TEXTBOOK FOR CLASS XII

ACCOUNTANCY

COMPANY ACCOUNTS AND ANALYSIS OF FINANCIAL STATEMENTS

ACCOUNTANCY Company Accounts and Analysis of Financial Statements Class XII NCERT

Contents

Accounting for Share Capital

1

Learning Objectives

After studying this chapter, you will be able to :

- *Explain the basic nature of a joint stock company as a form of business organisation and the various kinds of companies based on liability of their members;*
- *describe the types of shares issued by a company;*
- *explain the accounting treatment of shares issued at par, at premium and at a discount including oversubsription;*
- *outline the accounting for forfeiture of shares and reissue of forfeited shares under varying situations; and*
- *workout the amounts to be transferred to capital reserve when for feited*
- *shares are reissued; and*
- *prepare share forfeited account ;*

A company form of organisation is the third stage in the evolution of forms of organisation. Its capital is contributed by a large number of persons called shareholders who are the real owners of the company. But neither it is possible for all of them to participate in the management of the company nor considered desirable. Therefore, they elect a Board of Directors as their representative to manage the affairs of the company. In fact, all the affairs of the company are governed by the provisions of the Companies Act, 1956. A company means a company incorporated or registered under the Companies Act, 1956 or under any other earlier Companies Acts. According to Chief Justice Marshal, "a company is a person, artificial, invisible, intangible and existing only in the eyes of law. Being a mere creation of law, it possesses only those properties which the charter of its creation confers upon it, either expressly or as incidental to its very existence".

A company usually raises its capital in the form of shares (called share capital) and debentures (debt capital.) This chapter deals with the accounting for share capital of companies.

1.1 Features of a Company

A company may be viewed as an association of person who contribute money or money's worth to a common stock and use it for a common purpose. It is an artificial person having or corporate legal entity distinct from its members (shareholders) and has a common seal used for its signature. Thus, it has certain special features which distinguish it from the other forms of organisation. These are as follows:

- *Voluntary Association:* persons who are willing to form a company can come together voluntarily for carrying on a business. Therefore, it is regarded as a voluntary association of persons.
- *Separate Legal Entity:* A company has a separate legal entity which is distinct and separate from its members. It can hold and deal with any type of property. It can enter into contracts and even open a bank account in its own name. It can sue others as well as be sued by others.
- *Limited Liability:* The liability of the members of the company is limited to the unpaid amount of the shares held by them. In the case of the companies limited by guarantee, the liability of its members is limited to the extent of the guarantee given by them in the event of the company being wound up.
- *Perpetual Succession:* The company being an artificial person created by law continues to exist irrespective of the changes in its membership. A company can be terminated only through law. The death or insanity or insolvency of any member of the company in no way affects the existence of the company. Members may come and go but the company continues.
- *Common Seal:* The company being an artificial person, cannot sign its name by it self. Therefore, every company is required to have its own seal which acts as an official signatures of the company. Any document which does not carry the common seal of the company is not binding on the company.
- *Transferability of Shares:* The shares of a public limited company are freely transferable. The permission of the company or the consent of any member of the company is not necessary for the transfer of shares. But the Articles of the company can prescribe the manner in which the transfer of shares will be made.
- *May Sue or be Sued:* A company being a legal person can enter into contracts and can enforce the contractual rights against others. It can sue and be sued in its name if there is a breach of contract by the company.

1.2 Kinds of a Company

Companies can be classified either on the basis of the liability of its members or on the basis of the number of members. On the basis of liability of its members the companies can be classified into the following three categories:

- *Companies Limited by Shares:* In this case, the liability of its members is limited to the extent of the nominal value of shares held by them. If a member has paid the full amount of the shares, there is no liability on his part whatsoever may be the debts of the company. He need not pay a single paise from his private property. However, if there is any liability involved, it can be enforced during the existence of the company as well as during the winding-up.

(ii) *Companies Limited by Guarantee:* In this case, the liability of its members is limited to the amount they undertake to contribute in the event of the company being wound up. Thus, the liability of the members will arise only in the event of its winding up.

(iii) *Unlimited Companies:* When there is no limit on the liability of its members, the company is called an unlimited company. When the company's property is not sufficient to pay off its debts, the private property of its members can be used for the purpose. In other words, the creditors can claim their dues from its members. Such companies are not found in India even though permitted by the Companies Act, 1956.

On the basis of the number of members, a company can be divided into two categories as follows:

(i) *Public Company:* A public company means a company which (a) is not a private company, (b) has minimum capital of Rs. 5 lakh on such higher paid-up capital may be prescribed, and (c) is a private company which is a subsidiary of which is not a private company.

Private Company: A private company is one which has a minimum paid up capital of Rs. 1 Lakh or such higher paid-up capital as may be prescribed by its Articles :

(a) restricts the right to transfer its shares;
(b) limits the number of its members to fifty (excluding its employees);
(c) prohibits any invitation to the public to subscribe for any shares in or debentures of the company.
(d) prohihibits any invitation or acceptance of deposits from person other than its members, directors, and relatives.

1.3 Share Capital of a Company

A company, being an artificial person, cannot generate its own capital which has necessarily to be collected from several persons. These persons are known as shareholders and the amount contributed by them is called share capital. Since the number of shareholders is very very large, a separate capital account cannot be opened for each one of them. Hence, innumerable streams of capital contribution merge their identities in a common capital account called as 'Share Capital Account'.

1.3.1 Categories of Share Capital

From accounting point of view the share capital of the company can be classified as follows:

- *Authorised Capital:* Authorised capital is the amount of share capital which a company is authorised to issue by its Memorandum of Association. The company cannot raise more than the amount of capital as specified in the Memorandum of Association. It is also called Nominal or Registered capital. The authorised capital can be increased or decreased as per the procedure laid down in the Companies Act. It should be noted that the company need not issue the entire authorised capital for public subscription at a time. Depending upon its requirement, it may issue share capital but in any case, it should not be more than the amount of authorised capital.
- *Issued Capital:* It is that part of the authorised capital which is actually issued to the public for subscription including the shares allotted to vendors and the signatories to the company's memorandum. The authorised capital which is not offered for public subscription is known as 'unissued capital'. Unissued capital may be offered for public subscription at a later date.
- *Subscribed Capital:* It is that part of the issued capital which has been actually subscribed by the public. When the shares offered for public subscription are subscribed fully by the public the issued capital and subscribed capital would be the same. It may be noted that ultimately, the subscribed capital and issued capital are the same because if the number of share, subscribed is less than what is offered, the company allot only the number of shares for which subscription has been received. In case it is higher than what is offered, the allotment will be equal to the offer. In other words, the fact of over subscription is not reflected in the books.
- *Called-up Capital:* It is that part of the subscribed capital which has been called up on the shares. The company may decide to call the entire amount or part of the face value of the shares. For example, if the face value (also called nominal value) of a share allotted is Rs. 10 and the company has called up only Rs. 7 per share, in that scenario, the called up capital is Rs. 7 per share. The remaining Rs. 3 may be collected from its shareholders as and when needed.
- *Paid-up Capital:* It is that portion of the called up capital which has been actually received from the shareholders. When the share holders have paid all the call amount, the called-up capital is the same to the paid-up capital. If any of the shareholders has not paid amount on calls, such an amount may be called as 'calls in arrears'. Therefore, paid-up capital is equal to the called-up capital minus call-in-arrears.
- *Uncalled Capital:* That portion of the subscribed capital which has not yet been called-up. As stated earlier, the company may collect this amount any time when it needs further funds.

- *Reserve Capital:* A company may reserve a portion of its uncalled capital to be called only in the event of winding up of the company. Such uncalled amount is called 'Reserve Capital' of the company. It is available only for the creditors on winding up of the company.

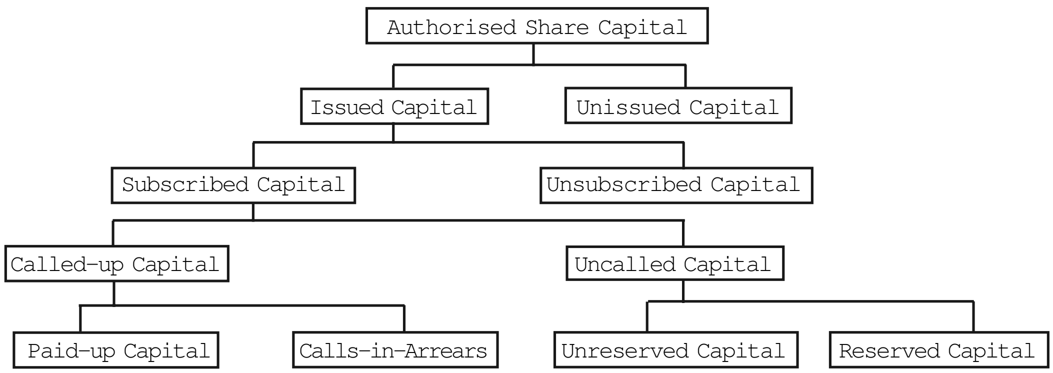


Fig. 1.1 : *Categories of Share Capital*

Let us take the following example and show how the share capital will be shown in the balance sheet. Sunrise Company Ltd., New Delhi, has registered its capital as Rs. 40,00,000, divided into 4,00,000 shares of Rs. 10 each. The company offered to the public for subscription of 2,00,000 shares of Rs. 10 each, as Rs. 2 on application, Rs.3 on allotment, Rs.3 on first call and the balance on final call. The company received applications for 2,50,000 shares. The company finalised the allotment on 2,00,000 shares and rejected applications for 50,000 shares. The company did not make the final call. The company received all the amount except on 2,000 shares where call money has not been received. The above amounts will be shown in the balance sheet of a company as follows:

Sunrise Company Ltd.
Balance Sheet as on ....

Share Capital	*(Rs.)*
Authorised or Registered or Nominal Capital:	
4,00,000 Shares of Rs. 10 each	40,00,000
Issued Capital:	
2,00,000 Shares of Rs. 10 each	20,00,000
Subscribed Capital	
2,00,000 Shares of Rs. 10 each	20,00,000

Called-up Capital		
2,00,000 Shares of Rs. 10 each, Rs. 8 per share		16,00,000
Paid-up Capital		
2,00,000 Shares of Rs. 10 each, Rs. 8 per share	16,00,000	
Less : Calls in arrears		
(on 2,000 Shares @ Rs. 3 per share)	6,000	15,94,000

1.4 Nature and Classes of Shares

Shares, as applied to the capital of a company, refer to the units into which the total share capital of a company is divided. Thus, a share is a fractional part of the share capital and forms the basis of ownership interest in a company. The persons who contribute money through shares are called shareholders.

The amount of authorised capital, together with the number of shares in which it is divided, is stated in the Memorandum of Association but the classes of shares in which the company's capital is to be divided, alongwith their respective rights and obligations, are prescribed by the Articles of Association of the company. As per Section 86 of The Companies Act, a company can issue two types of shares (1) preference shares, and (2) equity shares (also called ordinary shares).

1.4.1 Preference Shares

According to Section 85 of The Companies Act, 1956, a preference share is one, which fulfils the following conditions :

a) That it carries a preferential right to dividend to be paid either as a fixed amount payable to preference shareholders or an amount calculated by a fixed rate of the nominal value of each share before any dividend is paid to the equity shareholders.

b) That with respect to capital it carries or will carry, on the winding-up of the company, the preferential right to the repayment of capital before anything is paid to equity shareholders.

However, notwithstanding the above two conditions, a holder of the preference share may have a right to participate fully or to a limited extent in the surpluses of the company as specified in the Memorandum or Articles of the company. Thus, the preference shares can be participating and non-participating. Similarly, these shares can be cumulative or non-cumulative, and redeemable or irredeemable.

1.4.2 Equity Shares

According to Section 85 of The Companies Act, 1956, an equity share is a share which is not a preference share. In other words, shares which do not enjoy any preferential right in the payment of dividend or repayment of capital, are termed as equity shares. The equity shareholders are entitled to share the distributable profits of the company after satisfying the dividend rights of the preference share holders. The dividend on equity shares is not fixed and it may vary from year to year depending upon the amount of profits available for distribution. The equity share capital may be (i) with voting rights; or (ii) with differential rights as to voting, dividend or otherwise in accordance with such rules and subject to such conditions as may be prescribed.

Test your Understanding – I

State which of the following statements are true :

(a) A Company is formed according to the provisions of Indian Companies Act-1932.
(b) A company is an artificial person.
(c) Shareholders of a company are liable for the acts of the company.
(d) Every member of a company is entitled to take part in its management.
(e) Company's shares are generally transferable.
(f) Share application account is a personal account.
(g) The director of a company must be a shareholder.
(h) Application money should not be less than 25% of the face value of shares.
(i) Paid-up capital can exceed called-up capital.
(j) Capital reserves are created from capital profits.
(k) Securities premium account is shown on the assets side of the balance sheet.
(l) Premium on issue of shares is a capital loss.
(m) At the time of issue of shares, the maximum rate of securities premium is 10%.
(n) The part of capital which is called-up only on winding up is called reserve capital.
(o) Forfeited shares can not be issued at a discount.
(p) The shares originally issued at discount may be re-issued at a premium.

1.5 Issue of Shares

A salient characteristic of the capital of a company is that the amount on its shares can be gradually collected in easy instalments spread over a period of time depending upon its growing financial requirement. The first instalment is collected along with application and is thus, known as application money, the second on allotment (termed as allotment money), and the remaining instalment are termed as first call, second call and so on. The word final is sufixed to the last instalment. However, this in no way prevents a company from calling the full amount on shares right at the time of application.

The important steps in the procedure of share issue are :

- *Issue of Prospectus:* The company first issues the prospectus to the public. Prospectus is an invitation to the public that a new company has come into existence and it needs funds for doing business. It contains complete information about the company and the manner in which the money is to be collected from the prospective investors.
- *Receipt of Applications:* When prospectus is issued to the public, prospective investors intending to subscribe the share capital of the company would make an application along with the application money and deposit the same with a scheduled bank as specified in the prospectus. The company has to get minimum subscription (Refer Box 1) within 120 days from the date of the issue of the prospectus. If the company fails to receive the same within the said period, the company cannot proceed for the allotment of shares and application money should be returned within 130 days of the date of issue of prospectus.
- *Allotment of Shares:* If minimum subscription has been received, the company may proceed for the allotment of shares after fulfilling certain other legal formalities. Letters of allotment are sent to those whom the shares have been alloted, and letters of regret to those to whom no allotment has been more. When allotment is made, it results in a valid contract between the company and the applicants who now became the shareholders of the company.

Box 1

Minimum Subscription

It means the minimum amount that, in the opinion of directors, must be raised to meet the needs of business operations of the company relating to:·

- the price of any property purchased, or to be purchased, which has to be met wholly or partly out of the proceeds of issue;
- preliminary expenses payable by the company and any commission payable in connection with the issue of shares;
- the repayment of any money borrowed by the company for the above two matters;
- working capital; and
- any other expenditure required for the usual conduct of business operations.

It is to be noted that 'minimum subscription' of capital cannot be less than 90% of the issued amount according to SEBI (Disclosure and Investor Protection) Guidelines, 2000 [6.3.8.1 and 6.3.8.2]. If this condition is not satisfied, the company shall forthwith refund the entire subscription amount received. If a delay occurs beyond 8 days from the date of closure of subscription list, the company shall be liable to pay the amount with interest at the rate of 15% [Section 73(2)].

Shares of a company are issued either at *par, at a premium or at a discount.* Shares are said to have been issued at *par* when their issue price is exactly equal to their nominal value according to the terms and conditions of issue. When the shares of a company are issued more than its nominal value (face value), the excess amount is called *premium* and the issue is said to have been made at a premium. When the shares are issued at a price less than the face value of the share, it is known as shares issued at a *discount.*

Irrespective of the fact that shares are issued at par, premium or discount, the share capital of a company as stated earlier, is collected in instalments to be paid at different stages.

1.6 Accounting Treatment

On application : The amount of money paid with various instalment represents the contribution to share capital and should ultimately be credited to share capital. However, for the sake of convenience, initially individual accounts are opened for each instalment. All money received along with application is deposited with a scheduled bank in a separate account opened for the purpose. The journal entry is as follows:

Bank A/c	Dr.
To Share Application A/c	
(Amount received on application for — shares @ Rs. ______ per share).	

On allotment : When minimum subscription has been received and certain legal formalities on the allotment of shares have been duly complied with, the directors of the company proceed to make the allotment of shares.

The allotment of shares implies a contract between the company and the applicants who now become the allottees and assume the status of share-holders or members.

Box 2

Allotment of Shares

(Implications from accounting point of view)

- It is customary to ask for some amount called "Allotment Amount" from the allottees on the shares allotted to them as soon as the allotment is made.
- With the acceptance to the offer made by the applicants, the amount of application money received has to be transferred to share capital account as it has formally become the part of the same.
- The money received on rejected applications should either be fully returned to the applicant within 130 days of the date or issue of prospectus, or
- In case lesser number of shares have to be allotted, than those applied for the excess application money must be adjusted towards the amount due on allotment from the allottees.
- The effect of the later two steps is to close the share application account which is only a temporary account for share capital transactions.

The journal entries with regard to allotment of shares are as follows:

1. *For Transfer of Application Money*

   Share Application A/c Dr.

   To Share Capital A/c

   (Application money on _____ Shares allotted/ transferred to Share Capital)

2. *For Money refunded on rejected application*

   Share Application A/c Dr.

   To Bank A/c

   (Application money returned on rejected application for — shares).

3. *For Amount Due on Allotment*

   Share Allotment A/c Dr.

   To Share Capital A/c

4. *For Adjustment of Excess Application Money*

   Share Application A/c Dr.

   To Share Allotment A/c

   (Application Amount on — Shares @ Rs. per shares adjusted to the amount due on allotment).

5. *For Receipt of Allotment Amount*

   Bank A/c Dr.

   To Share Allotment A/c

   (Allotment money received on — Shares @ Rs. — per share Combined Account)

Sometimes *a combined account* for share application and share allotment called 'Share Application and Allotment Account' is opened in the books of a company. The combined account is based on the reasoning that allotment without application is impossible while application without allotment is meaningless. These two stages of share capital are closely inter-related. When a combined account is maintained, journal entries are recorded in the following manner:

1. *For Receipt of Application and Allotment*

   Bank A/c Dr.

   To Share Application and Allotment A/c

   (Money received on applications for shares @ Rs. _____ per share).

2. *For Transfer of Application Money and Allotment Amount Due*

   Share Application and Allotment A/c Dr.

   To Share Capital A/c

   (Transfer of application money to Share Capital Account for amount due or allotment of — Share @ Rs. _____ per share)

3. *For Money Refunded on Rejected Applications*

   Share Application and Allotment A/c Dr.

   To Bank A/c

   (Application money returned on rejected application for ___ shares).

4. *On Receipt of Allotment Amount*

   Bank A/c Dr.

   To Share Application and Allotment A/c

   (Balance of Allotment Money Received).

On Calls : Calls play a vital role in making shares fully paid-up and for realising the full amount of shares from the shareholders. In the event of shares not being fully called-up till the completion of allotment, the directors have the authority to ask for the remaining amount on shares as and when they decide about the same. It is also possible that the timing of the payment of calls by the shareholders is determined at the time of share issue itself and given in the prospectus.

Two points are important regarding the calls on shares. First, the amount on any call should not exceed 25% of the face value of shares. Second, there must be an interval of at least one month between the making of two calls unless otherwise provided by the articles of association of the company.

When a call is made and the amount of the same is received, the journal entries are as given below:

1. *For Call Amount Due*

   Share Call A/c Dr.

   To Share Capital A/c

   (Call money due on — Shares @ Rs. ____ per share)

2. *For Receipt of Call Amount*

   Bank A/c Dr.

   To Share Call A/c

   (Call money received)

The word/words First, Second, or Third must be added between the words "Share" and 'Call' in the Share Call account depending upon the identity of the call made. For example, in case of first call it will be termed as 'Share First Call Account', in case of second call it will be 'Share Second Call Account' and so on. Another point to be noted is that the words 'and Final' will also be added to the last call, say, if second call is the last call it will be termed as 'Second and Final Call' and if it is the third call which is the last call, it will be termed as 'Third and Final Call'. It is also possible that the whole balance after allotment may be collected in one call only. In that case the first call itself, shall be termed as the 'First and Final Call'.

Box 3

The following points should be kept in mind while issuing the share capital for public subscription :

1. The application money should be at least 5% of the face value of the share.
2. Calls are to be made as per the provisions of the articles of association.
3. Where there is no articles of association of its own, the following provisions of Table A will apply:
   (a) A period of one month must elapse between two calls;
   (b) The amount of call should not exceed 25% of the face value of the share;
   (c) A minimum of 14 days' notice is given to the shareholders to pay the amount; and
   (d) Calls must be made on a uniform basis on all shares within the same class.

Note: The procedure for accounting for the issue of both equity and preference shares is the same. To differentiate between the two the words 'Equity' and 'Preference' is prefixed to each and every instalment.

Illustration 1

Mona Earth Mover Ltd. decided to issue 12,000 shares of Rs.100 each payable at Rs.30 on application, Rs.40 on allotment, Rs.20 on first call and balance on second and final call. Applications are received for 13,000 shares. The directors decided to reject application of 1,000 shares and their application money being refunded in full. The allotment money is duly received on all the shares, and all sums due on calls are received except on 100 shares.

Record the transactions in the books of Mona Earth Movers Ltd.

Solution

Books of Mona Earth Movers Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr.		3,90,000	
	To Share Application A/c			3,90,000
	(Application money on 13,000 shares @ Rs.30 per share received)			
	Share Application A/c Dr.		3,60,000	
	To Share Capital A/c			3,60,000
	(Application money transferred to share capital)			

	Share Allotment A/c Dr. To Share Capital A/c (Money due on allotment of 12,000 shares @ Rs. 40 per share)		4,80,000	4,80,000
	Share Application A/c Dr. To Bank A/c (Application money on 1,000 shares returned]		30,000	30,000
	Bank A/c Dr. To Share Allotment A/c (Money received on 12,000 shares @ Rs. 40 per share on allotment)		4,80,000	4,80,000
	Share First Call A/c Dr. To Share Capital A/c (Money due on 12,000 shares @ Rs. 20 per share on first Call)		2,40,000	2,40,000
	Bank A/c Dr. To Share First Call A/c (First Call money received except for 100 shares)		2,38,000	2,38,000
	Share Second and Final Call A/c Dr. To Share Capital A/c (Money due on 12,000 shares @ Rs. 10 per share on Second and final Call)		1,20,000	1,20,000
	Bank A/c Dr. To Share Second and Final Call A/c (Second and final call money received except for 100 shares)		1,19,000	1,19,000

Illustration 2

Eastern Company Ltd. issued 40,000 shares of Rs. 10 each to the public for the subscription of its share capital, payable at Rs. 4 on application, Rs. 3 on allotment and the balance on Ist and final call. Applications were received for 40,000 shares. The company made the allotment to the applicants in full. All the amounts due on allotment and first and final call were duly received.

Give the journal entries in the books of the company.

