusted Profit & Loss Account

	Rs.		Rs.
To Proposed dividends	10,000	By Balance b/d	50,000
To Balance c/d	65,000	By Funds from Operations	25,000
	75,000		75,000

Statement of Cash from Operations

		Rs.	Rs.
Funds from Operations			25,000
Add :	Decrease in debtors	10,000	
	Increase in creditors	6,000	
			16,000
			41,000
Less:	Increase in Stock	1,000	
	Increase in bill receivable	10,000	11,000
Cash from Operations			30,000

Cash flow Statement for the year ended 31.12.1998

		Rs.	Rs.
Cash Balance as on 1.1.1998			40,000
Add :	Sources of Cash		
	Cash from operations	30,000	
	Issue of shares	90,000	
			1,20,000
			1,60,000
Less :	**Uses of Cash**		
	Purchase of fixed assets	1,00,000	
	Redemption of debentures	20,000	
	Payment of dividends	15,000	
			1,35,000
Cash Balance as on 31.12. 1998			25,000

Preparing cash flow statement with opening and closing balances of cash in known as an 'ending balance approaoh'. But, one can also follow the net different approach'. In this approach, instead of showing the opening and closing balances of cash in the cash flow statement, we may simply show, at the end, the increase or decrease in cash resulting from the difference between the total amount of cash generated from various 'sources and the total amount of cash applied to various uses. This approach is. similar to the one followed for preparing the fund flow statement.

Let us prepare the cash flow statement For Illustration following the net difference approach.

Cash Plow Statement **for the year ended 31.12.1998**

		Rs.	Rs.
A.	**Sources of Cash**		
	Cash from Operations	30,000	
	Issue of shares	90,000	
			1,20,000
B.	**Uses of Cash**		
	Purchase of fixed assets	1,00,000	
	Redemption of debentures	20,000	
	Payment of dividends	15,000	
			1,35,000
Decrease in Cash			(15,000)

19.4.4 Uses of Cash Flow Statement

The preparation of cash flow statement has several uses. The more important uses are as follows:

1 Changes in cash balance between two points of time and the contributing factors for such change are clearly revealed.

2 The cash flow statement explains the reasons for :

  i) the presence of a very low cash balance in spite of huge operating profits; or

  ii) the presence of a higher cash balance in spite of a very low level of profits

3 Projected cash flow statements help the management in short-term planning and several other ways like:

  i) Determination of additional cash requirements during a given period and making timely arrangements

  ii) Identification of the size of surplus and the time for which such surplus funds are likely to be available

  iii) Judging the ability of the firm to repay/redeem debentures/preferences shares.

  iv) Examining the possibility of maintaining/increasing dividends

  v) Assessing the capability of finance replacement of fixed assets

  vi) Assessing the capacity of the firm fo finance expansion.

  vii) More efficient and effective management of cash flows.

19.5 DISTINCTION BETWEEN CASH FLOW ANALYSIS AND FUND FLOW ANALYSIS

Following are the major points of difference between cash flow analysis and fund flow analysis:

1 Fund flow analysis deals with the change in working capital position between two balance sheet dates, whereas the cash flow analysis is concerned with the change in cash position.

2 Cash flow analysis is more useful as a tool in short-term planning, whereas fund flow analysis is more useful in long-term planning.

3 An increase in current liability or decrease in current asset (other than cash) results in an increase in cash whereas such changes result in decrease in the net working capital. Similarly, a decrease in any current liability or an increase in current asset (other than cash) results in a decrease in cash, whereas such changes increase the net working capital.

Check Your Progress A

1 Distinguish between cash flow statements and fund flow statement.

....

....

....

2 State whether each of the following **statements** is true or false

i) Cash flow statement includes the effect of transactions involving exclusively the non-current items.

ii) Increase in provision for doubtful debts should be back to find out cash from operations.

iii) The term 'funds' means 'current assets' in case of the cash flow 'analysis.

iv) Increase in debtors should be deducted from the funds from operations to find out cash from operations.

v) Increase in prepaid expenses results in a **decrease** in cash.

vi) Decrease in bills payable results in an increase in cash.

19.6 LET US SUM UP

Fund flow statement shows the sources and uses of funds resulting in an increase or a decrease in the next working capital. It can be **prepared** either in the form of a statement or in the form an account. This statement reveals the causes of change in the financial position of the business between tow balance sheets and explains, thus, the financial consequences of business operations. Fund flow statement **can** also be used for forecasting the,funds position in future and shaping the financial policies of the **organisation.**

Using the term funds in a limited source, the cash flow statement shows cash inflows (sources) and cash outflows (uses) resulting in an increase or decrease in the cash balance between two balance sheet dates. Cash, in this context, includes both cash and bank balances.