Solution

Books of Eastern Company Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr. To Share Application A/c (Application money on 40,000 shares @ Rs.4 per share received)		1,60,000	1,60,000
	Share Application A/c Dr. To Share Capital A/c (Application money transferred to share capital)		1,60,000	1,60,000
	Share Allotment A/c Dr. To Share Capital A/c (Money due on allotment of 40,000 shares @ Rs. 3 per share)		1,20,000	1,20,000
	Bank A/c Dr. To Share allotment A/c (Money received on 40,000 shares @ Rs. 3 per share on allotment)		1,20,000	1,20,000
	Share First and Final Call A/c Dr. To Share Capital A/c (Money due on 40,000 shares @ Rs. 3 per share on First and final call)		1,20,000	1,20,000
	Bank A/c Dr. To Share Ist and Final Call A/c (First and final call money received)		1,20,000	1,20,000

Do it Yourself

On January 01, 2006, a limited company was incorporated with an authorised capital of Rs. 40,000 divided into shares of Rs. 10 each. It offered to the public for subscription of 3,000 shares payable as follows:

On Application	Rs. 3 per share
On Allotment	Rs. 2 per share
On First Call (One month after allotment)	Rs. 2.50 per share
On Second and Final Call	Rs. 2.50 per share

The shares were fully subscribed for by the public and application money duly received on January 15, 2006. The directors made the allotment on February 1, 2006.

How will you record the share capital transactions in the books of a company if the amounts due has been duly received, and the company maintains the combined account for application and allotment.

1.6.1 Calls in Arrears

It often happens that shareholders do not pay the call amount when it becomes due. When any shareholder fails to pay the amount due on allotment or on any of the calls, such amount is known as 'Calls-in-Arrears'/'Unpaid Calls'. Calls-in-Arrears represent the debit balance of all the calls account and are shown as a deduction from the paid-up capital on the liabilities side of the balance sheet. However, where a company maintains 'Calls-in-Arrears' Account, it needs to pass the following additional journal entry. However, it is not necessary to do so.

Calls in Arrears A/c	Dr.
To Share I Call Account A/c	
To Share II and Final Call Account A/c	
(Calls in arrears brought into account)	

The Articles of Association of a company usually empower the directors to change interest at a stipulated rate on calls in arrears. In case the articles are silent in this regard, the rule contained in Table A shall be applicable which states that the interest at a rate not exceeding 5% p.a. shall have to be paid on all unpaid amounts on shares for the period intervening between the day fixed for payment and the time of actual payment thereon.

On receipt of the call amount together with interest, the amount of interest shall be credited to interest account while call money shall be credited to the respective call account or to calls-in-arrears account. When the shareholder makes the payment of calls-in-arrears together with interest, the entry will be as follows:

Bank A/c	Dr.
To Calls-in-Arrears A/c	
To Interest A/c	

If nothing is specified, there is no need to take the interest on calls-in-arrears account and record the above entry

Illustration 3

Cronic Limited issued 10,000 equity shares of Rs. 10 each payable at Rs. 2.50 on application, Rs. 3 on allotment, Rs. 2 on first call, and the balance of Rs. 2.50 on the final call. All the shares were fully subscribed and paid except of a shareholder having 100 shares who could not pay for the final call. Give journal entries to record these transactions.

Solution

Books of Cronic Limited
Journal

Date	Particulars		L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Bank A/c	Dr.		25,000	
	To Share Application A/c				25,000
	(Money received on applications for 10,000 shares @ Rs. 2.50 per share)				
	Equity Share Application A/c	Dr.		25,000	
	To Share Capital A/c				25,000
	(Transfer of application money on 10,000 shares to share capital)				
	Equity Share Allotment A/c	Dr.		30,000	
	To Share Capital A/c				30,000
	(Amount due on the allotment of 10,000 shares @ Rs. 3 per share)				
	Bank A/c	Dr.		30,000	
	To Share Allotment A/c				30,000
	(Allotment money received)				
	Share First Call A/c	Dr.		20,000	
	To Share Capital A/c				20,000
	(First call money due on 10,000 shares @ Rs. 2 per share)				
	Bank A/c	Dr.		20,000	
	To Share First Call A/c				20,000
	(First call money received)				
	Share Second and Final Call A/c	Dr.		25,000	
	To Share Capital A/c				25,000
	(Final call money due)				
	Bank A/c	Dr.		24,750	
	Call-in-Arrears A/c	Dr.		250	
	To Share Second and Final Call A/c				25,000
	(Final call money received except that of 100 shares)				

1.6.2 Calls in Advance

Sometimes some shareholders pay a part or the whole of the amount of the calls not yet made. The amount so received from the shareholders is known as "Calls in Advance". The amount received in advance is a liability of the company and should be credited to 'Call-in-Advance Account." The amount received will be adjusted towards the payment of calls as and when they becomes due. Table A of the Companies Act provides for the payment of interest on calls in advance at a rate not exceeding 6% per annum.

The following journal entry is recorded for the amount of calls received in advance.

Bank A/c	Dr.
To Calls-in-Advance A/c	
(Amount received on call-in-advance)	

When calls become actually due requiring adjustment of 'Call-in-Advance' Account, the journal entry will be :

Calls-in-Advance A/c	Dr.
To Particular Call A/c	
(Calls-in-advance adjusted with the call money due)	

The balance in 'Calls-in-Advance' account is shown as a separate item on the liabilities side of company's balance sheet under the heading 'Share Capital' but is not added to the amount of paid-up capital.

As Calls-in-Advance is a liability of the company, it is under obligation if provided by the Articles, to pay interest on such amount from the date of its receipt up to the date when appropriate call is due for payment. A stipulation is generally made in the Articles regarding the rate at which interest is payable. However, if Articles are silent on this account, Table A is applicable which provides for interest on calls in advance at a rate not exceeding 6% p.a.

The accounting treatment of interest on calls in advance is as follows:

1. *For Payment of Interest*

Interest on Calls in Advance A/c	Dr.
To Bank A/c	
(Interest paid on Calls-in-Advance)	

   Or

2. *For Interest due*

Interest on Calls-in-Advance A/c	Dr.
To Sundry Shareholder's A/c	

Illustration 4

Konica Limited registered with an authorised equity capital of Rs. 2,00,000 divided into 2,000 shares of Rs. 100 each, issued for subscription of 1,000 shares payable at Rs. 25 per share on application, Rs. 30 per share on allotment, Rs. 20 per share on first call and the balance as and when required.

Application money on 1,000 shares was duly received and allotment was made to them. The allotment amount was received in full, but when the first call was made, one shareholder failed to pay the amount on 100 shares held by him and another shareholder with 50 shares, paid the entire amount on his shares. The company did not make any other call.

Give the necessary journal entries in the books of the company to record these share capital transactions.

Solution

Books of Konica
Journal

Date	*Particulars*		*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c	Dr.		25,000	
	To Equity Share Application A/c				25,000
	(Money received on application for 1,000 shares @ Rs. 25 per share)				
	Equity Share Application A/c	Dr.		25,000	
	To Equity Share Capital A/c				25,000
	(Transfer of application money on 1,000 shares to share capital)				
	Equity Share Allotment A/c	Dr.		30,000	
	To Equity Share Capital A/c				30,000
	(Amount due on the allotment of 1,000 shares @ Rs. 30 per share)				
	Bank A/c	Dr.		30,000	
	To Equity Share Allotment A/c				30,000
	(Allotment money received)				
	Equity Share First Call A/c	Dr.		20,000	
	To Equity Share Capital A/c				20,000
	(First call money due on 1,000 shares @ Rs. 20 per share)				
	Bank A/c	Dr.		19,250	
	Calls-in-Arrears A/c	Dr.		2,000	
	To Equity Share First Call A/c				20,000
	To Calls-in-Advance A/c				1,250
	(First call money received on 900 shares and calls-in-advance on 50 shares @ Rs. 25 per share)				

In practice the entries for the amount received are recorded in the cash book and not in the journal. (See Illustration 5)

Illustration 5

Unique Pictures Ltd. was registered with an authorised capital of Rs. 5,00,000 divided into 20,000, 5% preference shares of Rs. 10 each and 30,000 equity shares of Rs. 10 each. The company issued 10,000 preference and 15,000 equity shares for public subscription. Calls on shares were made as under :

	Equity Shares (Rs.)	*Preference Shares* (Rs.)
Application	2	2
Allotment	3	3
First Call	2.50	2.50
Second and Final Call	2.50	2.50

All these shares were fully subscribed. All the dues were received except the second and final call on 100 equity shares and on 200 preference shares. Record these transactions in journal. You are also required to prepare the cash book and balance sheet.

Solution

Books of Unique Pictures Limited

Journal

Date	*Particulars*		*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Equity Share Application A/c	Dr.		30,000	
	5% Preference Share Application A/c	Dr.		20,000	
	To Equity Share Capital A/c				30,000
	To 5% Preference Share Capital A/c				20,000
	(Transfer of application money)				
	Equity Share Allotment A/c	Dr.		45,000	
	5% Preference Share Allotment A/c	Dr.		30,000	
	To Equity Share Capital A/c				45,000
	To 5% Preference Share Capital A/c				30,000
	(Amount due on allotment)				
	Equity Share First Call A/c	Dr.		37,500	
	5% Preference Share First Call A/c	Dr.		25,000	
	To Equity Share Capital A/c				37,500
	To 5% Preference Share Capital A/c				25,000
	(First call money due)				
	Call-in-Arrears A/c	Dr.		750	
	To Equity Share Second and Final Call A/c				250
	To 5% Preference Share Final Call A/c				500
	(For Calls-in-Arrears)				

Cash Book (Bank Column)

Dr. *Cr.*

Date	Particulars	L.F.	Amount (Rs.)	Date	Particulars	L.F.	Amount (Rs.)
	Equity Share Application		30,000		Bal. c/d		2,49,250
	5% Preference Share Application		20,000				
	Equity Share Allotment		45,000				
	5% Preference Share Allotment		30,000				
	Equity Share First Call		37,500				
	5% Preference Share First Call		25,000				
	Equity Share IInd & Final Call		37,250				
	5% Preference Share IInd & Final Call		24,500				
			2,49,250				**2,49,250**

Balance Sheet of Unique Pictures as on . . . . .

Liabilities			*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Authorised Capital				Bank	2,49,250
30,000 equity shares of Rs.10 each		3,00,000			
20,000, 5% preference shares of Rs.10 each		2,00,000	5,00,000		
Issued Capital					
15,000 equity shares of Rs.10 each		1,50,000			
10,000, 5% preference shares of Rs.10 each		1,00,000	2,50,000		
Paid-up Capital					
15,000; equity share of Rs.10 each		1,50,000			
10,000, 5% preference share of Rs.10 each		1,00,000			
		2,50,000			
Less : Calls in arrears :					
equity shares	250				
preference shares	500	750	2,49,250		
			2,49,250		**2,49,250**

Illustration 6

Rohit and Company issued 30,000 shares of Rs.10 each payable Rs.3 on application, Rs.3 on allotment and Rs.2 on first call after two months. All money due on allotment was received, but when the first call was made a shareholder having 400 shares did not pay the first call and a shareholder of 300 shares paid the money for the second and final call of Rs.2 which had not been made as yet.

Give the necessary journal entries in the books of the company.

Solution

Books of Rohit & Company
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr. To Share Application A/c (application money received on 30,000 shares @ Rs.3 per share)		90,000	 90,000
	Share Application A/c Dr. To Share Capital A/c (application money transferred to share capital account)		90,000	 90,000
	Share Allotment A/c Dr. To Share Capital A/c (Allotment money due on 30,000 shares @ Rs.3 per share)		90,000	 90,000
	Bank A/c Dr. To Share Allotment A/c (Allotment money received)		90,000	 90,000
	Share First Call A/c Dr. To Share Capital A/c (First call money due on 30,000 shares @ Rs.2 per share)		60,000	 60,000
	Bank A/c Dr. Call in Arrears A/c Dr. To Share First Call A/c To Calls in Advance A/c (Money received in advance on the second call for 300 shares @ Rs.2 per share, and the first call not received on 400 shares @ Rs.2 per share)		59,800 800	 60,000 600

Do it Yourself

1. A company issued 20,000 equity shares of Rs.10 each payable at Rs.3 on application, Rs.3 on allotment, Rs.2 on first call and Rs.2 on second and the final call. The allotment money was payable on or before May 01, 2005; first call money on or before August Ist, 2005; and the second and final call on or before October Ist, 2005; 'X', whom 1,000 shares were allotted, did not pay the allotment and call money; 'Y', an allottee of Rs.600 shares, did not pay the two calls; and 'Z', whom 400 shares were allotted, did not pay the final call. Pass journal entries and prepare the Balance Sheet of the company as on December 31, 2005.
2. Alfa company Ltd. issued 10,000 shares of Rs.10 each for cash payable at Rs.3 on application, Rs.2 on allotment and the balance in two equal instalments. The allotment money was payable on or before March 3, 2006; the first call money on or before 30 June, 2006; and the final call money on or before 31st August, 2006. Mr. 'A', whom 600 shares were allotted, paid the entire remaining face value of shares allotted to him on allotment. Record journal entries in company's books and also prepare their balance sheet on the date.

1.6.3 Over Subscription

There are instances when applications for more shares of a company are received than the number offered to the public for subscription. This usually happens in respect of share issues of well-managed and financially strong companies and is said to be a case of 'Over Subscription'.

In such a condition, three alternatives are available to the directors to deal with the situation: (1) they can accept some applications in full and totally reject the others; (2) they can make a pro-rata allotment to all; and (3) they can adopt a combination of the above two alternatives which happens to be the most common course adopted in practice.

The problem of over subscription is finally resolved with the allotment of shares. Therefore, from the accounting point of view, it is better to place the situation of over subscription within the total frame of application and allotment, i.e. receipt of application amount, amount due on allotment and its receipt from the shareholders, and the same has been observed in the pattern of entries.

First Alternative : When the directors decide to fully accept some applications and totally reject the others, the application money received from rejected applications is fully refunded. For example, a company invited applications for 20,000 shares and received the applications for 25,000 shares. The directors totally rejected the applications for 5,000 shares which are in excess of the required number and refunded their application money in full. In this case, the journal entries on application and allotment will be as follows :

The journal entries on application and allotment according to this alternative are as follows:

1	Bank A/c	Dr.
	To Share Application A/c	
	(Money received on application for 25,000 shares @ Rs. _ per share)	
2	Share Application A/c	Dr.
	To Share Capital A/c	
	To Bank A/c	
	(Transfer of money on application 20,000 for shares allotted and money refunded on applications for _ shares rejected)	
3	Share Allotment A/c	Dr.
	To Share Capital A/c	
	(Amount due on the allotment of _ shares @ Rs. _ per Share)	
4	Bank A/c	Dr.
	To Share Allotment A/c	
	(Allotment money received)	

Second Alternative : When the directors opt to make a proportionate allotment to all the applicants (called 'pro-rata' allotment), the excess application money received is normally adjusted towards the amount due on allotment. In case, however, the excess application money received is more than the amount due on allotment of shares, such excess amount may either be refunded or credited to calls in advance.

For example, in the event of applications for 20,000 shares being invited and those received are for 25,000 shares, it is decieded to allot shares in the ratio of 4:5 to all applicants. It is a case of pro-rata allotment and the excess application money received on 5,000 shares would be adjusted towards the amount due on the allotment of 20,000 shares. In this case, the journal entries on application and allotment will be as follows.

1	Bank A/c	Dr.
	To Share Application A/c	
	(Application money received on 25,000 shares @ Rs. _ per Share)	
2	Share Application A/c	Dr.
	To Share Capital A/c	
	To Share Allotment A/c	
	(Transfer of application money to share capital and the excess application money credited to share allotment.)	
3	Share Allotment A/c	Dr.
	To Share Capital A/c	
	(Amount due on the Allotment of 25,000 share @ Rs. _ per Share)	

4	Bank A/c To Share Allotment A/c (Allotment money received after adjusting the amount already received as excess application money)	Dr.

Third Alternative : When the application for some shares are rejected outrightly; and pro-rata allotment is made to the remaining applicants, the money on rejected applications is fully refunded and the excess application money received from applicants to whom prorata allotment has been made is adjusted towrds the amount due on the allotment of shares allotted.

For example, a company invited applications for 10,000 shares and received applications for 15,000 shares. the directors decided to reject the applications for 2,500 shares outright and to make a pro-rata allotment of 10,000 shares to the applicants for the remaining 12,500 shares so that four shares are allotted for every five shares applied. In this case, the money on applications for 2,500 shares rejected would be refunded fully and that on the remaining 2,500 shares (12,500 shares – 10,000 shares) would be adjusted against the allotment amount due on 10,000 shares allotted and credited to share allotment account, the journal entries on application and allotment recorded as follows:

1	Bank A/c To Share Application A/c (Money received on application for 15,000 shares @ Rs. _ per share)	Dr.
2	Share Application A/c To Share Capital A/c To Share Allotment A/c To Bank A/c (Transfer of application money to share capital, and the excess application amount of pro-rata allottees credited to share allotment and the amount on rejected applications refunded)	Dr.
3	Share Allotment A/c To Share Capital A/c (Amount due on the Allotment of 10,000 shares @ Rs. _ per share)	Dr.
4	Bank A/c To Share Allotment A/c (Allotment money received after adjusting the amount already received as excess application money.)	Dr.

Illustration 7

Janta Papers Limited invited applications for 1,00,000 equity shares of Rs. 25 each payable as under:

On Application	Rs. 5.00 per share
On Allotment	Rs. 7.50 per share
On First Call (due two months after allotment)	Rs. 7.50 per share
On Second and Final Call (due two months after First Call)	Rs. 5.00 per share

Applications were received for 4,00,000 shares on January 01, 2006 and allotment was made on February 01, 2006.

Record journal entries in the books of the company to record these share capital transactions under each of the following circumstances:

1 The directors decide to allot 1,00,000 shares in full to selected applicants and the applications for the remaining 3,00,000 shares were rejected outright.

2 The directors decide to make a pro-rata allotment of 25 per cent of the shares applied for to every applicant; to apply the balance of application money towards amount due on allotment; and to refund the amount remaining thereafter.

3 The directors totally reject applications for 2,00,000 shares, accept full applications for 80,000 shares and make a pro-rata allotment of the 20,000 shares to remaining applicants the excess of application money is to be adjusted towards allotment and calls to be made.

Solution

Books of Janta Papers Limited
Journal

First Alternative

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
2006 January 01	Bank A/c Dr. To Equity Share Application A/c (Money received on applications for 4,00,000 shares @ Rs. 5 per share)		20,00,000	20,00,000

February 01	Equity Share Application A/c Dr. To Equity Share Capital A/c To Bank A/c (Transfer of application money on 1,00,000 shares to share capital and money refunded on rejected applications)		20,00,000	 5,00,000 15,00,000
February 01	Equity Share Allotment A/c Dr. To Equity Share Capital A/c (Amount due on the allotment of 1,00,000 shares @ Rs 7.50 per share)		7,50,000	 7,50,000
	Bank A/c Dr. To Equity Share Allotment A/c (Allotment money received)		7,50,000	 7,50,000
April 01	Equity Share First Call A/c Dr. To Equity Share Capital A/c Dr. (First call money due on 1,00,000 shares @ Rs. 7.50 per share)		7,50,000	 7,50,000
June 01	Equity Share Second and Final Call A/c Dr. To Equity Share Capital A/c (Final Call money due on 1,00,000 shares @ Rs. 5 per share)		5,00,000	 5,00,000
June 01	Bank A/c Dr. To Equity Share Second and Final Call A/c (Final call money received)		5,00,000	 5,00,000

Second Alternative

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
2006 January 01	 Bank A/c Dr. To Equity Share Application A/c (Money received on applications for 4,00,000 shares @ Rs. 5 per share)		 20,00,000	 20,00,000
February 01	Equity Share Application A/c Dr. To Equity Share Capital A/c To Equity Share Allotment A/c To Bank A/c (Transfer of application money on Shares allotted to share capital, excess application amount credited to allotment account and money refunded on rejected applications)		20,00,000	 5,00,000 7,50,000 7,50,000

February 01	Equity Share Allotment A/c Dr. To Equity Share Capital A/c (Amount due on the allotment of Rs. 1,00,000 shares @ Rs 7.50 per share)		7,50,000	7,50,000
February 01	Bank A/c Dr. To Equity Share Allotment A/c (Amount due on the allotment of Rs. 1,00,000 shares @ Rs 7.50 per share)		7,50,000	7,50,000

Note : The entries regarding the two calls would be the same as under the preceeding method.

Third Alternative

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
2006 January 01	Bank A/c Dr. To Equity Share Application A/c (Money received on applications for 4,00,000 shares @ Rs. 5 per share)		20,00,000	20,00,000
February 01	Equity Share Application A/c Dr. To Equity Share Capital A/c To Equity Share Allotment A/c To Calls-in-Advance A/c To Bank A/c (Amount on share application adjusted to share capital, share allotment and calls-in-advance and the balance refunded including the money on rejected applications		20,00,000	5,00,000 1,50,000 2,50,000 11,00,000
February 01	Equity Share Allotment A/c Dr. To Equity Share Capital A/c (Transfer of application money on shares allotted to share capital and amount due on the allotment of 1,00,000 shares @ Rs. 7.50 per share		7,50,000	7,50,000
	Bank A/c Dr. To Equity Share Allotment A/c (Allotment money received)		6,00,000	6,00,000

April 01	Equity Share First Call A/c Dr. To Equity Share Capital A/c (First Call money due on 1,00,000 shares @ Rs. 7.50 per share)		7,50,000	7,50,000
April 01	Bank A/c Dr. Calls-in-Advance A/c Dr. To Equity Share First Call A/c (Calls-in-advance adjusted against first call and the balance money on call received)		6,00,000 1,50,000	7,50,000
June 01	Equity Share Second and Final Call A/c Dr. To Equity Share Capital A/c (Final Call money due on 1,00,000 shares @ Rs. 5 per share)		5,00,000	5,00,000
June 01	Bank A/c Dr. Calls-in-Advance A/c Dr. To Equity Share Second and Final Call A/c (Calls-in-advance adjusted against final call and the balance money on call received)		4,00,000[1] 1,00,000	5,00,000

Note: The balance of excess application money as a result of pro-rata distribution in journal entry 3 above is large enough to meet the demands on allotted shares in respect of the allotment and the two call money, as well as to leave an amount to be refunded along with that on the rejected applications.

Working Notes:

	(Rs.)	(Rs.)
Excess Application Money		15,00,000
Less Transfers :		
Share Allotment —		
20,000 shares @ Rs. 7.50	1,50,000	
Share Calls —		
20,000 shares @ Rs. 12.50	2,50,000	4,00,000[1]
Amount to be refunded (including that on the rejected applications)		11,00,000

1.6.4 Undersubscription

Under subscription is a situation where number of shares applied for is less than the number for which applications have been invited for subscription. For example, a comapny offered 2 lakh shares for subscription to the public but the applications were received for 1,90,000 share, only. In such a situation, the allotment will be confirmed to 1,90,000 share and entries shall be made accordingly. However, as stated earlier, it must be ensured that the company has received the minimum subscriptions (not less than 90% of the offer otherwise the procedure for issue of shares cannot proceed further and the company will have to refund the entire subscription amount received.

1.6.5 Issue of Shares at a Premium

It is quite common for the shares of financially strong and well-managed companies to be issued at a premium, i.e. at an amount more than the nominal or par value of shares. Thus, when a share of the nominal value of Rs. 100 is issued at Rs. 105, it is said to have been issued at a premium of 5 per cent.

When the issue of shares is at a premium, the amount of premium may technically be called at any stage of the issue of shares. However, premium is generally called with the amount due on allotment, sometimes with the application money and rarely with the call money. The premium amount is credited to a separate account called 'Securities Premium Account' and is shown on the liabilities side of the company's balance sheet under the heading 'Reserves and Surpluses'. It can be used only for the following four purposes as laid down by Section 78 of The Companies Act 1956:

(a) to issue fully paid bonus shares to an extent not exceeding unissued share capital of the company;
(b) to write-off preliminary expenses of the company;
(c) to write-off the expenses of, or commission paid, or discount allowed on any of the shares or debentures of the company; and
(d) to pay premium on the redemption of preference shares or debentures of the company.

The Journal entries for shares are issued at a premium are as follows:

1. For *Premium Amount called with Application money*

(a) Bank A/c Dr.

To Share Application A/c

(Money received on application for — shares @ Rs. — per share including premium)

Share Application A/c Dr.

To Share Capital A/c

To Securities Premium A/c

(Transfer of application money to share capital and securities premium accounts)

2. *Premium Amount called with Allotment Money*

(a) Share Allotment A/c Dr.
To Share Capital A/c
To Securities Premium A/c
(Amount due on allotment of shares @ Rs — per share including premium)

(b) Bank A/c Dr.
To Share Allotment A/c
(Allotment money received including premium)

Illustration 8

Jupiter Company Limited issued 35,000 equity shares of Rs. 10 each at a premium of Rs.2 payable as follows:

On Application Rs. 3
On Allotment Rs. 5 (including premium)
Balance on First and Final Call

The issue was fully subscribed. All the money was duly received.
Record journal entries in the books of the company.

Solution

Books of Jupiter Company Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr.		1,05,000	
	To Equity Share Application A/c			1,05,000
	(Money received on applications for 35,000 shares @ Rs. 3 per share)			
	Equity Share Application A/c Dr.		1,05,000	
	To Equity Share Capital A/c			1,05,000
	(Transfer of application money on allotment to share capital)			
	Equity Share Allotment A/c Dr.		1,75,000	
	To Equity Share Capital A/c			1,05,000
	To Securities Premium A/c			70,000
	(Amount due on allotment of 35,000 shares @ Rs. 5 per share including premium)			

	Bank A/c Dr. To Equity Share Allotment A/c (Money received including premium)		1,75,000	1,75,000
	Equity Share First and Final Call A/c Dr. To Equity Share Capital A/c (Amount due on First and Final Call of Rs. 4 per share on 35,000 shares)		1,40,000	1,40,000
	Bank A/c Dr. To Equity Share First and Final Call A/c (Money received on First and Final Call)		1,40,000	1,40,000

1.6.6 Issue of Shares at a Discount

There are instances when the shares of a company are issued at a discount, i.e. at an amount less than the nominal or par value of shares, the difference between the nominal value and issue price representing discount on the issue of shares. For example, when a share of the nominal value of Rs. 100 is issued at Rs. 98, it is said to have been issued at a discount of two per cent.

As a general rule, a company cannot ordinarily issue shares at a discount. It can do so only in cases such as 'reissue of forfeited shares' (to be discussed later) and in accordance with the provisions of section 79 of The Companies Act.

It states that, a company is permitted to issue shares at a discount provided the following conditions are satisfied:

(a) The issue of shares at a discount is authorised by an ordinary resolution passed by the company at its general meeting and sanctioned by the Company Law Board now Central Government.

(b) The resolution must specify the maximum rate of discount at which the shares are to be issued but the rate of discount must not exceed 10 per cent of the nominal value of shares. The rate of discount can be more than 10 per cent if the Government is convinced that a higher rate is called-for under special circumstances of a case.

(c) At least one year must have elapse since the date on which the company became entitled to commence the business.

(d) The shares are of a class which has already been issued.

(e) The shares issued within two months from the date of receiving sanction for the same from the Government or within such extended period as the Government may allow.

(f) If the offer prospectus at the date of issue must mention particulars of the discount allowed on the issue of shares.

Whenever shares are issued at a discount, the amount of discount is brought into the books at the time of allotment by debiting an account called 'Discount on the Issue of Shares Account'. The journal entry to be passed for the purpose is as given below:

Share Allotment A/c Dr.
Discount on the Issue of Shares A/c Dr.
Share Capital A/c
(Amount due on allotment of — shares @ Rs — per share and discount on issue brought into account.)

'Discount on the Issue of Shares Account', having a debit balance, denotes a loss to the company and is shown on the asset side of the company's balance sheet under heading 'Miscellaneous Expenditure'. It is written–off by being charging it to the Securities Premium Account if any and, in its absence, by being gradually charged to the Profit and Loss Account over a period of 5 to 10 years.

Illustration 9

Fine Arts Limited issued to the public for subscription of 10,000 shares of Rs.10 each at a discount of 10% payable at Rs. 4 on application, Rs. 3 on allotment and Rs.2 on Ist and the final call. The issue was fully subscribed and all the money was duly received.

Write journal entries for the above in the books of the company.

Solution

Books of Fine Arts Limited
Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Bank A/c Dr.		40,000	
	To Share Application A/c			40,000
	(Application money received on 10,000 shares @ Rs. 4 per share)			
	Share Application A/c Dr.		40,000	
	To Share Capital A/c			40,000
	(Application money transferred to Share Capital)			
	Share Allotment A/c Dr.		30,000	
	Discount on Issue of Share A/c Dr.		10,000	
	To Share Capital A/c			40,000
	(Amount due @ Rs. 3 per share on Allotment and @ Re. 1 per share discount on 10,000 shares allotted)			

	Bank A/c Dr. To Share Allotment A/c (Allotment money received on 10,000 shares)		30,000	30,000
	Share First and Final call A/c Dr. To Share Capital A/c (Final Call of Rs. 2 per share due on 10,000 shares)		20,000	20,000
	Bank A/c Dr. To Share First and Final Call A/c (Final call money received on 10,000 shares)		20,000	20,000

1.6.7 Issue of Shares for Consideration other than Cash

There are instances where a company enters into an arrangement with the vendors from whom it has purchased assets, whereby the latter agrees to accept, the payment in the form of fully paid shares of the company issued to them. Normally, no cash is received for such issue of shares. These shares can also be issued either at par, at premium or at discount, and the number of shares to be issued will depend upon the price at which the shares are issued and the amount payable to the vendor. Thus, to find out the number of shares to be issued to the vendor will be calculated as follows:

$$\text{No. of shares to be issued} = \frac{\text{Amount Payable}}{\text{Issue Price}}$$

For example, Rahul Limited purchased building from Handa Limited for Rs.5,40,000 and the payment is to be made by the issue of shares of Rs.100 each. The number of shares to be issued shall be worked out as follows in different situations :

(a) *When shares are issued at par, i.e. at Rs.100*

$$\text{Number of shares to be issued} = \frac{\text{Amount Payable}}{\text{Issue Price}} = \frac{\text{Rs. } 5{,}40{,}000}{\text{Rs. } 100} = 5{,}400 \text{ shares}$$

(b) *When shares issued at a discount of 10% i.e., at Rs.90 (100 – 10)*

$$\text{Number of shares to be issued} = \frac{\text{Amount Payable}}{\text{Issue Price}} = \frac{\text{Rs. } 5{,}40{,}000}{\text{Rs. } 90} = 6{,}000 \text{ shares}$$

(c) *When shares issued at premium of 20% i.e., at Rs.120 (100 + 20)*

$$\text{Number of shares to be issued} = \frac{\text{Amount Payable}}{\text{Issue Price}}$$

$$= \frac{\text{Rs. } 5,40,000}{\text{Rs. } 120}$$

$$= 4,500 \text{ shares}$$

The journal entries recorded for the share issued for consideration other than cash in above situations will be as follows :

Books of Rahul Limited
Journal

Date	*Particulars*		*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Building A/c	Dr		5,40,000	
	To Handa Limited				5,40,000
	(Building purchased)				
(a)	*When shares are issued at par*				
	Handa Limited	Dr.		5,40,000	
	To Share Capital A/c				5,40,000
	(5,400 Shares issued at par)				
(b)	*When shares are issued at Discount of 10%*				
	Handa Limited	Dr.		5,40,000	
	Discount on Issue of Shares A/c	Dr.		60,000	
	To Share Capital A/c				6,00,000
	(6,000 shares issued at Rs.90 per share)				
(c)	*When shares are issued at premium of 20%*				
	Handa Limited	Dr.		5,40,000	
	To Share Capital A/c				4,50,000
	To Securities Premium A/c				90,000
	(4,500 shares issued at Rs.120 per share)				

Illustration 10

Jindal and Company purchased a machine from High-Life Machine Limited for Rs.3,80,000. As per purchase agreement, Rs. 20,000 were paid in cash and balance by issue of shares of Rs.100 each. What will be the entry passed if the share are issued :

(a) at par
(b) at 10% discount
(c) at 20% premium

Solution

Number of shares will be calculated as follows:

i. When shares issued at par

$$\frac{\text{Rs. } 3,60,000}{\text{Rs.}100} = 3,600 \text{ shares}$$

ii) When shares issued at discount

$$\frac{\text{Rs. } 3,60,000}{\text{Rs.}90} = 4,000 \text{ shares}$$

iii) When shares issued at premium

$$\frac{\text{Rs. } 3,60,000}{\text{Rs.}120} = 3,000 \text{ shares}$$

Books of Jindal and Company

Journal

Date	*Particulars*		*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Machine A/c	Dr.		3,80,000	
	To Bank A/c				20,000
	To High Life machine Limited				3,60,000
	(Machine purchased and Rs.20,000 paid in cash and the balance paid by issue of share)				
(a)	*When shares are issued at par*				
	High-Life Machine Limited	Dr.		3,60,000	
	To Share Capital A/c				3,60,000
	(3,600 Shares of Rs.100 each)				
(b)	*When shares are issued at discount*				
	High Life Machine Limited	Dr.		3,60,000	
	Discount on Issue of Shares A/c	Dr.		40,000	
	To Share Capital A/c				4,00,000
	(4,000 shares of Rs.90 per share issued at discount)				
(c)	*When shares are issued at premium*				
	High Life Machine Limited	Dr.		3,60,000	
	To Share Capital A/c				3,00,000
	To Securities Premium A/c				60,000
	(3,000 shares issued at Rs.120 per share)				

Test your Understanding – II

Choose the Correct Answer.

(a) Equity share holders are :
  (i) creditors
  (ii) owners
  (iii) customers of the company.

(b) Nominal share capital is :
  (i) that Part of the authorised capital which is issued by the company.
  (ii) the amount of capital which is actually applied for by the prospective shareholders.
  (iii) the maximum amount of share capital which a company is authorised to issue.
  (iv) the amount actually paid by the shareholders.

(c) Interest on calls-in-arrears is charged according to "Table A" at :
  (i) 5 %
  (ii) 6 %
  (iii) 8 %
  (iv) 11 %

(d) Money received in advance from shareholders before it is actually called-up by the directors is :
  (i) debited to calls-in-advance account
  (ii) credited to calls-in-advance account
  (iii) debited to calls account.

(e) Shares can be forfeited :
  (i) for non-paymnt of call money
  (ii) for failure to attend meetings
  (iii) for failure to repay the loan to the bank
  (iv) for which shares are pledged as a security.

(f) The balance of share forfeited account after the reissue of forfeited shares is transferred to :
  (i) general reserve
  (ii) capital redemption reserve
  (iii) capital reserve
  (iv) reveneue reserve

(g) Balance of share forfeiture account is shown in the balance sheet under the item :
  (i) current liabilities and provisions
  (ii) reserves and surpluses
  (iii) share capital account
  (iv) unsecured loans

1.7 Forfeiture of Shares

It may happen that some shareholders fail to pay one or more instalments, viz. allotment money and/or call money. In such circumstances, the company can forfeit their shares, i.e. cancel their allotment and treat the amount already received thereon as forfeited to the company within the framework of the provisions in its articles. There provisions are usually based on Regulations 29 to 35 of the Table A which authorise, the directors to forefeit the shares for non-payment of calls made. For this purpose, they have to strictly follow the procedure laid down in this regard.

When shares are forefeited all entries relating to the shares forfeited, except those relating to premium, already recorded in the accounting records, must be reversed. Accordingly, share capital account is debited with the amount called-up in respect of shares are forfeited and crediting (i) the espective unpaid calls account's or calls in arrears account, as the case may be will the unpaid amount, and (ii) share foreited account with the amount already received. Thus, the journal entry will be as follows:

Share Capital A/c Dr.
  To Share Forfeiture A/c
  To Share Allotment A/c
  To Share Calls A/c (individually)
(..... shares forfeited for non-payment of
allotment money and calls made)

Note : In case 'Calls-in-Arrears' account is maintained by a company, 'Calls-in-Arrears' account would be credited in the above entry instead of 'Share Allotment' and/or 'Share Call or Calls' account.

The balance of shares forfeited account is shown as an addition to the total paid-up capital of the company under the heading 'Share Capital' on the liabilities side of the balance sheet till the forfeited shares are reissued.

Illustration 11

Handa Limited issued 10,000 equity shares of 100 each payable at follows: Rs. 25 on application, Rs. 30 on allotment, Rs. 20 on first call and Rs. 30 on second and final call 10,000 shares were applied for and allotment. All money due was received with the exception of both calls on 300 shares held by Supriya. These shares were forfeited. Give necessary journal entries.

Solution

Books of Handa Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr. To Share Application A/c (Application money on 10,000 shares @Rs.25 per share received)		2,50,000	 2,50,000

	Share Application A/c Dr. To Share Capital A/c (Application money transferred to share capital)		2,50,000	 2,50,000
	Share Allotment A/c Dr. To Share Capital A/c (Money due on allotment of 10,000 shares @Rs. 30 per share)		3,00,000	 3,00,000
	Bank A/c Dr. To Share Allotment A/c (Money received on 10,000 shares @ Rs. 30 per share on allotment)		3,00,000	 3,00,000
	Share First Call A/c Dr. To Share Capital A/c (Money due on 10,000 shares @ Rs. 20 per share on Ist Call)		2,00,000	 2,00,000
	Bank A/c Dr. To Share First Call A/c (First call money received except for 300 shares)		1,94,000	 1,94,000
	Share Second and Final Call A/c Dr. To Share Capital A/c (Money due on 10,000 shares @ Rs. 30 per share on Second and Final Call)		3,00,000	 3,00,000
	Bank A/c Dr. To Share Second and Final Call A/c (Second and Final Call money received except for 300 shares)		2,91,000	 2,91,000
	Share Capital A/c Dr. To Share First Call A/c To Share Second and Final Call A/c To Share Forfeiture A/c (Three hundred shares Forfeited)		30,000	 6,000 9,000 15,000

Forfeiture of Shares issued at a Premium: Where shares were originally issued at a premium and the premium amount has been fully realised, and later on some share are forfeited due to non-payment of call money, the accounting treatment of forfeiture would be on the same pattern as in the case of shares issued at par. The important point to be noted in this context is that the share premium account is not to be debited at the time of forfeiture if the premium has been received in respect of the forefeited share.

In case, however, if the premium amount has not been received, either wholly or partially, in respect of the shares forfeited, the Share Premium Account will also be debited with the amount of premium not received along-with the Share Capital Account at the time forfeiture. This will usually be the case when even the amount due on allotment has not been received. Thus, the journal entry to record the forfeiture of shares issued at a premium on which premium has not been fully received, will be :

Share Capital A/c Dr.
Securities Premium A/c Dr.
To Share Forfeiture A/c
To Share Allotment A/c
and/or
To Share Calls A/c (individually)
(..... shares forefeited for non-payment of allotment money and calls made)

Note: Where Calls-in-Arrears Account is maintained, Calls-in-Arrears Account is credited and not Share Allotment and/or Share Call/Calls Accounts.

Illustration 12

Sahil, a share holder, failed to pay the share second and final call of Rs. 20 on 1,000 shares issued to him at Rs. 120 (face value of Rs. 100 per share). His shares were forfeited after the second and final call. Give the necessary journal entry for forefeiture of the shares.

Solution

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Share Capital A/c Dr.		1,00,000	
	To Share IInd and Final Call A/c			20,000
	To Share Forfeiture A/c			80,000
	(Forfeiture of 300 shares for non-payment of the final call)			

Illustration 13

Sunena, a shareholder holding 500 shares of Rs.10 each, did not pay the allotment money of Rs. 4 per share (including a premium of Rs. 2) and the first and final call of Rs. 3. Her shares were forfeited after the first and final call. Give journal entry for forefeiture of the shares.

Solution

Date	Particulars		L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Share Capital A/c	Dr.		5 ,000	
	Securities Premium A/c	Dr.		1,000	
	To Share Allotment A/c				2,000
	To Share Ist and Final Call A/c				1,500
	To Share Forfeiture A/c				2,500
	(Forfeiture of 500 shares for non-payment of Ist and final call)				

Forfeiture of Shares Issued at a Discount: Where shares forfeited were originally issued at a discount, the discount applicable to such shares must be cancelled or written back. Hence the Discount on Issue of Shares Account should be credited at the time of forfeitures. So, that the balance on 'Discount on Issue of Shares Account' relates only to the remaining shares forming part of Share Capital Account. Thus, the journal entry to record the forfeiture will be :

Share Capital A/c	Dr.
To Share Forfeiture A/c	
To Discount on Issue of Shares	
To Share Allotment A/c	
To Share Calls A/c	
or	
To Calls-in-Arrears A/c	
(Forefeiture of ..... shares for non-payment of allotment money and the calls made).	

Illustration 14

Madan Limited invited application for 20,000 shares of Rs. 100 each at a discount of 10%, payable at Rs. 25 on application, Rs. 25 on allotment, Rs. 25 on first call and Rs. 15 on second and final call. Ritu who applied for 1,000 shares was allotted 600 shares and the excess application money adjusted against the allotment money on the shares allotted. These shares were forfeited after the first call. Journalise the transaction for forfeiture after she having failed to pay:

1. The allotment money and the first call, and
2. the first call only.

Solution

Books of Madam Limited
Journal

1. When the Allotment and first call is not paid

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Share Capital A/c Dr.		51,000	
	To Discount on Issue of Shares A/c			6,000
	To Share Allotment A/c			5,000
	To Share First Call A/c			15,000
	To Share Forfeiture A/c			25,000
	(600 shares forfeited after First Call for non-payment of allotment and First Call money)			

Note: The amount due on allotment was Rs. 5,000 only as the excess application money of Rs. 10,000 had been adjusted against the allotment money of Rs. 15,000 due from her.

2. When only the first call is not paid

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Share Capital A/c Dr.		51,000	
	To Discount on issue of shares A/c			6,000
	To Share First Call A/c			15,000
	To Share Forfeiture A/c			30,000
	(600 shares forfeited after First Call on non-payment of First Call money)			

Illustration 15

Ashok Limited issued 3,00,000 equity shares of Rs. 10 each at a premium of Rs. 2 per share, payable at Rs. 3 on application, Rs. 5 on allotment (including premium) and the balance in two calls of equal amount.

Applications were received for 4,00,000 shares and pro-rata allotment was made to all the applicants. The excess application money was adjusted towards allotment. Mukesh who was allotted 800 shares failed to pay both the calls and his shares were forfeited after the second call. Record necessary journal entries in the books of Ashok Limited and also show the balance sheet:

Solution

Books of Ashok Limited
Journal

Date	Particulars		L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Bank A/c	Dr.		12,00,000	
	To Equity Share Application A/c				12,00,000
	(Application money received on 4,00,000 shares)				
	Equity Share Application A/c	Dr.		12,00,000	
	To Equity Share Capital A/c				9,00,000
	To Equity Share Allotment A/c				3,00,000
	(Application money on 3,00,000 shares transferred to share capital account and the excess amount adjusted to share allotment account)				
	Equity Share Allotment A/c	Dr.		15,00,000	
	To Equity Share Capital A/c				9,00,000
	To Securities Premium A/c				6,00,000
	(Allotment money due on 3,00,000 shares)				
	Bank A/c	Dr.		12,00,000	
	To Equity Share Allotment A/c				12,00,000
	(Allotment amount received after adjusting excess money received with application)				
	Equity Share First Call A/c	Dr.		6,00,000	
	To Equity Share Capital A/c				6,00,000
	(First Call amount due on 3,00,000 shares)				
	Bank A/c	Dr.		5,98,400	
	Calls in arrears A/c	Dr.		1,600	
	To Equity Share First Call A/c				6,00,000
	(First Call amount received on 2,99,200 shares)				
	Equity Share Second and Final Call A/c	Dr.		6,00,000	
	To Equity Share Capital A/c				6,00,000
	(Second Call amount due)				
	Bank A/c	Dr.		5,98,400	
	Calls in Arrears A/c	Dr.		1,600	
	To Equity Share Second and Final Call A/c				6,00,000
	(Amount on 2,99,200 shares received)				

	Equity Share Capital A/c	Dr.		8,000	
	To Share Forfeited A/c				4,800
	To Call in Arrears A/c				3,200
	(Forfeiture of 800 shares)				

Balance Sheet of Ashok Limited as on ....

Liability	*Amount*	*Assets*	*Amount*
Share Capital	29,92,000	Bank	35,96,800
Securities premium	6,00,000		
Forfeited Share	4,800		
	35,96,800		**35,96,800**

Illustration 16

High Light India Ltd. invited applications for 30,000 Shares of Rs. 100 each at a premium of Rs. 20 per share payable as follows :

On Application	Rs. 40 (including Rs.10 premium)
On Allotment	Rs. 30 (including Rs.10 premium)
On First Call	Rs. 30
On Second & Final Call	Rs. 20

Applications were received for 40,000 shares and pro-rata allotment was made on the application for 35,000 share. Excess application money is to be utilised towards allotment.

Rohan to whom 600 Shares allotted failed to pay the allotment money and his shares were forfeited after allotment.

Aman who applied for 1,050 shares failed to pay first call and his share were forfeited after Ist Call.

Second and final call was made. All the money due on IInd call have been received.

Of the shares forfeited, 1,000 share were reissued as fully paid-up for Rs. 80 per share, which included the whole of Aman's shares.

Record necessary journal entries in the books of High Light India Ltd.