The sources and uses of cash are **similar** to the sources and uses of working capital as shown in the fund flow statement. The only item that differs is the 'cash from operations'. In fact just as the ascertainment funds from operations is necessary for **preparing** the funds flow statement. **For** this purpose, certain adjustments have to be made in the amount of funds from operations. These **adjustments** relate to the changes in current assets and current liabilities. Of course, the amount of cash from operations can also be worked out directly by making necessary adjustments in the **amount** of net profit revealed by tho profit and loss account.

The difference between cash flow analysis and fund flow analysis is that the turnover is concerned with changes in cash position while the latter deals with changes in working capital, Cash flow analysis is more useful for **long** ranging planning.

Tho **sources** and uses of cash are similar to the sources and uses of working capital as shown in funds flow statement. The only item which differs is the cash from operations.

19.7 KEY WORDS

Cash flow : Movement of cash **i.e.,** cash flow and cash outflow.

Cash Flow **Statement** : Statement prepared to show the sources and uses of cash between the two balance sheets dates.

Cash from Operations : Net Profit adjusted for changes in the current **items** in additional to the **adjustments** already made while ascertaining funds from operations.

19.8 ANSWERS TO CHECK YOUR PROGRESS

A 2 . i) False ii) True iii) False iv) True
v) True vi) False

19.9 TERMINAL QUESTIONS/EXERCISES

Questions

1 Explain the purpose and importance of fund flow statement
2 How is net profit from business converted to cash from operations?
3 How does cash flow statement differ from funds flow statement. What are the uses of cash flow statement.
4 What is cash flow statement? List the various sources and uses of cash.
5 How does cash flow analysis help management?

Exercises

1 Prepare a fund flow statement for X Co. from the following Balance Sheets:

Liabilities	31.3.98	31.3.99	Assets	31.3.98	31.3.99
	Rs.	Rs.		Rs.	Rs.
Share Capital	25,00,000	20,00,000	Fixed Assets	15,50,000	15,00,000
Reserves & Surplus	7,50,000	2.50,000	Investments	75,000	—
Proposed Dividend	5,00,000	6,00,000	Stock	37,50,000	39,37,500
Secured Loans	12,50,000	14,00,000	Debtors	20,00,000	17,50,000
Current Liabilities	25,00,000	30,00,000	Cash & Bank	1,25,000	62,500
	75,00,000	72,50,000		75,00,000	72,50,000

Additional information :

a) Dividend paid Rs. 2,50,000
b) Depreciation on fixed assets for the year was Rs. 1.5 lakhs (Rs. 1,50,000).

2 From the following Balance Sheets prepare fund flow statement:

Liabilities	1997	1998	Assets	1997	1998
	Rs.	Rs.		Rs.	Rs.
Share Capital	1,50,000	2,00,000	Goodwill	57,500	45,000
8% Redeemable Preference Share Capital	75,000	50,000	Land	1,00,000	85,000
General Reserve	20,000	35,000	Plant	40,000	1,00,000
Profit & Loss A/c	15,000	24000	Debtors	80,000	1,00,000
Proposed Dividend	21,000	25,000	Stock	38,500	54,500
Creditors	27,500	41,500	Bills Receivable	10,000	15,000
Bills Payable	10,000	8,000	Cash	7,500	5,000
Provision for Tax	20,000	25,000	Bank	5,000	4,000
	3,38,500	4,08,500		3,38,500	4,08,500

Additional Information:

a) Depreciation of Rs. 5,000 and Rs. 10,000 has been charged on Plant & Land respectively in 1998.

b) An interim dividend of Rs. 10,000 has been paid in 1998.

c) Income tax Rs. 17,500 has been paid during the year 1998.

3 From the following figures prepare a statement showing application and source of funds for the year 1998.

Liabilities	1997	1998	Assets	1997	1998
	Rs.	Rs.		Rs.	Rs.
Equity Share Capital	6,00,000	7,00,000	Fixed Assets (net)	10,20,000	12,40,000
8% Pref. Share Capital	4,00,000	2,00,000	Investment	60,000	1,60,000
Debentures	2,00,000	4,00,000	Current Assets	4,80,000	7,50,000
Reserves & Surplus	2,20,000	5,40,000	Discount on Debentures	20,000	10,000
Current Liabilities	1,60,000	3,20,000			
	15,80,000	21,60,000		15,80,000	21,60,000

You are informed that during the year (a) A machine with a book value of Rs. 80,000 was sold for Rs. 50,000 (b) Preference share redemption was done premium of 15% on 31st Dec. 1988, (c) Dividend at 15% was paid on equity shares for 1987, and (d) depreciation charged during the year was Rs. 1,20,000.

4 Prepare fund flow Statement from the following Balance Sheet:

Liabilities	31.12.97	31.12.98	Assets	31.12.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Share Capital	6,00,000	7,00,000	Fixed Assets (net)	10,20,000	12,40,000
General Reserve	3,00,000	4,00,000	Investment (Long-term)	60,000	1,60,000
P & L A/c	1,20,000	1,40,000	Current Assets	4,80,000	7,50,000
Debentures	2,00,000	4,00,000	Discount on Debentures	10,000	—
Depreciation Reserve	1,80,000	2,60,000			
Current Liabilities	1,50,000	2,20,000			
Provision for Doubtful Debts	20,000	30,000			
	15,70,000	21,50,000		15,70,000	21,50,000

During the year a dividend of 15% was paid for 1997. An asset costing Rs. 80,000 (Depreciation provided Rs. 34,000) was disposed off for Rs. 50,000,

5 From the following balance sheets prepare a cash flow statement.

Liabilities	31.12.97	31.12.98	Assets	31.12.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Capital	2,00,000	2,50,000	Fixed Assets:		
Reserves	1,00,000	1,20,000	Land	3,00,000	3,50,000
Profit & Loss A/c	1,20,000	1,50,000	Machinery	2,00,000	2,40,000
Debentures	90,000	1,00,000			
Accumulated Depreciation	60,000	80,000	Current Assets:		
Current Liabilities:					
Creditors	40,000	45,000	Inventory	1,00000	1,30,000
Bills Payable	65,000	40,000	Debtors	70,000	50,000
Expenses Outstanding	35,000	45,000	Cash	40,000	60,000
	7,10,000	8,30,000		7,10,000	8,30,000

Note: Machinery costing Rs. 40,000 (accumulated depreciation Rs. 10,000) was sold for Rs. 35,000.

6 Extracts of Balance Sheets of Messrs Beta Ltd. are given below:

Liabilities	31.12.97	31.12.98	Assets	31.12.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Share Capital	50,000	60,000	Fixed Assets:	1,50,000	2,44,000
			Stock in Hand	3,809	6,600
Creditors	54,000	70,000	Debtors	76,000	67,000
			Cash	36,000	13,750
			Bills Receivable	17,500	19,000

Additional **information**

The profits for the year ended 31.12.1998 amounted to Rs. 48,000 before charging depreciation & taxation. During the year 500 shares were issued at Rs. 20 each. Interim dividend paid during the year Rs. 6,950. Prepare cash flow statement.

7. The following balance sheets show the position of Messrs C Co.

Liabilities	1.1.98	31.12.98	Assets	1.1.98	31.12.98
	Rs.	Rs.		Rs.	Rs.
Capital	1,47,800	1,23,000	Fixed Assets	1,40,000	1,16,000
Bills Payable	5,800	5,000	Stocks	1,600	2,600
			Debtors	4,000	3,400
			Cash	8,000	6,000
	1,53,600	1,28,000		1,53,600	1,28,000

Additional Information

a) There were no drawings during the year

b) There was no purchase/sale of fixed assets.

8 Prepare fund flow and cash flow statements from the following balance sheets.

Capital & Liabilities	31.12.97	31.12.98	Assets & Property	31.12.97	31.12.98
	Rs.	Rs.		Rs.	Rs.
Equity Capital	70,000	85,000	Fixed Assets Dep. (50,000 - 5,000 as at 31.12.98	40,000	45,000
General Reserve	10,000	15,000	Investments	5,000	5,000
profit & Loss A/c	5,000	15,000	Sundry Debtors	15,000	25,000
Sundry Creditors	20,000	20.000	Stock	25,000	30,000
proposed Dividend	5,000	6,500	Cash	20,000	36,500
			Miscellaneous Expenses	5,000	—
	1,10,000	1,41,500		1,10,000	1,41,500

Note: These questions and exercises will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the university for assessment. These are for your practice only.

SOME USEFUL BOOKS

Maheshwari, S.N., 1998 : *Introduction to Accounting* Vikas Publishing House, New Delhi. (Chapter 4, Section IV and Chapters 1 & 2, Section V)

Gupta R.L. and M. Radhaswamy, 1998 : *Advanced Accounting* Sultan Chand & Sons, New Delhi. (Chapters 21, 22, 23)

Shukla, M.C., Grewal, T.S. & S.C. Gupta, 1998 : *Advanced Accounts S.* Chand & Co. Ltd., New Delhi. (Chapters 29, 30)

Monga J.R., Ahuja G.C. & Ashok Sehgal, 1998 : *Advanced Accounting* National Publishing House, New Delhi.