Solution

Date	Particulars		L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Bank A/c	Dr.		16,00,000	
	To Share Application A/c				16,00,000
	(Application money received on 40,000 shares)				
	Share Application A/c	Dr.		14,00,000	
	To Share Capital A/c				9,00,000
	To Securities Premium A/c				3,00,000
	To Share Allotment A/c				2,00,000
	(Application money transferred to share capital account, securities premium account and the excess money transfered to share allotment account)				
	Share Allotment A/c	Dr.		9,00,000	
	To Share Capital A/c				6,00,000
	To Securities Premium A/c				3,00,000
	(Money due on allotment)				
	Share Application A/c	Dr.		2,00,000	
	To Bank A/c				2,00,000
	(Amount returned on 500 shares)				
	Bank A/c	Dr.		6,86,000	
	To Share Application A/c				6,86,000
	(Amount received in allotment)				
	Share Capital A/c	Dr.		30,000	
	Securities Premium A/c	Dr.		12,000	
	To Share Allotment A/c				14,000
	To Share Forfeiture A/c				28,000
	(Forfeiture of 600 shares of Rohan for non-payment of allotment money)				
	Share First Call A/c	Dr.		8,82,000	
	To Share Capital A/c				8,82,000
	(First Call money due on 29,400 shares)				
	Bank A/c	Dr.		8,55,000	
	To Share First Call A/c				8,55,000
	(First call money received on 28,500 shares)				

	Share Capital A/c Dr.		72,000	
	To Share First Call A/c			27,000
	To Share Forfeiture A/c			45,000
	(Forfeiture of 900 Aman Shares)			
	Share IInd & Final Call A/c Dr.		5,70,000	
	To Share Capital A/c			5,70,000
	(IInd & Final Call money due on 28,500 shares)			
	Bank A/c Dr.		5,70,000	
	To Share IInd & Final Call A/c			5,70,000
	(Due money received)			
	Bank A/c Dr.		80,000	
	Share Forfeiture A/c Dr.		20,000	
	To Share Capital A/c			1,00,000
	(Reissue of 1,000 forfeited shares)			
	Share Forfeiture A/c Dr.		29,666	
	To Capital Reserve		29,666	
	(Profit on 1,000 reissued shares transferred to capital reverve)			

Working Notes :

(I) Excess amount received on Rohan's application

Rohan has been alloted = 600 Shares

He must have applied for $\frac{\text{Rs. } 35{,}000}{\text{Rs. } 30{,}000}$ 600 700 Shares

		Rs.
Amount received from Rohan	= 700 × Rs. 40	28,000
Amount Adjusted on Application	= 600 × Rs. 40	(24,000)
Amount Adjusted on Allotment		**4,000**
Money due on Allotment	= 600 × Rs. 30	18,000
Money Adjusted		(4,000)
Balance due on Allotment		**14,000**

(II) Amount recieved on Allotment

Total Amount due on Allotment = Rs. 30,000 × Rs. 30	= 9,00,000
Amount received on Application	(2,00,000)
	7,00,000

Amount not received on Rohan's Share		(14,000)
Money received on First Call		**6,86,000**

(III) First Call money due on 29,400 shares

	29,400 × Rs. 30 =	8,82,000
Application money not received on 900 Shares	900 × Rs. 30	(27,000)
		8,55,000

(IV) 1000 shares have been reissued including 900 shares of Aman and Balance 100 shares of Rohan

Profit on 100 shares = $\dfrac{28,000}{600} \quad 100$	=	4,666
Profit in 900 shares	=	45,000
		49,666
Less: Loss on issue of 1,000 shares		(20,000)
		29,666

(V) Balance in Share forfeiture Account of 500 shares

Rs. $\dfrac{28,000}{600} \quad 500$ = Rs. 23,334

Do it Yourself

1. A company forfeited 100 equity shares of Rs.10 each issued at a premium of 20% for non-payment of final call of Rs.5 including the premium. Show the journal entry to be passed for forefeiture of shares.
2. A company forfeited 800 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 and pass the journal entry for forefeiture of the shares.

Illustration 17

X Ltd. issued for public subscription 40,000 equity shares of Rs. 10 each at premium of Rs. 2 per share payable as under :

On application	Rs. 4 per share
On Allotment	Rs. 5 per share (including premium)
On Call	Rs. 3 per share

Applications were received for 60,000 shares. Allotment was made pro-rata to the applicants for 48,000 shares, the remaining applications being rejected. Money overpaid on application was applied towards sums due on allotment.

Shri Chitnis, to whom 1,600 shares were allotted, failed to pay the allotment money and Shri Jagdale, to whom 2,000 shares were allotted, failed to pay the call money. These shares were subsequently forfeited.

Record journal entries in the books of the company to record the above transactions.

Solution

Books of X Ltd.
Journal

Date	*Particulars*		*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c	Dr.		2,40,000	
	To Equity Share Application A/c				2,40,000
	(Money received on applications for 60,000 shares @ Rs. 4 per share)				
	Equity Share Application A/c	Dr.		2,40,000	
	To Equity Share Capital A/c				1,60,000
	To Equity Share Allotment A/c				32,000
	To Bank a/c				48,000
	(Application amount transferred to share capital, money refunded on rejected applications and excess application money under pro-rata distribution credited to share allotment)				
	Equity Share Allotment A/c	Dr.		2,00,000	
	To Equity Share Capital A/c				1,20,000
	To Securities Premium A/c				80,000
	(Amount due on allotment of 40,000 shares @ Rs. 5 per share including premium)				
	Bank A/c	Dr.		1,61,280	
	Calls-in-Arrears A/c	Dr.		6,720	
	To Equity Share Allotment A/c				1,68,000
	(Money received consequent upon allotment)				
	Equity Share Call A/c	Dr.		1,20,000	
	To Equity Share Capital A/c				1,20,000
	(First call money due on 40,000 shares @ Rs. 3 per share)				

	Bank A/c Dr. Calls-in-Arrears A/c Dr. To Equity Share Call A/c (Money received on first call)		1,09,200 10,800	 1,20,000
	Equity Share Capital A/c Dr. Securities Premium A/c Dr. To Forfeited Shares A/c To Call-in-Arrears A/c (Entry for forfeiture of 3,600 shares)		36,000 3,200	 21,680 17,520

Working Notes :

I Amount received on allotment **Rs.**

a)	Amount due on allotment 40,000 shares × Rs. 5 per share	2,00,000
b)	Amount actually due on allotment	2,00,000
	Amount due on allotment	
	Less excess Application amount Applied to allotment	32,000
	Amount actually due	1,68,000
c)	Allotment amount due from Chitnis	8,000
	Allotment money on Chitnis's share 1,600 shares × Rs. 5 per share	
	Less excess application money paid Due to pro-rata distribution – (1,920 shares – 1,600 shares) 320 × 4	1,280
		6,720
	Allotment amount due from Chitnis	

According to the ratio of pro-rata distribution (40,000 shares : 48,000 shares), for 1,600 shares to be allotted, Chitnis must have applied for 1,920 shares (1,600 shares × 6/5).

d)	Allotment money received (Amount actually due on Allotment)	1,68,000
	Less Amount unpaid by Chitnis	(6,720)
	Amount received	1,61,280

II. Balance on Shares Forfeited Account

Amount paid by Chitnis :	
1,920 Shares applied for × Rs. 4 per share	7,680
Amount paid by Jagdale :	
2,000 Shares × (Rs. 4 + Rs. 3)	14,000
Total balance	21,680

Note : Premium amount on Jagdale's shares will not be taken into account as it has been received in full by the company.

1.7.1 Re-issue of Forfeited Shares

The directors can either cancel or re-issue the forefeited shares. In most cases, however, they reissue special shares which may be at par, at premium or at a discount. Normally, the forfeited shares are reissued as fully paid and at a discount. In this context, it may be noted that the amount of discount allowed cannot exceed the amount that had been received on forfeited shares on their original issue, and that the discount allowed on reissue of forfeited shares should be debited to the 'Share Forfeited Account'. The balance, if any, left in the Share-Forfeited Account, should be treated as capital profit and transferred to Capital Reserve Account. For example, when a company forfeits 200 shares of Rs. 10 each on which Rs. 600 had been received, it can allow a maximum discount of Rs. 600 on their reissue. Assuming that the company reissues these shares for Rs. 1,800 as fully paid, the necessary journal entry will be:

Bank A/c	Dr.	1,800	
Share Forfeiture A/c	Dr.	200	
To Share Capital A/c			2,000
(Reissue of 200 forfeited shares at Rs. 9 per share as fully paid)			

This shall leave a balance of Rs. 400 in share forfeited account which should be transferred to Capital Reserve Account by recording the following journal entry:

Forfeited Share A/c	Dr.	400	
To Capital Reserve			400
(Profit on reissue of forfeited shares transferred)			

Another important point to be noted in this context is that the capital profit arises only in respect of the forefited share reissued, and not on all forefeited shares. Hence, when a part of the forfeited shares are reissued, the whole balance of Share Forfeited Account cannot be transferred to the capital reserve. In such a situation, it is only the proportionate amount of balance that relates to the forefeited shares reissued which should that relates to the forefeited shares reissued which should be transferred to capital reserve, ensuring that the remaining balance in Share forefeited Account is equal to the amount forefeited on shares not yet reissued.

Illustration 18

The director of Poly Plastic Limited resolved that 200 equity shares of Rs.100 each be forfeited for non-payment of the IInd and final call of Rs.30 per share. Out of these, 150 shares were re-issued at Rs.60 per share to Mohit.

Show the necessary journal entries .

Solution

Books of Poly Plastic Limited
Journal

Date	Particulars		L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Share Capital A/c	Dr.		20,000	
	To Share Forfeited A/c				14,000
	To Share IInd and Final Call A/c				6,000
	(200 shares forfeited for non-payment of final call at Rs.30 per share)				
	Bank A/c	Dr.		9,000	
	Share Forfeiture A/c	Dr.		6,000	
	To Share Capital A/c				15,000
	(Reissue of 150 shares of Rs.100 each, issued as fully paid for Rs.60 each)				
	Share Forfeited A/c	Dr.		4,500	
	To Capital Reserve				4,500
	(Profit on reissue of 150 forfeited shares transferred to capital reserve)				

Working Notes :

		(Rs.)	
Total amount forfeited on 200 shares	=	14,000	(200 × Rs.70)
Amount forfeited on 150 shares	=	10,500	(150 × Rs.70)
Amount forfeited on 50 shares	=	3,500	(50 × Rs.70)
Amount of discount on reissue of 150 shares	=	6,000	(150 × Rs.40)
Amount of profit on reissued shares transferred to capital reserve	=	4,500	(Rs. 10,500 – Rs.6,000)
Balance left in share forfeited account (equal to amount forfeited on 50 shares)	=	4,500	(Rs.14,000 – Rs.6,000 – Rs. 3,500)

Illustration 19

On January 1, 2002, the director of X Ltd. issued for public subscription 50,000 equity shares of Rs. 10 each at Rs. 12 per share payable as to Rs. 5 on application (including premium), Rs. 4 on allotment and the balance on call in May 01, 2002.

The lists were closed on February 10, 2002 by which date applications for 70,000 were received. Of the cash received Rs. 40,000 was returned and Rs.60,000 was applied to the amount due on allotment, the balance of which was paid on February 16, 2002.

All the shareholders paid the call due on May 01, 2002 with the exception of an allottee of 500 shares.

These shares were forfeited on September 29, 2002 and reissued us fully paid at Rs. 8 per share on November 01, 2002.

The company, as a matter of policy, does not maintain a Calls-in-Arrears Account.

Give journal entries to record these share capital transactions in the books of X. Ltd.

Solution

Book of X. Ltd.
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
Feb.10	Bank A/c Dr. To Equity Share Application and Allotment A/c (Amount received on application for 70,000 shares @ Rs. 5 per share Including Premium)		3,50,000	 3,50,000
Feb.16	Equity Share Application A/c Dr. To Equity Share Capital A/c To Securities Premium A/c (Transfer of application money on 50,000 shares to share capital and premium accounts consequent upon allotment)		2,50,000	 1,50,000 1,00,000
Feb.16	Equity Share Allotment A/c Dr. To Equity Share Capital A/c (Amount due on allotment of 50,000 Shares @ Rs. 4 per share)		2,00,000	 2,00,000
Feb.16	Equity Share Application A/c Dr. To Bank A/c To Equity Share Allotment A/c (Money refunded for 8,000 shares and balance transfer to share capital account)		1,00,000	 1,00,000
Feb.16	Bank A/c Dr. To Equity Share Allotment A/c (Money received on allotment)		1,40,000	 1,40,000
May 1	Equity Share First & Final Call A/c Dr. To Equity Share Capital A/c (First call money due)		1,50,000	 1,50,000

May 1	Bank A/c Dr. To Equity Share First & Final Call A/c (Money received on first call)		1,48,500	 1,48,500
Sept.29	Equity Share Capital A/c Dr. To Share Forfeited A/c To Equity Share First & Final Call A/c (Forfeiture of 500 shares for non-payment of call)		5,000	 3,500 1,500
Nov. 1	Bank A/c Dr. Shares Forfeited A/c Dr. To Equity Share Capital A/c (Reissue of 500 forfeited shares as fully paid at Rs. 4 per share)		4,000 1,000	 5,000
Nov. 1	Share Forfeited A/c Dr. To Capital Reserve (Balance on Share Forfeited Accounts transferred to capital reserve)		2,500	 2,500

Illustration 20

A limited company forfeited 1,000 equity shares of Rs. 10 each, issued at a discount of 10 per cent, for non-payment of first call of Rs. 2 and second call of Rs. 3 per share.

These shares were reissued to A upon payment of Rs. 7,000 credited as fully paid.

The company maintains calls-in-arrears account.

Record journal entries in the books of the company relating to forfeiture of 1,000 shares and their reissue.

Solution

Books of Limited Company
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Equity Share Capital A/c Dr. To Share Forfeited A/c To Discount on the Issue of Share A/c To Calls-in-Arrears A/c (Forfeiture of 1,000 shares for non-payment of call and discount on issue written back)		10,000	 4,000 1,000 5,000

	Bank A/c Dr.		7,000	
	Discount on Issue of Shares a/c Dr.		1,000	
	Shares Forfeited A/c Dr.		2,000	
	To Equity Share Capital A/c			10,000
	(Reissue of 1,000 forfeited shares as fully paid at Rs. 7 per share, discount on issue written back and the balance debited to forfeited shares account)			
	Share Forfeited A/c Dr.		2,000	
	To Capital Reserve			2,000
	(Closure of forfeited shares)			

Illustration 21

O Limited issued a prospectus offering 2,00,000 Equity Shares of Rs. 10 each, at a premium of Rs. 2 per share, payable as follows:

On Application	Rs. 2.50 per share
On Allotment	Rs. 4.50 per share (including premium)
On First Call (three months from allotment)	Rs. 2.50 per share
On Second Call (three months after call)	Rs. 2.50 per share

Subscriptions were received for 3,17,000 shares on April 23, 2002 and the allotment made on April 30, was as under :

		Shares Allotted
(i)	Allotment in full (two applicants paid in full on allotment in respect of 4,000 shares each)	38,000
(ii)	Allotment of two shares for every three shares applied for	1,60,000
(iii)	Allotment of one share for every four shares applied for	2,000

Cash amounting to Rs. 77,500 (being application money received with applications on 31,000 shares upon which no allotments were made) was returned to applicants on May 6, 2002.

The amounts called from the allottees were received on the due dates with the exception of the final call on 100 shares. These shares were forfeited on November 15, 2002 and reissued to A on November 16 for payment of Rs. 9 per share.

Record journal entries other than those relating to cash, in the books of O Limited, and also show how the transactions would appear in the Balance Sheet, assuming that the Company paid interest due from it on October 31, 2002.

Solution

Book of O Limited
Journal

Date	*Particulars*		*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
April 30	Share application A/c	Dr.		7,15,000	
	To Equity Share Capital A/c				5,00,000
	To Equity Share Allotment A/c				1,75,000
	To Cash-in-Advance A/c				40,000
	(Transfer of Application Money to share capital after allotment and excess appliation money on 86,000 shares due to pro-rata allotment credited to share allotment)				
April 30	Equity Share Allotment A/c	Dr.		9,00,000	
	To Equity Share Capital A/c				5,00,000
	To Securities Premium A/c				4,00,000
	(Allotment amount due on 2,00,000 shares @ Rs. 4.50 per share including premium)				
July 31	Equity Share First Call A/c	Dr.		5,00,000	
	To Equity Share Capital A/c				5,00,000
	(First call money due on 2,00,000 shares @ Rs. 2.50 per share)				
July 31	Calls-in-Advance A/c	Dr.		20,000	
	To Equity share First Call A/c				20,000
	(Call in advance on 8,000 shares adjusted against first call money due)				
Oct. 31	Equity Share Second and Final Call A/c	Dr.		5,00,000	
	To Equity Share Capital A/c				5,00,000
	(Second call money due on 2,00,000 shares @ Rs. 2.50 per share)				
Oct. 31	Calls in Advance A/c	Dr.		20,000	
	To Equity Share Second and Final Call A/c				20,000
	(Calls in advance on 8,000 shares adjusted against second call money due)				

Nov. 15	Equity Share Capital A/c Dr.		1,000	
	To Equity Shares Forfeited A/c			750
	To Equity share Second and Final Call A/c			250
	(Forfeiture of 100 shares for the non-payment of call money)			
Nov. 16	Equity Shares Forfeited A/c Dr.		100	
	To Equity Share Capital A/c			100
	(Amount due from A for the reissue of 100 shares as fully paid at Rs. 9 per share)			
Nov. 16	Equity Shares Forfeited A/c Dr.		650	
	To Capital Reserve			650
	(The closure of forfeited shares)			

Cash Book

Dr. *Cr.*

Receipts	*Amount (Rs.)*	*Payments*	*Amount (Rs.)*
Equity Share Aplication	7,92,500	Equity Shares Application	77,500
Equity Share Allotment	6,85,000	Balance c/f	23,60,650
Equity Share First Call	4,80,000		
Equity Share Second and First Call	4,79,750		
Equity Share Capital	900		
	24,38,150		**24,38,150**

Working Notes :

1. Excess Application Money

Categories of Allotment	*No. of Shares Applied*	*No. of Share Alloted*	*Ratio of Allotment*
i	38,000	38,000	100%
i	2,40,000	1,60,000	2/3
iii	8,000	2,000	1/4
	2,86,000	**2,00,000**	

Therefore, refund of application money = 3,17,000 – 2,86,000 × Rs. 2.50

= Rs. 77,500

Application money received (2,86,000 shares @ Rs. 2.50) = Rs. 7,15,000

Application money due : (2,00,000 shares @ Rs. 2.50)	=	Rs. 5,00,000
Excess application money		Rs. 2,15,000

2. Amount of Calls-in-Advance

   As two allotees, each holding 4,000 shares, paid the full amount on allotment, amount of calls-in-advance is thus :
   8,000 shares × (Rs. 2.50 + Rs. 2.50) = Rs. 40,000

Box 4

Buy-Back of Shares : When a company purchased its own shares, it is called 'Buy-Back of Shares'. Section 77A of the Companies Act, 1956 provides such a facility to the companies and can buy its own shares from either of the following :

(a) Existing equity shareholders on a proportionate basis
(b) Open Market
(c) Odd lot shareholders
(d) Employees of the company

The company can buy back its own shares either from the free reserves, securities premium or from the proceeds of any shares or other specified securities. In case shares are bought back out of free reserves, the company must transfer a sum equal to the nominal value of shares bought back to 'Capital Redemption Reserve Account'.

Section 77A of The Companies Act 1956 has laid down the following procedures for buy-back of shares :

(a) The Articles of the Association must authorise the company for the buy-back of shares.
(b) A special resolution must be passed in the companies' Annual General Body meeting.
(c) The amount of buy-back of shares should not exceed 25% of the paid-up capital and free reserves.
(d) The debt-equity ratio should not be more than a ratio of 2:1 after the buy-back.
(e) All the shares of buy-back should be fully paid-up.
(f) The buy-back of the shares should be completed within 12 months from the date of passing the special resolution.
(g) The company should file a solvency declaration with the Registrar and SEBI which must be signed by at least two directors of the company.

Illustration 22

Garima Limited issued a prospectus inviting applications for 3,000 shares of Rs. 100 each at a premium of Rs.20 payable as follows:

On Application	Rs.20 per share
On Allotment	Rs.50 per share (Including premium)
On First call	Rs.20 per share
On Second call	Rs.30 per share

Applications were received for 4,000 shares and allotments made on pro-rata basis to the applicants of 3,600 shares, the remaining applications being rejected, money received on application was adjusted on account of sums due on allotment.

Renuka whom 360 shares were allotted failed to pay allotment money and calls money, and her shares were forfeited.

Kanika, the applicant of 200 shares failed to pay the two calls, her shares were also forfeited. All these shares were sold to Naman as fully paid for Rs.80 per share. Show the journal entries in the books of the company.

Solution

Books of Garima Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr.		80,000	
	To Share Application A/c			80,000
	(Application money received on 4,000 shares @ Rs. 20 per share)			
	Share Application A/c Dr.		80,000	
	To Share Capital A/c			60,000
	To Share Allotment A/c			12,000
	To Bank A/c			8,000
	(Transfer of application money on 3,000 shares to Share Capital Account, on 600 shares to Allotment Account, and on of 400 shares refunded)			
	Share Allotment A/c Dr.		1,50,000	
	To Share Capital A/c			90,000
	To Securities Premium A/c			60,000
	(Money due on allotment @ Rs. 50 per share on 3,000 shares including Rs.20 on account of share premium)			
	Bank A/c Dr.		1,21,440	
	To Share Allotment A/c			1,21,440
	(Money received on share allotment:*See note 1)*			
	Share First Call A/c Dr.		60,000	
	To Share Capital A/c			60,000
	(Money due on call on 3,000 shares @ Rs.20 per share)			

	Bank A/c Dr. To Share First Call A/c (First call money received on 2440 shares)		48,800	 48,800
	Share Second and Final Call A/c Dr. To Share Capital A/c (Money due on call on 3,000 shares @ Rs.30 per share)		90,000	 90,000
	Bank A/c Dr. To Share Second and Final Call A/c (Second and Final Call money received on 2,440 shares)		73,200	 73,200
	Share Capital A/c Dr. Securities Premium A/c *(See note 2)* To Share Allotment A/c To Share First Call A/c To Share Second and Final A/c To Shares Forfeited A/c *(See Note 3)* (Forfeiture of 560 shares)		56,000 7,200	 16,560 11,200 16,800 18,640
	Bank A/c Dr. Share Forfeiture A/c Dr. To Share Capital A/c (Reissue of 560 forfeited shares)		44,800 11,200	 56,000
	Shares forfeiture A/c Dr. To Capital Reserve (Profit on forfeiture and reissue of 560 forfeited shares transferred)		7,440	 7,440

Working Notes :

Amount received on allotment has been calculated as follows:

		(Rs.)
	Total money due on allotment (including premium)	1,50,000
Less :	Application money receive on 600 shares adjusted towards allotment money	12,000
	Net amount due on allotment on 3000 shares	1,38,000
Less :	Allotment money due on 360 shares alloted to	
	Renuka, not received $\frac{360}{3000} \times 1,38,000$	16,560
	Net amount received on 2,640 shares	1,21,440

Since the allotment money which includes securities premium of Rs. 20 per share has not been received. on 360 shares held by Renuka (now forfeited) has been debited to share premium account as per rules.

Amount forefeited has been worked out as follows :-

Application money received from Renuka: $360 \times \frac{3,600}{3,000}$ = 432 × Rs. 20 = Rs. 8,640

Application and Allotment money received from Kanika on 200 shares	Rs. 10,000
Total amount received on forefeited shares	Rs. 18,640

Do it Yourself

Excell Company Limited made an issue of 1,00,000 Equity Shares of Rs.10 each, payable as follows :

On Application	Rs.2.50 per share
On Allotment	Rs.2.50 per share
On Ist and Final Call	Rs.5.00 per share

X, the holder of 400 shares did not pay the call money and his shares were forfeited. Two hundred of the forfeited shares were reissued as fully paid at Rs.8 per share. Draft necessary journal entries and prepare Share Capital and Share Forfeited' accounts in the books of the company.

Test your Understanding – III

(a) If a Share of Rs. 10 on which Rs. 8 is called-up and Rs. 6 is paid is forfeited. State with what amount the Share Capital account will be debited.

(b) If a Share of Rs. 10 on which Rs. 6 has been paid is forfeited, at what minimum price it can be reissued.

(c) Allhuwalia Ltd. issued 1,000 equity shares of Rs. 100 each as fully paid-up in consideration of the purchase of plant and machinery worth Rs. 1,00,000. What entry will be recorded in company's journal.

Illustration 23

Sunrise Company Limited offered for public subscription 10,000 shares of Rs.10 each at Rs. 11 per share. Money was payable as follows:

Rs. 3 on application

Rs. 4 on allotment (including premium)

Rs. 4 on first and final call.

Applications were received for 12,000 shares and the directors made *pro-rata* allotment.

Mr. Ahmad, an applicant for 120 shares, could not pay the allotment and call money, and Mr. Basu, a holder of 200 shares, failed to pay the call. All these shares were forfeited.

Out of the forfeited shares, 150 shares (the whole of *Mr. Ahmad*'s shares being included) were issued at Rs. 8 per share. Record journal entries for the above transactions and prepare the share forfeited account.

Solution

Books of Sunrise Company Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c *(See Note 1)* Dr. To Share Application A/c (Application money received on 12,000 shares @ Rs. 3 per share)		36,000	 36,000
	Share Application A/c Dr. To Share Capital A/c To Share Allotment A/c (Transfer of application money to share capital account on 10,000 shares and the balance to allotment account)		36,000	 30,000 6,000
	Share Allotment A/c Dr. To Share Capital A/c To Securities Premium A/c (Money due on allotment @ Rs. 4 per share on 10,000 shares including Re 1 on account of share premium)		40,000	 30,000 10,000
	Bank A/c Dr. To Share Allotment A/c (Money received on share allotment: *See note 1)*		33,660	 33,660
	Share Ist and Final Call A/c Dr. Share Capital A/c (Money due on call on 10,000 shares @ Rs. 4 per share)		40,000	 40,000

	Bank A/c To Share Ist and Final Call A/c (Call money received on 9,700 shares)	Dr.		38,800	 38,800
	Share Capital A/c Securities Premium A/c *(See Note 2)* To Share Allotment A/c To Share Ist and Final Call A/c To Share Forfeiture A/c *(See Note 3)* (Forfeiture of 300 shares)	Dr.		3,000 100	 340 1,200 1,560
	Bank A/c Share Forfeiture A/c To Share Capital A/c (Reissue of 150 forfeited shares)	Dr. Dr.		1,200 300	 1,500
	Share Forfeiture A/c To Capital Reserve A/c *(See Note 4)* (Profit on forfeiture and reissue of 150 forfeited shares transferred)	Dr.		360	 360

Share Forfeiture Account

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Share Capital		300		Sundries		1,560
	Capital Reserve		360				
	Balance c/d		900				
			1,560				1,560

Working Notes :

1. Amount received on allotment has been calculated as follows:

		(Rs.)	(Rs.)
	Total money due on 10,000 shares @ Rs. 4 per share		40,000
Less:	Application Money Received on 2000 shares adjusted against allotment money net amount due on allotment		(6,000)
			34,000
Less:	Amount due from an applicant for 120 shares who was allotted only 100 shares $\frac{100}{10,000} \times 34,000$		(340)
	Amount received on allotment		33,660

2. Securities Premium Account has been debited only with Rs. 100 relating to 100 shares allotted Mr. Ahmad's shares from whom the allotment money (including premium) has not been received.

3. Shares–Forfeited Account represents the money received on forfeited shares excluding share premium. This has been worked–out as follows:

	(Rs.)
Mr. Ahmad has paid application money @ Rs. 3 per share on 120 shares	360
Mr. Basu has paid @ Rs. 6 per share on Two hundred shares in (application and allotment money excluding premium)	1,200
Total amount received	1,560

	(Rs.)
4. Amount received from *Mr. Ahmad* on 100 shares forfeited which have been reissued Amount received from *Mr. Basu* on 50	360
shares forfeited which have been reissued $\frac{50}{200} \times$ Rs. 1,200	300
Total amount received on One fifty shares which have been forfeited and laten reissued	660
Less: Discount on reissue of forfeited shares (150 Rs. 2)	300
Amount of Capital Profit transferred to capital reserve	360

Do it Yourself

Journalise the following :

(a) The directors of a company forfeited 200 equity shares of Rs. 10 each on which Rs. 800 had been paid. The Shares were re–issued upon payment of Rs. 1,500.

(b) A holds 100 shares of Rs. 10 each on which he has paid Re. 1 per share on application. B holds 200 Shares of Rs. 10 each on which he has paid Re. 1 on application Rs. 2 on allotment. C holds 300 shares of Rs. 10 each who has paid Re. 1 on applications, Rs. 2 on allotment and Rs. 3 on first call. They all failed to pay their arrears and second call of Rs. 4 per share as well. All the shares of A, B and C were forfeited and subsequently reissued at Rs. 11 per share as fully Paid–up.

Terms Introduced in the Chapter

1. Joint Stock Company
2. Share Capital
3. Authorised Capital
4. Issued Capital
5. Unissued Capital
6. Subscribed Capital
7. Called-up Capital
8. Uncalled Capital
9. Paid-up Capital
10. Reserve Capital
11. Share
12. Preference Share
13. Non-redeemable Preference Share
14. Equity Share
15. Issue of Shares for Consideration Other than Cash
16. Discount on Shares
17. Premium on Shares
18. Application Money
19. Minimum Subscription
20. Calls-on Shares
21. Calls-in-Arrears
22. Calls-in-Advance
23. Over subscription
24. Under-subscription
25. Forfeiture of Shares
26. Reissue of forfeited shares
27. Buy Back of Shares

Summary

Company: An organisation consisting of individuals called 'shareholders' by virtue of their holding the shares of a company, who can act as one legal person as regards its business through an elected board of directors.

Share: Fractional part of the capital, and forms the basis of ownership in a company; shares are generally of two types, viz. equity shares and preference shares, according to the provisions of The Companies Act, 1956. Preference shares again are of different types based on varying shades of rights attached to them.

Share Capital of a company is collected by issuing shares to either a select group of persons through the route of private placements and/or offered to the public for subscription. Thus, the issue of shares is basic to the capital of a company. Shares are issued either for cash or for consideration other than cash, the former being more common. Shares are said to be issued for consideration other than cash when a company purchases business, or some asset/assets, and the vendors have agreed to receive payment in the form of fully paid shares of a company.

Stages of Share Issue: The issue of shares for cash is required to be made in strict conformity with the procedure laid down by law for the same. When shares are issued for cash, the amount on them can be collected at one or more of the following stages:

(i) Application for shares

(ii) Allotment of shares

(iii) Call/Calls on shares.

Calls in arrears: Sometimes, the full amount called on allotment and/or call (calls) is not received from the allottees/shareholders. The amount not so received are cumulatively called 'Unpaid calls' or 'Calls-in-Arrears'. However, it is not mandatory for a company to maintain a separate Calls-in-Arrears Account. There are also instances where some shareholders consider it descreet to pay a part or whole of the amount not yet called-up on the shares allotted to them. Any amount paid by a shareholder in the excess of the amount due from him on allotment/call (calls) is known as 'Calls-in-Advance' for which a separate account is maintained. A company has the power to charge interest on calls-in-arrears and is under an obligation to pay interest on calls-in-advance if it accepts them in accordance with the provisions of Articles of Association.

Oversubscription: It is possible for the shares of some companies to be oversubscribed which means that applications for more shares are received than the number offered for subscription through the prospectus. Under such a condition, the alternatives available to the directors are as follows :

(i) They can accept some applications in full and totally reject the others,

(ii) A pro-rata distribution can be made by them,

(iii) A combination of the above two alternatives can be adopted by them.

If the amount of minimum subscription is not received to the extent of 90%, the issue devolves. In case the applications received are less than the number of shares offered to the public, the issue is termed as 'under subscribed'.

Issue of Shares at Premium: Irrespective of the fact that shares have been issued for consideration other than cash, they can be issued either at par or at premium. The issue of shares at par implies that the shares have been issued for an amount exactly equal to their face or nominal value. In case shares are issued at a premium, i.e. at an amount more than the nominal or par value of shares, the amount of premium is credited to a separate account called 'Securities Premium Account', the use of which is strictly regulated by law.

Issue of Shares at Discount: Shares can as well be issued at a discount, i.e. on an amount less than the nominal or par value of shares provided the company fully complies with the provisions laid down by law with regard to the same. Apart from such compliance, shares of a company cannot ordinarily be issued at a discount. When shares are issued at a discount, the amount of discount is debited to 'Discount on Issue of Share Account', which is in the nature of capital loss for the company.

Forfeiture of Shares: Sometimes, shareholders fail to pay one or more instalments on shares allotted to them. In such a case, the company has the authority to forfeit shares of the defaulters. This is called 'Forfeiture of Shares'. Forfeiture means the cancellation of allotment due to breach of contract and to treat the amount already received on such shares as forfeited to the company. The precise accounting treatment of share forfeiture depends upon the conditions on which the shares have been issued — at par, premium or discount. Generally speaking, accounting treatment on forfeiture is to reverse the entries passed till the stage of forfeiture, the amount already received on the shares being credited to Forfeited Shares Account.

Re-issue of Shares: The management of a company is vested with the power to reissue the shares once forfeited by it, subject of course, to the terms and conditions in the articles of association relating to the same. The shares can be reissued even at a discount provided the amount of discount allowed does not exceed the credit balance of forfeited shares' account relating to shares being reissued. Therefore, discount allowed on the reissue of forfeited shares is debited to forfeited shares' account.

Once all the forfeited shares have been reissued, any credit balance on forfeited shares' account is transferred to Capital Reserve representing profit on forfeiture of shares. In the event of all forfeited share not being reissued, the credit amount on forfeited shares' account relating to shares yet to be reissued is carried forward and the remaining balance on the account only is credited to capital reserve account.

Question for Practice

Short Answer Questions

1. What is public company?
2. What is private limited company.
3. Define Government Company?
4. What do you mean by a listed company?
5. What are the uses of securities premium?
6. What is buy-back of shares?
7. Write a brief note on 'Minimum Subscription".

Long Answer Questions

1. What is meant by the word 'Company'? Describe its characteristics.
2. Explain in brief the main categories in which the share capital of a company is divided.
3. What do you mean by the term 'share'? Discuss the type of shares, which can be issued under the Companies Act, 1956 as amended to date.
4. Discuss the process for the allotment of shares of a company in case of over subscription.
5. What is a 'Preference Share'? Describe the different types of preference shares.
6. Describe the provisions of law relating to 'Calls-in-Arrears' and 'Calls-in-Advance'.
7. Explain the terms 'Over-subscription' and 'Under-subscription'. How are they dealt with in accounting records?
8. Describe the purposes for which a company can use 'Securities Premium Account'.
9. State clearly the conditions under which a company can issue shares at a discount.
10. Explain the term 'Forfeiture of Shares' and give the accounting treatment on forfeiture.

Numerical Questions

1. Anish Limited issued 30,000 equity shares of Rs.100 each payable at Rs.30 on application, Rs.50 on allotment and Rs.20 on Ist and final call. All money was duly received.

   Record these transactions in the journal of the company.

2. The Adersh Control Device Ltd was registered with the authorised capital of Rs.3,00,000 divided into 30,000 shares of Rs.10 each, which were offered to the public. Amount payable as Rs.3 per share on application, Rs.4 per share on allotment and Rs.3 per share on first and final call. These share were fully subscribed and all money was dully received. Prepare journal and Cash Book.

3. Software solution India Ltd inviting application for 20,000 equity share of Rs.100 each, payable Rs.40 on application, Rs.30 on allotment and Rs.30 on call. The company received applications for 32,000 shares. Application for 2,000 shares were rejected and money returned to Applicants. Applications for 10,000 shares were accepted in full and applicants for 20,000 share allotted half of the number of share applied and excess application money adjusted into allotment. All money received due on allotment and call.

   Prepare journal and cash book.

4. Rupak Ltd. issued 10,000 shares of Rs.100 each payable Rs.20 per share on application, Rs.30 per share on allotment and balance in two calls of Rs.25 per share. The application and allotment money were duly received. On first call all member pays their dues except one member holding 200 shares, while another member holding 500 shares paid for the balance due in full. Final call was not made.

   Give journal entries and prepare cash book.

5. Mohit Glass Ltd. issued 20,000 shares of Rs.100 each at Rs.110 per share, payable Rs.30 on application, Rs.40 on allotment (including Premium), Rs.20 on first call and Rs.20 on final call. The applications were received for 24,000 shares and allotted 20,000 shares and reject 4,000 shares and amount returned thereon. The money was duly received.

   Give journal entries.

6. A limited company offered for subscription of 1,00,000 equity shares of Rs.10 each at a premium of Rs.2 per share. 2,00,000. 10% Preference shares of Rs.10 each at par.

   The amount on share was payable as under :

	Equity Shares	*Preference Shares*
On Application	Rs.3 per share	Rs.3 per share
On Allotment	Rs.5 per share (including a premium)	Rs.4 per share
On First Call	Rs.4 per share	Rs.3 per share

   All the shares were fully subscribed, called-up and paid.

   Record these transactions in the journal and cash book of the company:

7. Eastern Company Limited, having an authorised capital of Rs.10,00,000 in shares of Rs.10 each, issued 50,000 shares at a premium of Rs.3 per share payable as follows :

On Application	Rs.3 per share
On Allotment (including premium)	Rs.5 per share
On first call (due three months after allotment)	Rs.3 per share

and the balance as and when required.

Applications were received for 60,000 shares and the directors allotted the shares as follows :

(a) Applicants for 40,000 shares received shares, in full.

(b) Applicants for 15,000 shares received an allotment of 8,000 shares.

(c) Applicants for 500 shares received 200 shares on allotment, excess money being returned.

All amounts due on allotment were received.

The first call was duly made and the money was received with the exception of the call due on 100 shares.

Give journal and cash book entries to record these transactions of the company. Also prepare the Balance Sheet of the company.

8. Sumit Machine Ltd issued 50,000 shares of Rs.100 each at discount of 5%. The shares were payable Rs.25 on application, Rs. 40 on allotment and Rs.30 on first and final call. The issue were fully subscribed and money were duly received except the final call on 400 shares. The discount was adjusted on allotment.

Give journal entries and prepare balance sheet.

9. Kumar Ltd purchases assets of Rs.6,30,000 from Bhanu Oil Ltd. Kumar Ltd. issued equity share of Rs.100 each fully paid in consideration. What journal entries will be made, if the share are issued, (a) at par, (b) at discount of 10 % and (c) at premium of 20%.

(**Ans:** No. of shares issued (a) 6,300, (b) 7,000, (c) 5250)

10. Bansal Heavy machine Ltd purchased machine worth Rs.3,20,000 from Handa Trader. Payment was made as Rs.50,000 cash and remaining amount by issue of equity share of the face value of Rs. 100 each fully paid at an issue price of Rs.90 each.

Give journal entries to record the above transaction.

(**Ans** : No of shares issued 3,000 shares)

11. Naman Ltd issued 20,000 shares of Rs.100 each, payable Rs.25 on application, Rs.30 on allotment , Rs.25 on first call and The balance on final call. All money

duly received except Anubha, who holding 200 shares did not pay allotment and calls money and Kumkum, who holding 100 shares did not pay both the calls. The directors forfeited shares of Anubha and kumkum.

Give journal entries.

12. Kishna Ltd issued 15,000 shares of Rs.100 each at a premium of Rs.10 per share, payable as follows:

On application	Rs.30
On allotment	Rs.50 [including premium]
On first and final call	Rs.30

All the shares subscribed and the company received all the money due, With the exception of the allotment and call money on 150 shares. These shares were forfeited and reissued to Neha as fully paid share of Rs.12 each.

Give journal entries in the books of the company.

(**Ans** : Capital Reserve Rs. 4,500)

13. Arushi Computers Ltd issued 10,000 equity shares of Rs.100 each at 10% discount. The net amount payable as follows:

On application	Rs.20
On allotment	Rs.30 (Rs.40 – discount Rs.10)
On first call	Rs.30
On final call	Rs.10

A shareholder holding 200 shares did not pay final call. His shares Were forfeited. Out of these 150 shares were reissued to Ms.Sonia at Rs.75 per shares.

Give journal entries in the books of the company.

(Ans : Capital Reserve Rs.9,750)

14. Raunak Cotton Ltd. issued a prospectus inviting applications for 6,000 equity shares of Rs.100 each at a premium of Rs.20 per shares, payable as follows:

On application	Rs.20
On allotment	Rs.50 [including premium]
On first call	Rs.30
On final call	Rs.20

Application were received for 10,000 shares and allotment was made Pro-rata to the applicants of 8,000 shares, the remaining applications Being refused. Money received in excess on the application was adjusted toward the amount due on allotment.

Rohit, to whom 300 shares were allotted failed to pay allotment and calls money, his shares were forfeited. Itika, who applied for 600 shares, failed to pay the two calls and her share were also forfeited. All these shares were sold to Kartika as fully paid for Rs.80 per shares.

Give journal entries in the books of the company.

(Ans: Capital Reserve Rs.7,000)

15. Himalaya Company Limited issued for public subscription of 1,20,000 equity shares of Rs.10 each at a premium of Rs.2 per share payable as under :

With Application	Rs. 3 per share
On allotment (including premium)	Rs. 5 per share
On First call	Rs. 2 per share
On Second and Final call	Rs. 2 per share

Applications were received for 1,60,000 shares. Allotment was made on pro-rata basis. Excess money on application was adjusted against the amount due on allotment.

Rohan, whom 4,800 shares were allotted, failed to pay for the two calls. These shares were subsequently forfeited after the second call was made. All the shares forfeited were reissued to Teena as fully paid at Rs. 7 per share.

Record journal entries in the books of the company to record these transactions relating to share capital. Also show the company's balance sheet.

(Ans : Capital Reserve Rs.14,400)

16. Prince Limited issued a prospectus inviting applications for 2,00,000 equity shares of Rs.10 each at a premium of Rs.3 per share payable as follows :

With Application	Rs.2
On Allotment (including premium)	Rs.5
On First Call	Rs.3
On Second Call	Rs.3

Applications were received for 30,000 shares and allotment was made on pro-rata basis. Money overpaid on applications was adjusted to the amount due on allotment.

Mr. 'Mohit' whom 400 shares were allotted, failed to pay the allotment money and the first call, and her shares were forfeited after the first call. Mr. 'Joly', whom 600 shares were allotted, failed to pay for the two calls and hence, his shares were forfeited.

Of the shares forfeited, 800 shares were reissued to Supriya as fully paid for Rs.9 per share, the whole of Mr. Mohit's shares being included.

Record journal entries in the books of the Company and prepare the Balance Sheet.

(Ans : Capital Reserve Rs.2,000)

17. Life machine tools Limited, issued 50,000 equity shares of Rs.10 each at Rs.12 per share, payable at to Rs.5 on application (including premium), Rs.4 on allotment and the balance on the first and final call.

    Applications for 70,000 shares had been received. Of the cash received, Rs.40,000 was returned and Rs.60,000 was applied to the amount due on allotment, the balance of which was paid. All shareholders paid the call due, with the exception of one share holder of 500 shares. These shares were forfeited and reissued as fully paid at Rs.8 per share. Journalise the transactions.

    (Ans : Capital Reserve Rs.2,500)

18. The Orient Company Limited offered for public subscription 20,000 equity shares of Rs.10 each at a premium of 10% payable at Rs.2 on application; Rs.4 on allotment including premium; Rs.3 on First Call and Rs.2 on Second 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 money were received except the final call on 500 shares which were forfeited. 300 of the forfeited shares were later on issued as fully paid at Rs.9 per share. Give journal entries and prepare the balance sheet.

    (Ans : Capital Reserve Rs.2,100)

19. Alfa Limited invited applications for 4,00,000 of its equity shares of Rs.10 each on the following terms :

Payable on application	Rs.5 per share
Payable on allotment	Rs.3 per share
Payable on first and final call	Rs.2 per share

Applications for 5,00,000 shares were received. It was decided :

(a) to refuse allotment to the applicants for 20,000 shares;

(b) to allot in full to applicants for 80,000 shares;

(c) to allot the balance of the available shares' pro-rata among the other applicants; and

(d) to utilise excess application money in part as payment of allotment money.

One applicant, whom shares had been allotted on pro-rata basis, did not pay the amount due on allotment and on the call, and his 400 shares were forfeited. The shares were reissued @ Rs.9 per share. Show the journal and prepare Cash book to record the above .

(Ans : Capital Reserve Rs. 2,100)

20. Ashoka Limited Company which had issued equity shares of Rs.20 each at a discount of Rs. 4 per share, forfeited 1,000 shares for non-payment of final call of Rs.4 per share. 400 of the forfeited shares are reissued at Rs.14 per share out of the remaining shares of 200 shares 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.6,400, Balance in share forfeiture account Rs.4,800)

21. Amit holds 100 shares of Rs.10 each on which he has paid Re.1 per share as application money. Bimal holds 200 shares of Rs.10 each on which he has paid Re.1 and Rs.2 per share as application and allotment money, respectively. Chetan holds 300 shares of Rs.10 each and has paid Re.1 on application, Rs.2 on allotment and Rs.3 for the first call. They all fail to pay their arrears and the second call of Rs.2 per share and the directors, therefore, forfeited their shares. The shares are reissued subsequently for Rs.11 per share as fully paid. Journalise the transactions.

    (Ans: Capital Reserve Rs.2,500)

22. Ajanta Company Limited having a normal capital of Rs.3,00,000, divided into shares of Rs.10 each offered for public subscription of 20,000 shares payable at 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 was refunded.

    All moneys due were received with the exception of the final call on 600 shares which were forfeited after legal formalities were fulfilled. 400 shares of the forfeited shares were reissued at Rs.9 per share.

    Record necessary journal entries and prepare the balance Sheet showing the amount transferred to capital reserve and the balance in Share forfeiture account.

    (Ans: Amount transferred to Capital Reserve Rs.2,600]

23. Journalise the following transaction in the books Bhushan Oil Ltd:
    (a) 200 shares of Rs.100 each issued at a discount of Rs.10 were forfeited for the non payment of allotment money of Rs.50 per share. The first and final call of Rs.20 per share on these share were not made. The forfeited share were reissued at Rs.70 per share as fully paid-up.
    (b) 150 shares of Rs.10 each issued at a premium of Rs.4 per share payable with allotment were forfeited for non-payment of allotment money of Rs.8 per share including premium. The first and final call of Rs.4 per share were not made. The forfeited share were reissued at Rs.15 per share fully paid-up.
    (c) 400 share of Rs.50 each issued at par were forfeited for non-payment of final call of Rs.10 per share. These share were reissued at Rs.45 per share fully paid-up.

    (Ans : Capital Reserve (a) Nil , (b) Rs.300, (c) Rs.14,000)

24. Amisha Ltd inviting application for 40,000 shares of Rs.100 each at a premium of Rs.20 per share payable; on application Rs.40 ; on allotment Rs.40 (Including premium): on first call Rs.25 and Second and final call Rs.15.

    Application were received for 50,000 shares and allotment was made on pro-rata basis. Excess money on application was adjusted on sums due on allotment.

    Rohit to whom 600 shares were allotted failed to pay the allotment money and his shares were forfeited after allotment. Ashmita, who applied for 1000 shares failed to pay the

    Two calls and his shares were forfeited after the second call. Of the shares forfeited, 1200 shares were sold to Kapil for Rs.85 per share as fully paid, the whole of Rohit's shares being included.

    Record necessary journal entries.

    (**Ans**: Capital Reserve Rs.48,000; Balance in share forfeited A/c Rs.12,000)

Answers to Test your Understanding

Test your Understanding – I

(a) False, (b) True, (c) False, (d) True, (e) True, (f) True, (g) True, (h) True,

(i) False, (j) True, (k) False, (l) False, (m) False, (n) True, (o) False, (p) True

Test your Understanding – II

(a) (ii), (b) (iii), (c) (i), (d) (ii), (e) (i), (f) (iii), (g) (iii)

Test your Understanding – III

(a) Rs. 8, (b) Rs. 4,

(c) Vendor	Dr.	1,00,000	
To Share Capital A/c			1,00,000

Issue and Redemption of Debentures

2

Learning Objectives

After studying this chapter you will be able to :

- *state the meaning of debenture capital and explain the difference between debentures and shares;*
- *describe various types of debentures;*
- *record the journal entries for the issue of debentures at par, at a discount and at premium;*
- *explain the concept of debentures issued for consideration other than cash and the accounting thereof;*
- *explain the concept of issue of debentures as a collateral security and the accounting thereof;*
- *record the journal entries for issue of debentures with various terms of issue terms of redemption;*
- *show the items relating to issue of debentures in company's balance sheet;*
- *describe the methods of writing-off discount/loss on issue of debentures;*
- *explain the methods of redemption of debentures and the accounting thereof; and*
- *explain the concept of sinking fund, its use for redemption of debentures and the accounting thereof;*

A company raises its capital by means of issue of shares. But the funds raised by the issue of shares are seldom adequate to meet their long-term financial needs of a company. Hence, most companies turn to raising long-term funds also through debentures which are issued either through the route of private placement or by offering the same to the public. The finances raised through debentures are also known as long-term debt. This chapter deals with the accounting treatment of issue and redemption of debentures and other related aspects.

SECTION I

2.1 Meaning of Debentures

Debenture: The word 'debenture' has been derived from a Latin word 'debere' which means to borrow. Debenture is a written instrument acknowledging a debt under the common seal of the company. It contains a contract for repayment of principal after a specified period or at intervals or at the option of the company and for payment of interest at a fixed rate payable usually either half-yearly or yearly on fixed dates. According, to section 2(12) of The Companies Act,1956 'Debenture' includes Debenture Stock, Bonds and any other securities of a company whether constituting a charge on the assets of the company or not.

E. Thomas : "A debenture is a document under company's seal which provides for the repayment of a principal sum and interest thereon at regular intervals which is usually secured by a fixed or floating charge on the company's property and which acknowledges loan of a company".

Topham: "Debenture is a document given by a company as evidence of debt to the holder usually arising out of a loan and most commonly secured by a charge."

Chitty J.: "Debenture' means a document which either creates a debt or acknowledges it and any document which fulfills either of these conditions."

Bond: Bond is also an instrument of acknowledgement of debt. Traditionally, the Government issued bonds, but these days' bonds are also being issued by semi-government and non-governmental organisations. The terms 'debentures' and 'Bonds' are now being used inter-changeably.

2.2 Distinction between Shares and Debentures

Ownership: A shareholder is an owner of the company whereas a debenture holder is only a loan creditor. A share is a part of the owned capital whereas a debenture is a part of borrowed capital.

Return: The return on shares is known as dividend while the return on debentures is called interest. The rate of return on shares may vary from year to year depending upon the profits of the company but the rate of interest on debentures is pre-fixed. The payment of dividend is an appropriation out profits, whereas the payment of interest is a charge on profits and is to be paid even if there is no profit.

Repayment: Normally, the amount of shares is not returned during the life of the company, while the debentures are issued for a specified period and the amount of debentures is returned after that period. However, an amendment in 1998 to The Companies Act, 1956 has permitted the companies to buy back its own shares from the market, particularly, when the price of its share in the market is lower than the book value.

Voting Rights: Shareholders enjoy voting rights whereas debentureholders do not normally enjoy any voting right.

Issue on Discount: Both shares and debentures can be issued at a discount. However, shares can be issued at discount in accordance with the provisions of Section 79 of The Companies Act, 1956 which stipulates that the rate of discount must not exceed 10% of the face value.

Security : Shares are not secured by any charge whereas the debentures are generally secured and carry a fixed or floating charge over the assets of the company.

Convertibility: Shares cannot be converted into debentures whereas debentures can be converted into shares if the terms of issue so provide, and in that case these are known as convertible debentures.

2.3 Types of Debentures

A company may issue different kinds of debentures which can be classified as under:

2.3.1 From the Point of view of Security

(a) *Secured Debentures*: Secured debentures refer to those debentures where a charge is created on the assets of the company for the purpose of payment in case of default. The charge may be fixed or floating. A fixed charge is created on a specific asset whereas a floating charge is on the general assets of the company. The fixed charge is created against those assets which are held by a company for use in operations not meant for sale whereas floating charge involves all assets excluding those assigned to the secured creditors.

(b) *Unsecured Debentures*: Unsecured debentures do not have a specific a charge on the assets of the company. However, a floating charge may be created on these debentures by default. Normally, these kinds of debentures are not issued.

2.3.2 From the Point of view of Tenure

(a) *Redeemable Debentures:* Redeemable debentures are those which are payable on the expiry of the specific period either in lump sum or in Instalments during the life time of the company. Debentures can be redeemed either at par or at premium.

(b) *Irredeemable Debentures:* Irredeemable debentures are also known as *Perpetual Debentures* because the company does not given any undertaking for the repayment of money borrowed by issuing such debentures. These debentures are repayable on the on winding-up of a company or on the expiry of a long period.

2.3.3 From the Point of view of Convertibility

(a) *Convertible Debentures:* Debentures which are convertible into equity shares or in any other security either at the option of the company or the debentureholders are called convertible debentures. These debentures are either fully convertible or partly convertible.

(b) *Non-Convertible Debentures :* The debentures which cannot be converted into shares or in any other securities are called non-convertible debentures. Most debentures issued by companies fell in this category.

2.3.4 From Coupon Rate Point of view

Specific Coupon Rate Debentures: These debentures are issued with a specified rate of interest, which is called the coupon rate. The specified rate may either be fixed or floating. The floating interest rate is usually tagged with the bank rate.

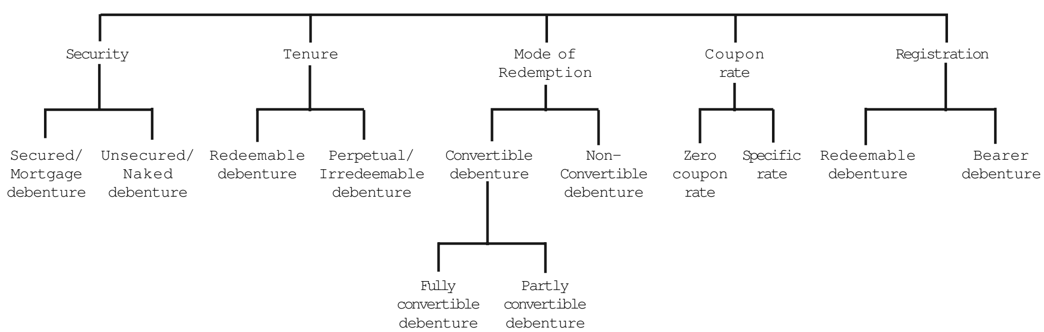
Zero Coupon Rate Debentures: These debentures do not carry a specific rate of interest. In order to compensate the investors, such debentures are issued at substantial discount and the difference between the nominal value and the issue price is treated as the amount of interest related to the duration of the debentures.

2.3.5 From the view Point of Registration

(a) *Registered Debentures*: Registered debentures are those debentures in respect of which all details including names, addresses and particulars of holding of the debentureholders are entered in a register kept by the company. Such debentures can be transferred only by executing a regular transfer deed.

(b) *Bearer Debentures*: Bearer debentures are the debentures which can be transferred by way of delivery and the company does not keep any record of the debentureholders. Interest on debentures is paid to a person who produces the interest coupon attached to such debentures.

Types of Debenture/Bond



2.4 Issue of Debentures

The procedure for the issue of debentures is the same as that for the issue of shares. The intending investors apply for debentures on the basis of the prospectus issued by the company. The company may either ask for the entire amount to be paid on application or by means of instalments on application, on allotment and on various calls. Debentures can be issued at par, at a premium or at a discount. They can also be issued for consideration other than cash or as a Collateral Security.

2.4.1 Issue of Debentures for Cash

Debentures are said to be issued at par when their issue price is equal to the face value. The journal entries recorded for such issue are as under.

(a) *If whole amount is received in one instalment:*

(i) On receipt of the money on application
Bank A/c Dr.
To Debenture Application & Allotment A/c

(ii) On making the allotment
Debenture Application & Allotment A/c Dr.
To Debentures A/c

(b) *If debenture amount is received in two instalments:*

(i) On receipt of application money
Bank A/c Dr.
To Debenture Application A/c

(ii) For adjustment of applications money on allotment
Debenture Application A/c Dr.
To Debentures A/c

(iii) For a allotment money due
Debenture Allotment A/c Dr.
To Debentures A/c

(iv) On receipt of allotment money
Bank A/c Dr.
To Debenture Allotment A/c

(c) *If debenture money is received in more than two instalments*
Additional entries:

(i) On making the first call
Debenture First Call A/c Dr.
To Debentures A/c

(ii) On the receipt of the first call
Bank A/c Dr.
To Debenture First Call A/c

Notes: Similar entries may be made for the second call and final call. However, normally the whole amount is collected on application or in two instalments, i.e. on application and allotment. More than two instalments involving calls is a rarity.

Illustration 1

ABC Ltd. issues Rs.10,000, 12% debentures of Rs.100 each payable Rs.30 on application and remaining amount on allotment. The public applied for 9,000 debentures which were fully allotted, and all the relevant allotment money duly received. Give journal entries in the books of ABC Ltd., and show the portion of the balance sheet.

Solution

Books of ABC Limited
Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Bank A/c Dr. To 12% Debenture Application A/c (Application money on 9,000 debentures received)		2,70,000	2,70,000
	12% Debenture Application A/c Dr. To 12% Debentures A/c (Application money transferred to debentures Account on allotment)		2,70,000	2,70,000
	12% Debenture Allotment A/c Dr. To 12% Debentures A/c (Amount due on 9,000 debentures on allotment @ Rs.70 per debenture)		6,30,000	6,30,000
	Bank A/c Dr. To 12% Debenture Allotment A/c (Amount received on allotment)		6,30,000	6,30,000

Balance Sheet of ABC Limited as on ——

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
12% Debentures	10,00,000	Cash at bank	10,00,000

*Relevant data only.

2.4.2 Issue of Debentures at a Discount

When a debenture is issued at a price below its nominal value, it is said to be issued at a discount. For example, the issue of Rs.100 debentures at Rs.95, Rs.5 being the amount of discount. Discount on issue of debentures is a capital loss and is shown on the asset side of the balance sheet under the head "Miscellaneous Expenditure" till it is written-off. The discount on issue of debentures can be written-off either by debiting it to profit and loss account or out of the capital profits, if any, during the life time of debentures.

The Companies Act, 1956 does not impose any restrictions upon the issue of debentures at a discount. However, convertible debentures cannot be issued at a discount, if they are to be converted immediately.

Illustration 2

TV Components Ltd. issued 10,000, 12% debentures of Rs.100 each at a discount of 5% payable as follows:

On application Rs.40
On allotment Rs.55

Show the journal entries including these for cash, assuming that all the instalments were duly collected. Also show the relevant portion of the balance sheet.

Solution

Books of TV Components Ltd.
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr.		4,00,000	
	To 12% Debenture Application A/c			4,00,000
	(Receipt of application money @ Rs. 30 per debenture)			
	12% Debenture Application A/c Dr.		4,00,000	
	To 12% Debenture A/c			4,00,000
	(Transfer of application money to debenture account)			
	12% Debenture Allotment A/c Dr.		5,50,000	
	Discount on Issue of Debentures A/c		50,000	
	To 12% Debenture A/c			6,00,000
	(Allotment money due on debentures)			
	Bank A/c Dr.		5,50,000	
	To 12% Debenture Allotment A/c			5,50,000
	(Receipt of allotment money on debentures)			

Balance Sheet of TV Component Ltd. as on ——

Liabilities	*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Secured Loans: 12% Debentures	 10,00,000	Cash at bank *Miscellaneous Expenditure:* Discount on issue of debentures	9,50,000 50,000

* Relevant data only.

2.4.3 Debentures issued at Premium

A debenture is said to be issued at a premium when the price charged is more than its nominal value. For example, the issue of Rs.100 debentures for Rs.110, (Rs.10 is being the premium). The amount of premium is credited to Securities Premium account and is shown on the liabilities side of the balance sheet under the head "Reserves and Surpluses".

Illustration 3

XYZ Industries Ltd. issued 2,000, 10% debentures of Rs.100 each, at a premium of Rs.10 per debenture payable as follows:

On application Rs.50
On allotment Rs.60

The debentures were fully subscribed and all money was duly received. Record the journal entries in the books of company. Show how the amounts will appear in the balance sheet.

Solution

Books of XYZ Industries Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr. To 10% Debenture Application A/c (application money on 10% debentures received)		1,00,000	 1,00,000
	10% Debenture Application A/c Dr. To 10% Debentures A/c (Transfer of application money on allotment)		1,00,000	 1,00,000

	10% Debenture Allotment A/c Dr.		1,20,000	
	To 10% Debentures A/c			1,00,000
	To Securities Premium A/c			20,000
	(Allotment money due on debentures including the premium)			
	Bank A/c Dr.		1,20,000	
	To 10% Debenture Allotment A/c			1,20,000
	(Allotment money received)			

Balance Sheet of XYZ Industries Ltd. as on ——

Liabilities	*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Reserves and Surplus:		Cash at bank	2,20,000
Securities premium	20,000		
Secured loans :			
10% Debentures	2,00,000		
	2,20,000		**2,20,000**

* Relevant data only.

Illustration 4

A Ltd. issued 5,000, 10% debentures of Rs.100 each, at a premium of Rs.10 per debenture payable as follows:

On application	Rs.25
On allotment	Rs.45 (including premium)
On first and final call	Rs.40

The debentures were fully subscribed and all money was duly received. Record the necessary entries in the books of the company. Show how the amounts will appear in balance sheet.

Solution

Books of A Limited
Journal

Date	Particulars		L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Bank A/c	Dr.		1,25,000	
	To 10% Debenture Application A/c				1,25,000
	(Application money on 10% debentures received)				
	10% Debenture Application A/c	Dr.		1,25,000	
	To 10% Debentures A/c				1,25,000
	(Transfer of application money on allotment)				
	10% Debenture Allotment A/c	Dr.		2,25,000	
	To 10% Debentures A/c				1,75,000
	To Securities Premium A/c				50,000
	(Allotment money of due on debentures including the premium)				
	Bank A/c	Dr.		2,25,000	
	To 10% Debenture Allotment A/c				2,25,000
	(Allotment money received)				
	10% Debenture First & Final Call A/c	Dr.		2,00,000	
	To 10% Debentures A/c				2,00,000
	(First and final call money due on debentures)				
	Bank A/c	Dr.		2,00,000	
	To 10% Debenture A/c				2,00,000
	(First and final call money received)				

Balance Sheet of A Limited as on ——

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Reserves and Surplus:		Cash at bank	5,50,000
Securities premium	50,000		
Secured Loans :			
10% Debentures	5,00,000		
	5,50,000		**5,50,000**

* Relevant data only.

2.5 Over Subscription

When the number of debentures applied for is more than the number of debentures offered to the public, the issue is said to be over subscribed. A company, however, cannot allot more debentures than it has invited for subscription. The excess money received on over subscription may, however, be retained for adjustment towards allotment and the respective calls to be made. But the money received from applicants to whom no debentures have been allotted, will be refunded to them.

Illustration 5

X Ltd. Issued Rs.10,000, 12% debentures of Rs.100 each payable Rs.40 on application and Rs.60 on allotment. The public applied for Rs.14,000 debentures. Applications of 9,000 debentures were accepted in full; applications for 2,000 debentures were allotted 1,000 debentures and the remaining application, were rejected. All money was duly received. Journalise the transactions.

Solution

Books of X Limited
Journal

Date	Particulars		L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Bank A/c	Dr.		5,60,000	
	To 12% Debenture Application A/c				5,60,000
	(Receipt of application money on 14,000 debentures)				
	12% Debenture Application A/c	Dr.		4,00,000	
	To 12% Debentures A/c				4,00,000
	(Transfer of application money on 10,000 debentures on allotment)				
	12% Debenture Application A/c	Dr.		1,20,000	
	To Bank A/c				1,20,000
	(Application money on rejected applications refunded)				
	12% Debenture Allotment A/c	Dr.		6,00,000	
	To 12% Debentures A/c				6,00,000
	(Amount due on allotment on 10,000 debentures)				

	Bank A/c Dr.		5,60,000	
	Debenture Application A/c Dr.		40,000	
	To Debenture Allotment A/c			6,00,000
	(Surplus application money on 1,000 debentures transferred to debenture allotment account and the balance due was received)			

2.6 Issue of Debentures for Consideration other than Cash

Sometimes a company purchases assets from vendors and instead of making payment in cash issues debentures for consideration thereof. Such issue of debentures is called debantures issued for consideration other than cash. In that case also, the debentures may be issued at par, at a premium or at a discount then entries made in such a situation are similar to those of the shares issued for consideration other than cash, which are as follows :

1. *On purchase of assets*

    Sundry Assets A/c Dr.
    To Vendor's

2. *On issue of debentures*

    (a) At Par

    Vendors Dr.
    To Debentures A/c

    (b) At premium

    Vendors Dr.
    To Debentures A/c
    To Securities Premium A/c

    (c) At a discount

    Vendors Dr.
    Discount on Issue of Debenture A/c Dr.
    To Debentures A/c

Illustration 6

Aashirward Company Ltd.purchased assets of the book value of Rs. 2,00,000 from another company and agreed to make the payment of purchase consideration by issuing 2,000, 10% debentures of Rs.100 each.

Record the necessary journal entries.

Solution

Books of Aashirwad Company Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Sundry Assets A/c Dr.		2,00,000	
	To Vendors			2,00,000
	(Assets purchased from vendors)			
	Vendors Dr.		2,00,000	
	To 10% Debentures A/c			2,00,000
	(Allotment of debentures to vendors as purchase consideration)			

***Illustration* 7**

Rai Company purchased assets of the book value of Rs. 2,20,000 from another company and agreed to make the payment of purchase consideration by issuing 2,000, 10% debentures of Rs. 100 each at a premium of 10%.

Record necessary journal entries.

Solution

Books of Rai Company Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Sundry Assets A/c Dr.		2,20,000	
	To Vendors			2,20,000
	(Assets purchased from vendors)			
	Vendors Dr.		2,20,000	
	To 10% Debentures A/c			2,00,000
	To Securities Premium A/c			20,000
	(Allotment of 2,000 debentures of Rs. 100 each at a premium of 10% as purchase consideration)			

Illustration 8

National Packaging company purchased assets of the value of Rs. 1,90,000 from another company and agreed to make the payment of purchase consideration by issuing 2,000, 10% debentures of Rs. 100 each at a discount of 5%.

Record necessary journal entries.

Solution

Books of National Packaging Limited
Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Sundry Assets A/c Dr. To Vendors (Assets purchased from vendors)		1,90,000	 1,90,000
	Vendors Dr. Discount on Issue of Debenture A/c Dr. To 10% Debentures A/c (Allotment of debentures – 2,000 debentures of Rs. 100 each at a discount of 5% as purchase consideration)		1,90,000 10,000	 2,00,000

Illustration 9

G.S.Rai company purchased assets of the book value of Rs. 99,000 from another firm. It was agreed that purchase consideration be paid by issuing 11% debentures of Rs. 100 each. Assume debentures have been issued.

1. At par
2. At discount of 10%, and
3. At a premium of 10%.

Record necessary journal entries.

Solution

Books of G.S.Rai Company Limited
Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Sundry Assets A/c Dr. To Vendors (Assets purchased from vendors)		99,000	 99,000
In Ist Case	Vendors Dr. To 10% Debentures A/c (Allotment of debentures to vendors as purchase consideration)		99,000	 99,000

In IInd Case	Vendors Dr. Discount on Issue of Debenture A/c Dr. To 10% Debentures A/c (1,100 debenture of Rs. 100 issued at discount of 10% to vendor)		99,000 11,000	 1,10,000
In IIIrd Case	Vendors Dr. To 11% Debentures A/c To Securities Premium A/c (900 debentures of Rs. 100 issued at a premium of 10% to the vendors)		99,000	 90,000 9,000

Sometimes a company may purchase the assets as well as take over its liabilities of another concern. It happens usually is case of purchase of the whole business of the other concern. In such a situation, the purchase consideration will be equal to the value of net assets and assets – liabilities) taken over, and if the whole amount of the consideration is paid by issue of debentures, the journal entry will be:

Sundry Assets A/c Dr.
To Sundry Liabilities A/c
To Vendors
(Purchase of the Vendors' business)

Illustration 10

Romi Ltd. acquired assets of Rs. 20 lakh and took over creditors of Rs. 2 lakh from Kapil Enterprises. Romi Ltd. issued 8% debentures of Rs. 100 each at par as purchase consideration. Record necessary journal entries in the books of Romi Ltd.

Solution

Books of Romi Ltd.
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Sundry Assets A/c Dr. To Kapil Enterprises To Sundry Creditors A/c (The purchase of business)		20,00,000	 18,00,000 2,00,000

	Vendors Dr.		18,00,000	
	To 8% Debentures A/c			18,00,000
	(The issue of 18,000, 8% debentures of Rs. 100 each)			

In case of the whole business being taken over if the amount of debentures issued is more than the amount of the net assets taken over, Its difference (excess) will be treated as value of goodwill and the same shall also be debited while passing the journal entry for the purchase of vender's business (see Illustration 10). But if it is the other way round i.e., the value of debentures is less than the value of the net assets taken over the difference will be credited to capital Reserve accounts (See Illustration 12).

Illustration 11

Blue Prints Ltd. Purchased building worth Rs.1,50,000, machinery worth Rs.1,40,000 and furniture worth Rs.10,000 from XYZ Co. and took over its liabilities of Rs.20,000 for a purchase consideration of Rs.3,15,000. Blue Prints Ltd. paid the purchase consideration by issuing 12% debentures of Rs.100 each at a premium of 5%. Record necessary journal entries.

Solution

Books of Blue Prints Limited
Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Building A/c Dr.		1,50,000	
	Plant & Machinery A/c Dr.		1,40,000	
	Furniture A/c Dr.		10,000	
	Goodwill A/c [1] Dr.		35,000	
	To Liabilities (Sundry)			20,000
	To XYZ Co.			3,15,000
	(Purchase of assets and taking over of liabilities of XYZ Co.)			
	XYZ Co. Dr.		3,15,000	
	To 12% Debentures A/c			3,00,000
	To Securities Premium A/c			15,000
	(Issue of 3,000 debentures at a premium of 5%)			

*Note: 1. Since the purchase consideration is more than net assets taken over, the difference has been debited to Goodwill account.

2. No. of debentures issued = $\frac{\text{Purchase Consideration}}{\text{Issue Price of a Debenture}}$

No. of debentures = $\frac{\text{Rs. } 3,15,000}{105} = 3,000$

Illustration 12

A Ltd. took over the assets of Rs.3,00,000 and liabilities of Rs.10,000 from B & Co. Ltd. for an agreed purchase consideration of Rs.2,70,000 to be satisfied by issue of 15% debentures of Rs.100 at 20% premium. Show the journal entries in the journal of A Ltd.

Solution

Books of A Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Sundry Assets A/c Dr.		3,00,000	
	To Sundry Liabilities A/c			10,000
	To B & Co. Ltd.			2,70,000
	To Capital Reserve			20,000
	(Purchase of assets and liabilities from B Ltd.)			
	B & Co. Ltd. Dr.		2,70,000	
	To 15% Debentures A/c			2,25,000
	To Securities Premium A/c			45,000
	(Issue of 2250 debentures of Rs.100 each at a premium of 20%)			

Do it Yourself

1. Amrit Company Limited purchased assets of the book value of Rs.2,20,000 from another company and agreed to make the payment of purchase consideration by issuing 2,000, 10% debentures of Rs.100 each at a premium of 10%. Record necessary journal entries.
2. A company purchased assets of the value of Rs.1,90,000 from another company and agreed to make the payment of purchase consideration by issuing 2,000, 10% debentures of Rs.100 each at a discount of 5%. Record necessary journal entries.

3. Rose Bond Limited purchased a business for Rs. 22,00,000. Purchase Price was paid by 6% debentures. Debentures of Rs. 20,00,000 were issued at a premium of 10% for the purpose. Record necessary journal entries.
4. Nikhil and Ashwin Limited bought business of Agarwal Limited consisting sundry assts of Rs. 3,60,000, sundry creditors Rs. 1,00,000 for a consideration of Rs. 3,07,200. It issued 14% debentures of Rs. 100 each fully paid at a discount of 4% in satisfaction of purchase consideration. Record necessary journal entries.

Illustration 13

Suvidha Ltd. purchased machinery worth Rs.1,98,000 from Suppliers Ltd. The payment was made by issue of 12% debentures of Rs.100 each.

Pass the necessary journal entries for the purchase of machinery and issue of debentures when:

(i) Debentures are issued at par;
(ii) Debentures are issued at 10% discount; and
(iii) Debentures are issued at 10% premium

Solution

Books of Suvidha Ltd.
Journal

Date	Particulars		L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Machinery A/c	Dr.		1,98,000	
	To Suppliers Ltd.				1,98,000
	(Machinery purchased)				
Case(i)	When debentures are issued at par:				
	Suppliers Ltd.	Dr.		1,98,000	
	To 12% Debentures A/c				1,98,000
	(12% Debentures issued to Suppliers Ltd.)				
Case(ii)	When debentures are issued at 10% discount:				
	Suppliers Ltd.	Dr.		1,98,000	
	Discount on Issue of Debentures A/c	Dr.		22,000	
	To 12% Debentures A/c				2,20,000
	(12% Debentures issued to Suppliers Ltd. at 10% discount)				

Case(iii)	When debentures are issued at 10% premium:			
	Suppliers Ltd. Dr.		1,98,000	
	To 12% Debentures A/c			1,80,000
	To Premium on Issue of Debentures A/c			18,000
	(12% Debentures issued to Suppliers Ltd. at 10% premium)			

Workings:

(a) Number of debentures issued in case of 10% discount:

	(Rs.)
Face value	100
Less: Discount 10%	10
Value at which issued	90

$$\frac{\text{Rs. } 1{,}98{,}000}{90} = 2{,}200 \text{ Debentures}$$

(b) Number of debentures issued in case of 10% premium:

	(Rs.)
Face value	100
Add: Premium 10%	10
Value at which issued	110

$$\frac{\text{Rs.}1{,}98{,}000}{110} = 1{,}800 \text{ Debentures}$$

2.7 Issue of Debentures as a Collateral Security

A collateral security may be defined as a subsidiary or secondary or additional security besides the primary security when a company obtains a loan or overdraft from a bank or any other financial Institution. It may pledge or mortgage some assets as a secured loan against the said loan. But the lending institutions may insist on some more assets as collateral security so that the amount of loan can be realised in full with the help of collateral security in case the amount from the sale of principal security should fall short of the loan money. In such a situation, the company may issue its own debentures to the lenders in addition to some other assets already pledged. Such an issue of debenture is known as 'Debentures issued as Collateral Security'.

If the company fails to repay the loan along with interest, the sender is free to receive his money from the sale of primary security and if the realisable value of the primary security falls short to cover the entire amount, the lender has the right to invoke the benefit of collateral security whereby debentures may either be presented for redemption or sold in the open market.

Debentures issued as collateral security can be dealt with in two ways in the books of the company:

First Method

No entry is made in the books of accounts since no liability is created by such issue. However, on the liability side of the Balance Sheet, below the item of loan, a note to the effect that it has been secured by issue of debentures as a collateral security is appended. For example, X Company has issued 9%, 10,000 debentures of Rs.100 each for a loan of Rs.10, 00,000 taken from a bank. This fact may be shown in the balance sheet as under:

Balance Sheet of X Company as on ——

Liabilities

Secured Loans:	
Bank loan	10,00,000
(secured by 9%, 10,000 Debentures of Rs. 10 each as collateral security)	

(No entry is made for issuing debentures as a Collateral Security)

Second Method

The issue of debentures as a collateral security may be recorded by means of journal entry as follows:

Journal Entries

i *Issue of 10,000, 9% debentures of Rs.100 each as collateral security for bank loan of Rs.10,00,000.*

Debenture Suspense A/c	Dr.	10,00,000	
To 9% Debentures A/c			10,00,000

ii. *For cancellation of 9% debentures as collateral security on repayment of bank loan.*

Debenture Suspense account will appear as a deduction from the debentures on the liability side of the Balance Sheet. When loan is repaid the above entry will be cancelled by a reverse entry :

9% Debentures A/c	Dr.	10,00,000	
To Debenture Suspense A/c			10,00,000

Balance Sheet of X Company as on ——

Liabilities		*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Secured Loans:				
Bank loan		10,00,000		
9%, 10,000 Debentures of Rs.100 each	10,00,000			
Less : Debentures Suspense A/c	10,00,000			
	——			

Illustration 14

A company took a loan of Rs.10,00,000 from Punjab National Bank and issued 10% debentures of Rs.12,00,000 of Rs.100 each as a collateral security. Explain how you will deal with the issue of debentures in the books of the company.

Solution

First Method:

Balance Sheet (Extract)

Liabilities	*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Secured Loans:			
Loan from PN Bank	10,00,000		
(Secured by issued of 12,000, 10% debenture of Rs.100 each as collateral security)			

Note: No entry recorded in the books of accounts.

Second Method:

Journal Entries

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Debenture Suspense A/c Dr.		12,00,000	
	To 10% Debentures A/c			12,00,000
	(12,000 debenture of Rs.100 each issued as collateral security to PN Bank)			

Balance Sheet (Extract)

Liabilities	*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Loan from PNB 10% Debentures 12,00,000 Less : Debentures Suspense A/c 12,00,000	10,00,000		

Do it Yourself

1. Raghuveer Limited created 10,00,000, 8% debentures stock which was issued as follows to:

		Rs.
1.	Sundry Subscribers for Cash at 90%	5,50,000
2.	Creditor for Rs. 2,00,000 capital expenditure in satisfaction of his claim	2,00,000
3.	Bankers as Collateral Security for a bank loan worth Rs. 20,00,000 for which principal security is Business Premises worth Rs. 22,50,000.	2,50,000

   The issue (1) and (2) are redeemable at the end of 10 years at par. State how the debenture stock be dealt with while preparing the balance sheet of a company.
2. Hassan Limited took a loan of Rs. 30,00,000 from a bank against primary security worth Rs. 40,00,000 and issued 4,000, 6% debentures of Rs. 100 each as a collateral security. The company again after one year took a loan of Rs. 50,00,000 from bank against Plant as primary security and deposited 6,000, 6% debentures of Rs. 100 each as collateral security. Record necessary journal entries and prepare balance sheet of a company.
3. Meghnath Limited took a loan of Rs. 1,20,000 from a bank and deposited 1,400, 8% debentures of Rs. 100 each as collateral security along with primary security worth Rs. 2 lakhs. Company again took a loan of Rs. 80,000 after two months from a bank and deposited 1,000, 8% debentures of Rs. 100 each as collateral security. Record necessary journal entries and prepare a balance sheet of a company.

2.8 Terms of Issue of Debentures

When a company issues debentures, it usually mentions the terms on which they will be redeemed at their maturity. Redemption of debentures means discharge of liability on account of debentures by repayment made to the debentureholders. Debentures can be redeemed either at par or at a premium.

Depending upon the terms and conditions of issue and redemption of debentures, the following six situations are commonly found in practice.

(i) Issued at par and redeemable at par

(ii) Issued at discount and redeemable at par

(iii) Issued at a premium and redeemable at par

(iv) Issued at par and redeemable at a premium

(v) Issued at a discount and redeemable at a premium

(vi) Issued at a premium and redeemable at a premium

The journal entries to be recorded for the for above six cases of issue of debentures are as follows.

1. *Issue at par and redeemable at par*

(a) Bank A/c Dr.
    To Debenture Application & Allotment A/c
(Receipt of application money)

(b) Debenture Application & Allotment A/c Dr.
    To Debentures A/c
(Allotment of debentures)

2. *Issue at a discount and redeemable at par*

(a) Bank A/c Dr.
    To Debenture Application & Allotment A/c
(Receipt of application money)

(b) Debenture Application & Allotment A/c Dr.
Discount on Issue of Debentures A/c Dr.
    To Debentures A/c
(Allotment of debentures at a discount)

3. *Issue at premium and redemption at par*

(a) Bank A/c Dr.
    To Debenture Application & Allotment A/c
(Receipt of application money)

(b) Debenture Application & Allotment A/c Dr.
    To Debentures A/c
    To Securities Premium A/c
(Allotment of debentures at a premium)

4. *Issue at par and redeemable at premium*

(a) Bank A/c	Dr.	
To Debenture Application & Allotment A/c		
(Receipt of application money)		
(b) Debenture Application & Allotment A/c	Dr.	
Loss on Issue of Debentures A/c	Dr.	(with premium on redemption)
To Debentures A/c		(with nominal value of debenture)
To Premium on Redemption of Debenture A/c		(with premium on redemption)
(Allotment of debentures at par and redeemade at a premium)		

5. *Issue at discount and redemption at premium*

Bank A/c	Dr.	
To Debenture Application & Allotment A/c		
(Receipt of application money)		
Debenture Application & Allotment A/c	Dr.	
Loss on Issue of Debentures A/c	Dr.	(with discount on issue plus premium on redemption)
To Debentures A/c		(with nominal value of debenture)
To Premium on Redemption of Debentures A/c		(with premium on redemption)
(Allotment of debentures at a discount and redeemable at premium)		

6. *Issued at a premium and redeemable at premium*

Bank A/c	Dr.	
To Debenture Application & Allotment A/c		
(Receipt of application money)		
Debenture Application & Allotment A/c	Dr.	
Loss on Issue of Debentures A/c	Dr.	(with premium on redemption)
To Debentures A/c		(with nominal value of debenture)
To Securities Premium A/c		(with premium on issue)
To Premium on Redemption of Debentures A/c		(with premium on redemption)

Notes:

1. When debentures are redeemable at a premium, a provision has to be made right at the time of the issue by debiting the amount to 'Loss on Issue of Debentures A/c'. It may be noted that when debentures are issued at a discount and are redeemable at a premium, the amount of discount issue is also debited to 'Loss on Issue of Debentures'. It may be noted that when the debentures are issued at a discount and are redeemable at par, the amount debited to 'Discount on Issue of Debentures A/c' as usual.
2. Premium on redemption is a liability of a company payable in future. It is a provision and is shown under the head 'Secured Loans' until debentures are redeemed.
3. Loss on issue of debenture account is a capital loss and it is to be written-off gradually against the profit and loss account or securities premium account. The unwritten-off amount is shown on the assets side of the balance sheet under the head 'Miscellaneous Expenditure'. Just like discount on issue of debenture account.

Illustration 15

Give Journal Entries for the following:

1. Issue of Rs.10,000, 9% debentures of Rs. 100 each and redeemable at par.
2. Issue of Rs.10,000, 9% debentures of Rs. 100 each at premium of 5% but redeemable at par.
3. Issue of Rs.10,000, 9% debentures of Rs. 100 each at discount of 5% repayable at par.
4. Issue of Rs.10,000, 9% debentures of Rs. 100 each at par but repayable at a premium of 5%.
5. Issue of Rs.10,000, 9% debentures of Rs. 100 each at discount of 5% but redeemable at premium of 5%.
6. Issue of Rs.10,000, 9% debentures of Rs. 100 each at premium of 5% and redeemable at premium of 5%.

Solution

Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
1	Bank A/c Dr. To 9% Debenture Application & Allotment A/c (Debentures Application money received)		1,00,000	 1,00,000
	Debenture Application & Allotment A/c Dr. To 9% Debentures A/c (Application money transferred to Debentures Account)		1,00,000	 1,00,000

2	Bank A/c Dr. To 9% Debenture Application & Allotment A/c (Debentures application money received)		1,05,000	 1,05,000
	Debenture Application & Allotment A/c Dr. To 9% Debentures A/c To Securities Premium A/c (Debentures application money transferred to Debentures & Securities Premium account)		1,05,000	 1,00,000 5,000
3	Bank A/c Dr. To 9% Debenture Application & Allotment A/c (Debentures application money received)		95,000	 95,000
	9% Debenture Application & Allotment A/c Dr. Discount on Issue of Debentures A/c Dr. To 9% Debentures A/c (Debentures application money transferred to Debentures account)		95,000 5,000	 1,00,000
4	Bank A/c Dr. To 9% Debenture Application & Allotment A/c (Debentures Application money received)		1,00,000	 1,00,000
	Debenture Application & Allotment A/c Dr. Loss on Issue of Debentures A/c Dr. To 9% Debentures A/c To Premium on Redemption of Debentures A/c (Debentures Application money transferred to Debentures account)		1,00,000 5,000	 1,00,000 5,000
5	Bank A/c Dr. To 9% Debenture Application & Allotment A/c (Debentures Application money received)		95,000	 95,000
	Debenture Application & Allotment A/c Dr. Loss on Issue of Debentures A/c Dr. To 9% Debentures A/c To Premium on Redemption of Debentures A/c (Debentures application money transferred to debentures and Premium on debenture account)		95,000 10,000	 1,00,000 5,000

6	Bank A/c Dr.		1,05,000	
	To 9% Debenture Application & Allotment A/c			1,05,000
	(Debentures Application money received)			
	Debenture Application & Allotment A/c Dr.		1,05,000	
	Loss on Issue of Debentures A/c Dr.		5,000	
	To 9% Debenture A/c			1,00,000
	To Premium on Redemption of Debentures A/c			5,000
	To Securities Premium A/c			5,000
	(Debenture application money transferred to debentures account)			

Illustration 16

You are required to set out the journal entries relating to the issue of the debentures in the books of X Ltd. and show how they would appear in its balance sheet under the following cases:

(a) 120, 8% debentures of Rs.1,000 each are issued at 5% discount and repayable at par.

(b) 150, 7% debentures of Rs.1,000 each are issued at 5% discount and repayable at premium of 10%.

(c) 80, 9% debentures of Rs.1,000 each are issued at 5% premium.

(d) Another 400, 8% debentures of Rs.100 each are issued as collateral security against a loan of Rs.40,000.

Solution

Books of X Ltd.

(a) **Journal**

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr.		1,14,000	
	Discount on issue of Debentures A/c Dr.		6,000	
	To 8% Debentures A/c			1,20,000
	(Issue of 120, 8% debentures at a discount of 5% repayable at par)			

Balance Sheet of X Ltd.

Liabilities	*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Secured Loans:		Cash at Bank	1,14,000
8% Debentures	1,20,000	Miscellaneous Expenditure	
		Discount on debentures	6,000

(b) **Journal**

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr.		1,42,500	
	Loss on Issue of Debentures A/c Dr.		22,500*	
	To 7% Debentures A/c			1,50,000
	To Premium on Redemption of Debenture A/c			15,000
	(Issue of 150, 7% debentures at a discount of 5% repayable at premium of 10%)			

* Discount on issue of debentures Rs.7,500 and premium on redemption of debentures Rs.15,000.

Balance Sheet of X Ltd.

Liabilities	*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Secured loans:		Cash at bank	1,42,500
7% Debentures	1,50,000	Miscellaneous expenditure:	
Premium on redemption of debentures	15,000	Loss on issue of debentures	22,500

(c) **Journal**

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr.		84,000	
	To 9% Debentures A/c			80,000
	To Securities premium A/c			4,000
	(Issue of 80, 9% debentures of Rs.1,000 each at 5% premium)			

Balance Sheet of X Ltd.

Liabilities	*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Reserve & Surpluses:		Cash at bank	84,000
Securities premium	4,000		
Secured loans:			
9% Debentures	80,000		

(c) **Journal**

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Debenture Suspense A/c Dr.		40,000	
	To 8% Debentures A/c			40,000
	(Issue of 400, 8% debentures of Rs.100 each as collateral security against a loan of Rs.40,000)			

Balance Sheet of X Ltd.

Liabilities		*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Secured loans:				
Bank loan		40,000		
400, 8% Debentures				
Rs.100	40,000			
Less : Debenture suspense A/c	40,000	———		

Do it Yourself

1. Nena Limited issued 50,000, 10% debentures of Rs. 100 each on the basis of the following conditions:
   a. Debentures issued at par and redeemable at par.
   b. Debentures issued at discount @ 5% and redeemable at par.
   c. Debentures issued at premium @ 10% and redeemable at par.
   d. Debentures issued at par and redeemable at premium @ 10%.
   e. Debentures issued at discount of 5% and redeemable at a premium of 10%.
   f Debentures issued at premium of 6% and redeemable at a premium of 4%.

   Record necessary journal entries in the above mentioned cases at the time of issue and redemption of debentures.

2. Record necessary journal entries in each of the following cases:
   a. 27,000, 7% debentures of Rs. 100 each issued at par, redeemable at par.
   b. 25,000, 7% debentures of Rs. 100 each issued at par redeemable at 4% premium.
   c. 20,000, 7% debentures of Rs. 100 each issued at 5% discount and redeemable at par.
   d. 30,000, 7% debentures of 100 each issued at 5% discount and redeemable at 2½ % premium.
   e. 35,000, 7% debentures of Rs. 100 each issued at 4% premium and redeemable.

2.9 Interest on Debentures

When a company issues debentures, it is under an obligation to pay interest thereon at fixed percentage (half yearly) periodically until debentures are repaid. This percentage is usually as part of the name of debentures like 8% debentures, 10% debentures, etc., and interest payable is calculated at the nominal value of debentures.

Interest on debenture is a charge against the profit of the company and must be paid whether the company has earned any profit or not. According to Income Tax Act 1961, a company must deduct income tax at a prescribed rate from the interest payable on debentures if it exceeds the prescribed limit. It is called Tax Deducted at Source (TDS) and is to be deposited with the tax authorities. Of course, the debentureholders can adjust this amount against the tax due from them.

2.9.1 Accounting Treatment

The following journal entries are recorded in the books of a company in connection with the interest on debentures:

1. *When interest is due*
   Debenture Interest A/c Dr.
   To Income Tax payable A/c
   To Debentureholders A/c
   (Amount of interest due on debenture and tax deducted at source)

2. *For payment of interest to debentureholders*
   Debentureholders A/c Dr.
   To Bank A/c
   (Amount of interest paid to debentureholders)

3. *On transfer debenture Interest Account to profit and loss account*
   Profit and Loss A/c Dr.
   To Debenture Interest A/c
   (Debenture interest transferred to profit and loss A/c)

4. On payment of tax deducted at source to Government
   Income Tax Payable A/c Dr.
   To Bank A/c
   (Payment of tax deducted at source on interest on debentures)

Illustration 17

A Ltd. issued 2000 10% debentures of Rs.100 each on January 01, 2004 at a discount of 10% redeemable at a premium of 10%.

Give journal entries relating to the issue of debentures and debenture interest for the period ending December 31, 2004 assuming that interest was paid half yearly on June 30 and December 31 and tax deducted at source is 10%. A.Ltd. follows calendar year as its accounting year.

Solution

Book of A Ltd.

Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
2004 Jan.01	Bank A/c Dr. To 10% Debenture Application & Allotment A/c (Application money received on 2,000, 10% debentures)		1,80,000	 1,80,000
	10% Debentures Application & Allotment A/c Dr. Loss on Issue of Debenture A/c Dr. To 10% Debentures A/c To Premium on Redemption of Debentures A/c (Allotment of debentures at a discount of 10% and redeemable at a premium of 10%)		1,80,000 40,000	 2,00,000 20,000
Jun.30	10% Debenture Interest A/c Dr. To Debentureholders A/c To Income Tax Payable A/c (Interest due for 6 months and tax deducted at source)		10,000	 9,000 1,000
	10% Debenturesholders A/c Dr. To Bank A/c (Payment of interest)		9,000	 9,000

Dec.31	10% Debenture interest A/c Dr. To Debentureholders A/c To Income Tax Payable A/c (Interest due for 6 months and tax deducted at source)		10,000	 9,000 1,000
	10% Debenturesholders A/c Dr. To Bank A/c (Payment of interest)		9,000	 9,000
Dec.31	Income Tax Payable A/c Dr. To Bank A/c (Paid tax deducted at source to the government)		2,000	 2,000
	Profit & Loss A/c Dr. To Debenture Interest A/c (Debenture interest transferred to profit and loss account)		20,000	 20,000

Do it Yourself

1. Diwakar enterprises Ltd. Issued 10,00,000, 6% debentures on April 1, 2002. Interest is paid on September 30, 2002 and March 31, 2003.

   Record necessary journal entries assuming that income tax is deducted @30% of the amount of interest.

   (Amount of tax Rs. 18,000 for the year ending March 31, 2003)
2. Laser India Ltd. Issued 7,00,000, 8% debentures of Rs. 100 each at par. Company deducts income tax from the interest of these debentures at source. Interest is to be paid on these debentures half-yearly on September 30 and March 31, every year. Amount of income tax deducted half-yearly is Rs. 2,80,000.

2.10 Writing off Discount/Loss on Issue of Debentures

The discount/loss on issue of debentures is a capital loss or a fictitious asset and, therefore, must be written-off during the life time of debentures. The amount of discount/loss on issue of debentures should normally not be written-off in the year of issue itself since the benefit of the debentures would accrue to the company till their redemption. The discount/loss on it is, therefore, treated as capital loss and, normally, spread user the duration of debentures say 5–7 years meanwhile it should be shown under the head 'Miscellaneous Expenditure' on the asset side of Balance Sheet. Section 78 of The Companies Act, 1956 also permits the utilisation of 'Securities Premium Account' and other capital profits for writing off the discount/loss on issue of debentures. In case, however, there are no capital profits or if the capital profits are not adequate, the amount of such discount/loss can be written-off against the revenue profits every year by passing the following journal entry.

Profit and Loss A/c	Dr.
To Discount/Loss on Issue of Debentures A/c	
(Discount/loss on issue of debentures written-off)	

There are two methods, which can be adopted to write off discount/loss on issue of debentures against the revenue profits. These are as follows.

1. *Fixed Instalment Method:* When the debentures are redeemed at the end of a specified period, the total amount of discount should be written-off in equal instalments of fixed amount over that period. For example, if the debentures are to be redeemed after 10 years then out of the total amount of discount of Rs.1,00,000, Rs.10,000 will be written-off every year.
2. *Fluctuating Instalment Method:* When debentures are repaid by annual drawings or in instalments, the discount should be written-off in the ratio of debentures outstanding as at the end of each accounting year. The amount of discount, under this method, goes on reducing every year and so this method may also be known as Reducing Instalment Method.

For example, a company issues Rs.15,00,000, 9% Debentures at a discount of 10% redeemable by annual drawings of Rs.3,00,000 at the end of each year. The amount of discount to be written-off will be calculated as under:

Year	**Amount utilised during the Year**	**Ratio**
First Year	Rs.15,00,000	5
Second Year	Rs.12,00,000	4
Third Year	Rs. 9,00,000	3
Fourth Year	Rs. 6,00,000	2
Fifth Year	Rs. 3,00,000	1

Hence, the amount of discount to be written-off every year will be as under :

First Year	Rs.1,50,000	5/15	=	Rs.50,000
Second Year	Rs.1,50,000	4/15	=	Rs.40,000
Third Year	Rs.1,50,000	3/15	=	Rs.30,000
Fourth Year	Rs.1,50,000	2/15	=	Rs.20,000
Fifth Year	Rs.1,50,000	1/15	=	Rs.10,000

Illustration 18

X Ltd. issued 5,000, 16% debentures of Rs.100 each at a discount of 5% repayable after 5 years at a premium of 5%. You are required to write-off the loss on issue of debentures over the period of five years.

Solution

Books of X Limited
Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Bank A/c Dr. To Debenture Application & Allotment A/c (Debentures application money received)		4,75,00	 4,75,000
	Debenture Applications Allotment A/c Dr. Loss on Issue of Debentures A/c Dr. To 16% Debentures A/c To Premium on Redemption of Debenture A/c (Debenture application money transferred to Debentures A/c repayable at premium of 5%)		4,75,000 50,000	 5,00,000 25,000
First Year	Profit & Loss A/c Dr. To Loss on Issue of Debentures A/c		10,000	 10,000
Second Year	Profit & Loss A/c Dr. To Loss on Issue of Debentures A/c		10,000	 10,000
Third Year	Profit & Loss A/c Dr. To Loss on Issue of Debentures A/c		10,000	 10,000
Fourth Year	Profit & Loss A/c Dr. To Loss on Issue of Debentures A/c		10,000	 10,000
Fifth Year	Profit & Loss A/c Dr. To Loss on Issue of Debentures A/c		10,000	 10,000

Loss on Issue of Debenture Account

Dr. *Cr.*

Date	Particulars	Amount (Rs.)	Date	Particulars	Amount (Rs.)
Jan.01 (year1)	Debentures	50,000	Dec.31 (year 1)	Profit & Loss Balance c/d	10,000 40,000
		50,000			**50,000**

Jan.01 (year2)	Balance b/d	40,000	Dec.31 (year 2)	Profit & Loss Balance c/d	10,000 30,000
		40,000			**40,000**
Jan.01 (year3)	Balance b/d	30,000	Dec.31 (year 3)	Profit & Loss Balance c/d	10,000 20,000
		30,000			**30,000**
Jan.01 (year4)	Balance b/d	20,000	Dec.31 (year 4)	Profit & Loss Balance c/d	10,000 10,000
		20,000			**20,000**
Jan.01 (year5)	Balance b/d	10,000	Dec.31 (year 5)	Profit & Loss	10,000
		10,000			**10,000**

Illustration 19

A company issued 9% debentures of the face value of Rs.2,00,000 at a discount of 6%. The debentures were repayable by annual drawings of Rs.40,000. How would you deal with discount on issue of debenture? Show the discount account in company's ledger for the duration of debentures.

Solution

Discount on Issue of Debentures Account

Dr. *Cr.*

Date	*Particulars*	*Amount (Rs.)*	*Date*	*Particulars*	*Amount (Rs.)*
Jan.01 (year1)	9% Debentures	12,000	Dec.31 (year 1)	Profit & Loss Balance c/d	4,000 8,000
		12,000			**12,000**
Jan.01 (year2)	Balance b/d	8,000	Dec.31 (year 2)	Profit & Loss Balance c/d	3,200 4,800
		8,000			**8,000**
Jan.01 (year3)	Balance b/d	4,800	Dec.31 (year 3)	Profit & Loss Balance c/d	2,400 2,400
		4,800			**4,800**

Jan.01 (year4)	Balance b/d	2,400	Dec.31 (year 4)	Profit & Loss Balance c/d	1,600 800
		2,400			**2,400**
Jan.01 (year5)	Balance b/d	800	Dec.31 (year 5)	Profit & Loss	800
		800			**800**

Working Note :

Statement showing the Debentures Discount to be written-off each year :

Year ended on	Face Value of Debentures used (Rs.)	Period of use	Product	Ratio	Amount of Discount (Rs.)
A	B	C	D=B C	E	(12000 E/15)
End of Ist year	2,00,000	12 months	24,00,000	5	4,000
End of IInd year	1,60,000	12 months	19,20,000	4	3,200
End of IIIrd year	1,20,000	12 months	14,40,000	3	2,400
End of IVth year	80,000	12 months	9,60,000	2	1,600
End of Vth year	40,000	12 months	4,80,000	1	800
				15	

Illustration 20

Z Ltd. issued 10,000 Debentures of Rs.100 each at 8%, payable, Rs.10 on application; and the balance on allotment. All the money was duly received. Record the entries in the books of the company.

Solution

Books of Z Ltd.
Journal Entries

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr. 8% Debenture Applications A/c (Debenture Application money received)		1,00,000	 1,00,000
	8% Debenture Applications A/c Dr. To 8% Debentures A/c (Applications money transferred to DebenturesA/c)		1,00,000	 1,00,000

	8% Debenture Allotment A/c Dr. To 8% Debentures A/c (Amount due on allotment)		9,00,000	9,00,000
	Bank A/c Dr. To 8% Debentures Allotment A/c (Allotment money received)		9,00,000	9,00,000

Illustration 21

A Ltd. invited applications for 5,000, 10% debentures of Rs.100 each at 10%, premium, Rs.25 payable on application, Rs.50 (including premium) on allotment and the balance on first and final call. Applications were received for 7,500 debentures and it was decided to make allotment as under:

(i) To refuse allotment to the applicants of 1,500 debentures

(ii) To give full allotment to the applicants of 1,000 debentures

(iii) To allot the remaining debentures on pro-rata basis

The excess money received on applications is to be adjusted on allotment. Record the necessary journal entries assuming that full money has been received. Also prepare the extract of Balance Sheet.

Solution

Books of A Ltd.
Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Bank A/c Dr. To 10% Debenture Application A/c (Application money on 10% debentures received)		1,87,500	1,87,500
	8% Debenture Application A/c Dr. To 10% Debentures A/c To 10% Debenture Allotment A/c To Bank A/c (Application money transferred to Debentures A/c, surplus refunded and excess money adjusted)		1,87,500	1,25,000 25,000 37,500
	10% Debenture Allotment A/c Dr. To 10% Debentures A/c To Securities Premium A/c (Allotment money due received on debentures)		2,50,000	2,00,000 50,000

	Bank A/c Dr. To 10% Debenture Allotment A/c (Allotment money received on debentures)		2,25,000	2,25,000
	10% Debenture First & Final Call A/c Dr. To 10% Debentures A/c (First and Final Call money due on debentures)		1,75,000	1,75,000
	Bank A/c Dr. To 10% Debenture First & Final Call A/c (Debenture First & Final Call money received)		1,75,000	1,75,000

Extract of Balance Sheet

Liabilities	*Amount (Rs.)*	*Assets*	*Amount (Rs.)*
Reserves and Surplues:			
Securities premium	50,000	Cash at bank	5,50,000
Secured loans:			
10% Debentures	5,00,000		
	5,50,000		**5,50,000**

Do it Yourself

1. X Ltd. Issued 2,000, 10% debentures of Rs.100 each at a discount of 8% on 1 Jan, 1992 which are redeemable at par by annual drawings in 4 years commencing from 31st March 1993 as per the following redemption plan:

   Ist Draw 10%, 2nd Draw 20%, 3rd Draw 30%, and 4th Draw 40%. Calculate the amount of discount to be written-off each year assuming that X Ltd. follows calendar year as its accounting year.
2. Z Ltd. issued 15,00,000, 10% debenture of Rs.50 each at premium of 10% payable as Rs.20 on application and balance on allotment. Debentures are redeemable at par after 6 years. All the money due on allotment was called and duly received. Record necessary entries when premium money is included:

   (i) in application money

   (ii) in allotment money
3. Z Ltd. issued 5,000, 10% debentures of Rs.100 each at a discount of 10% on 1.1.2005. The debentures are to be redeemed every year draw of lots – 1,000 debenture to be redeemed every year starting on 31.12.2005. Record the necessary journal entries including the payment of interest and writing off the discount on issue of debentures. The interest is payable on 30th June and 31st December. Z Ltd. Closes its books of accounts on 31st December.

4. M Ltd. issued 10,000, 8% debentures of Rs.100 each at a premium of 10% on 1.1.2004. It purchased sundry assets of the value of Rs,2,50,000 and took over the liabilities of Rs,1,90,000 and issued 8% debentures at a discount of 5% to the vendor. On the same date it took loan from the Bank for Rs.1,00,000 and issued 8% debentures as Collateral Security. Record the relevant journal entries in the books of M Ltd. and prepare the extract of balance sheet on 31.12.2004. Ignore interest.
5. On 1.1.2005 Fast Computers Ltd. issued 20,00,000, 6% debentures of Rs.100 each at a discount of 4%, redeemable at a premium of 5% after three years. The amount was payable as follows:

   On application Rs.50 per debenture,

   Balance on allotment,

   Record the necessary journal entries for issue of debentures.
6. D Ltd. Purchased machinery worth Rs.2,00,000 from E Ltd. on 1.1.2001. Rs.50,000 were paid immediately and the balance was paid by issue of Rs.1,60,000, 12% Debentures in D Ltd. Record the necessary journal entries for recording the transactions in the books of D Ltd.

Illustration 22

A Ltd. Company has issued Rs.1,00,000, 9% debentures at a discount of 6%. These debentures are to be redeemed equally, spread over 5 annual instalments. Show Discount on Issue of Debentures Account for five years.

Solution

Books of A Ltd.
Discount on Issue of Debentures Account

Dr. *Cr.*

Date	*Particulars*	*Amount (Rs.)*	*Date*	*Particulars*	*Amount (Rs.)*
Ist year	Debenture	6,000	Ist year	Profit & Loss Balance c/d	2,000 4,000
		6,000			**6,000**
IInd year	Balance b/d	4,000	IInd year	Profit & Loss Balance c/d	1,600 2,400
		4,000			**4,000**
IIIrd year	Balance b/d	2,400	IIIrd year	Profit & Loss Balance c/d	1,200 1,200
		2,400			**2,400**

IVth year	Balance b/d	1,200	IVth year	Profit & Loss Balance c/d	800 400
		1,200			**1,200**
Vth year	Balance b/d	400	Vth year	Profit & Loss	400
		400			**400**

Workings Notes:

Total discount on the issue of debentures

$$\text{Rs. } 1{,}00{,}000 \quad \frac{6}{100} = \text{Rs. } 6{,}000$$

Amount of discount to be written off is determined as follows:

Year	Amount	Ratio	Amount (Rs.)	
1	1,00,000	5	$\frac{5}{15} \times 6{,}000 =$	2,000
2	80,000	4	$\frac{4}{15} \times 6{,}000 =$	1,600
3	60,000	3	$\frac{3}{15} \times 6{,}000 =$	1,200
4	40,000	2	$\frac{2}{15} \times 6{,}000 =$	800
5	20,000	1	$\frac{1}{15} \times 6{,}000 =$	400

Test your Understanding – I

State whether the following statements are True (T) or False (F):

1. Debenture is written instrument acknowledging a debt under the common seal of the company.
2. Debenture is a part of owned capital.
3. The payment of interest on debentures is a charge on the profits of the company.
4. The debentures cannot be issued at a discount of more than 10% of the face value.

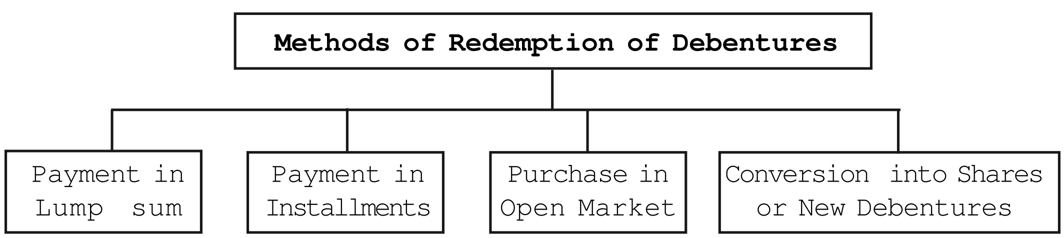
5. Redeemable debentures are those debentures, which are payable on the expiry of the specific period.
6. Perpetual debentures are also known as irredeemable debentures.
7. Debentures cannot be converted into shares.
8. Debentures cannot be issued at a premium.
9. A Collateral Security is a Subsidiary Security.
10. Debentures cannot be issued at a premium and redeemable at par.
11. Loss on issue of debentures account is a revenue loss.
12. Premium on redemption of debentures account is shown under the 'Securities Premium' in the Balance Sheet.

SECTION II

2.11 Redemption of Debentures

Redemption of debentures refers to extinguishing or discharging the liability on account of debentures in accordance with the terms of issue. In other words redemption of debentures means repayment of the amount of debentures by the company. There are four ways by which the debentures can be redeemed. These are :

1. Payment in lump sum
2. Payment in instalments
3. Purchase in the open market
4. By conversion into shares or new debentures.



Payment in lump sum : The company redeems the debentures by paying the whole amount in one lump sum to the debenturesholders at the expiry of the agreed time or earlier at the option of the company. In this case, the time of repayment is known in advance and the company can plan its financial resources accordingly.

Payment in instalments : Under this method, redemption of debentures is made in instalments at the end of each year during the tenure of the debentures. The total amount of debenture liability is divided by the number of years it is to last and the actual debentures redeemable are identified by means of drawing the requisite number of lots from out of the debentures outstanding for payment.

Purchase in open market: When a company purchases its own debentures through stock exchanges for the purposes of cancellation, such an act of purchasing and cancelling the debentures constitutes redemption of debentures by purchase in the open market.

Conversion into shares or new debentures : A company can redeem its debentures by converting them into new class of debentures or shares. If debentureholders find that the offer is beneficial to them, they can exercise their right of converting their debentures into new class of debentures or shares. These new shares or debentures can be issued at par, at a discount or at a premium. It should be noted that only the actual proceeds of debentures are to be taken into account for ascertaining the number of shares to be issued in lieu of the debentures to be converted. If debentures are originally issued at discount, the actual amount realised from them at the time of issue is used as the basis for computing the actual number of shares to be issued. It may be noted that this method is applicable only to convertible debentures. Non-convertible debentures can be redeemed in this way.

2.12 Redemption by Payment in Lump Sum

When the company pays the whole amount in one lumpsum, the following, journal entries are recorded in the books of the company.

1. *If debentures are to be redeemed at par*

(a)	Debentures A/c	Dr.
	To Debentureholders	
(b)	Debentureholders	Dr.
	To Bank A/c	

2. *If debentures are to be redeemed at premium*

(a)	Debentures A/c	Dr.
	Premium on Redemption of Debentures A/c	Dr.
	To Debenture holders	
(b)	Debentureholders	Dr.
	To Bank A/c	

Illustration 23

Give the necessary journal entries at time of redemption of debentures in each of the following cases.

1. X Ltd. issued 500, 9% debentures of Rs.100 each at par and redeemable at par at the end of 5 years out of capital.
2. X Ltd. issued 1,000, 12% debentures of Rs.100 each at par. These debentures are redeemable at 10% premium at the end of 4 years.
3. X Ltd. issued 12% debentures of the total face value of Rs.1,00,000 at premium of 5% to be redeemed at par at the end of 4 years.
4. X Ltd. issued Rs.1,00,000, 12% debentures at a discount of 5% but redeemable at a premium of 5% at the end of 5 years.

Solution

Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
1.	9% Debentures A/c Dr.		5,00,000	
	To Debentureholders			5,00,000
	(Amount due on redemption debentures)			
	Debentureholders Dr.		5,00,000	
	To Bank A/c			5,00,000
	(Payment made to debenturesholders)			
2.	12% Debentures A/c Dr.		1,00,000	
	Premium on Redemption of Debentures A/c Dr.		10,000	
	To Debentureholders			1,10,000
	(Amount due on redemption of debentures)			
	Debentureholders Dr.		1,10,000	
	To Bank A/c			1,10,000
	(Payment made to debenturesholders)			
3.	12% Debentures A/c Dr.		1,00,000	
	To Debentureholders			1,00,000
	(Amount due on redemption)			
	Debentureholders A/c Dr.		1,00,000	
	To Bank A/c			1,00,000
	(Payment made to debenturesholders)			

4.	12% Debentures A/c Dr. Premium on Redemption of Debentures A/c Dr. To Debentureholders A/c (Amount due on redemption of debentures)		1,00,000 5,000	 1,05,000
	Debentureholders Dr. To Bank A/c (Payment made to debenturesholders)		1,05,000	 1,05,000

As per the latest provisions of The Companies Act, the company must sets aside a portion of profits every year and transfer it to Debenture Redemption Reserve for redemption of debentures until the debentures are redeemed. The journal entry recorded for the purpose is as follows :

Provisions of The Companies (Amendment) Act, 2000 – Section 117C

(a) Where a company issued debentures after the commencement of this Act, it shall create a Debenture Redemption Reserve for the redemption of such debentures, to which adequate amount shall be credited, from out of its profit every year until such debentures are redeemed.

(b) The amount credited to the Debenture Redemption Reserve shall not be utilised by the company except for the purpose of redemption of debentures.

SEBI's Guidelines

Securities and Exchange Board of India (SEBI) has provided some guidelines for redemption of debentures. The focal points of these guidelines are:

1. Every company shall create Debenture Redemption Reserve in case of issue of debenture redeemable after a period of more than 18 months from the date of issue.
2. The creation of Debenture Redemption Reserve is obligatory only for non-convertible debentures and non-convertible portion of partly convertible debentures.
3. A company shall create Debenture Redemption Reserve equivalent to at least 50% of the amount of debenture issue before starting the redemption of debenture.
4. Withdrawal from Debenture Redemption Reserve is permissible only after 10% of the debenture liability has already been reduced by the company.

SEBI guidelines would not apply under the following situations:

(a) Infrastructure company (a company wholly engaged in the business of developing, maintaining and operating infrastructure facilities), and

(b) A company issuing debentures with a maturity period of not more than 18 months.

2.12.1 Clarifications regarding creation of Debenture Redemption Reserve

The Department of Company Affairs, Government of India, vide their circular No.9/2002, dated 18.04.2002 has issued the following clarifications regarding creation of Debenture Redemption Reserve (DRR)–

a. No DRR is required for debentures issued by All India Financial Institutions, regulated by RBI and Banking Companies for both public as well as privately placed debentures.

b. No DRR is required in case of privately placed debentures.

c. Section 117C will apply to debentures issued and pending to be redeemed and, therefore, DRR will also be created for debentures issued prior to 13.12.2000 and pending redemption.

d. Section 117C will apply to non-convertible portion of debentures issued whether they are fully or partly paid.

The Debenture Redemption Reserve account appears on the liability side of the Balance sheet under the head "Reserves and Surpluses." When the debentures are redeemed, the requisite amount of Debenture Redemption Reserve is transferred to General Reserve by recording the following journal entry.

Illustration 24

XYZ Ltd. issued 200, 15% debentures of Rs.100 each on January 01, 2002 at discount of 10% redeemable at premium of 10% out of profits. Give journal entries at the time of issue and redemption of debentures if debentures are to be redeemed in lump sum at the end of 4th year. The directors decided to transfer the minimum amount to Debenture Redemption Reserve on December, 31 2002.

Solution

Books of XYZ Ltd.
Journal

Date	Particulars		L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
2002	Bank A/c	Dr.		18,000	
Jan.01	Loss on Issue of Debenture A/c	Dr.		4,000	
	To 15% Debentures A/c				20,000
	To Premium on Redemption of Debenture A/c				2,000
	(Issue of debentures at 10% discount and redeemable at 10% premium)				

Dec.31	Profit & Loss Appropriation A/c Dr. To Debenture Redemption Reserve A/c (Transfer of profits to DRR as per Sec 117(C) and SEBI)		10,000	10,000
2004 Dec.31	15% Debentures A/c Dr. Debenture Redemption Premium A/c Dr. To Debentureholders A/c (Amount due on redemption)		20,000 2,000	22,000
	Debentureholders A/c Dr. To Bank A/c (Amount paid to debentures holders)		22,000	22,000
	Debenture Redemption Reserve A/c Dr. To General Reserve A/c (Transfer of DRR to General Reserve after total redemption)		10,000	10,000

It may be noted that when Debenture Redemption Reserve is created, redemption of debentures is termed as redemption out of profits. Otherwise, it is treated as redemption out of capital.

Do it Yourself

1. X Ltd. decides to redeem 8,000, 10% debentures of Rs.100 each on January 1, 2004 at a premium of 5%. The company has a balance of Rs.9, 00,000 at the credit of its profit and loss account. The company closes its books on December 31 every year. What journal entries the company will be recorded to redeem the above debentures.
2. G Ltd. issued 5,00,000, 12 % debenture of Rs.100 each on April 1, 2002 redeemable at par on July 1, 2003. The company received applications for 6,00,000 debentures and the allotment was made to all the applicants on pro-rata basis. The debenture were redeemed on due date. How much amount of Debenture Redemption Reserve is to be created before the redemption is carried out? Also record necessary journal entries regarding issue and redemption of debenture. Ignore tax deducted at source.

2.12.2 Redemption by Payment in Instalments

When, as per terms of the issue, the debentures are to be redeemed in instalments beginning from a particular year, the actual debentures to be redeemed are selected usually by draw of lots, and the redemption to be made either out of profits or out of capital. The entries will be:

1. *If redeemed out of profits*
   (a) Profit and Loss Appropriation A/c Dr.
   To Debenture Redemption Reserve A/c
   (b) Debentures A/c Dr.
   To Debentureholders
   (c) Debentureholders Dr.
   To Bank A/c
2. *If redeemed out of capital*
   (a) Debentures A/c Dr.
   To Debentureholders
   (b) Debentureholders Dr.
   To Bank A/c

Illustration 25

ABC Ltd. issued 3,000, 14% Debentures of Rs. 100 each at a discount of 5% on January 1, 2002. Interest on these debentures is payable annually on 31st December each year. The debentures are redeemable at part 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.

Soluation

14% Debentures Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2002				2002			
Dec.31	Balance c/d		3,00,000	Jan.01	Debenture Application A/c		2,85,000
				Dec.31	Discount on Issue of Debentures A/c		15,000
			3,00,000				**3,00,000**
2003				2003			
Dec.31	Balance c/d		3,00,000	Jan.01	Balance b/d		3,00,000
			3,00,000				**3,00,000**

2004				2004			
Dec.31	Bank A/c		1,00,000	Jan.01	Balance b/d		3,00,000
Dec.31	Balance c/d		2,00,000				
			3,00,000				**3,00,000**
2005				2005			
Dec.31	Bank A/c		1,00,000	Jan.01	Balance b/d		2,00,000
Dec.31	Balance c/d		1,00,000				
			2,00,000				**2,00,000**
2006				2006			
Dec.31	Balance c/d		1,00,000	Jan.01	Balance b/d		1,00,000
			1,00,000				**1,00,000**

Debentures Interest Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2002				2002			
Dec.31	Bank		**42,000**	Dec.31	Profit and Loss		**42,000**
2003				2003			
Dec.31	Bank		**42,000**	Dec.31	Profit and Loss		**42,000**
2004				2004			
Dec.31	Bank		**42,000**	Dec.31	Profit and Loss		**42,000**
2005				2005			
Dec.31	Bank		**28,000**	Dec.31	Profit and Loss		**28,000**
2006				2006			
Dec.31	Bank		**14,000**	Dec. 31	Profit and Loss		**14,000**

Discount on Issue Debentures Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2002				2002			
Jan.01	Balance c/d		15,000	Dec.31	Profit and Loss		3,750
				Dec.31	Balance c/d		11,250
			15,000				**15,000**

2003				2003			
Jan.01	Balance c/d		11,250	Dec. 31	Profit and Loss		3,750
				Dec. 31	Balance c/d		7,500
			11,250				**11,250**
2004				2004			
Jan.01	Balance c/d		7,500	Dec. 31	Profit and Loss		3,750
				Dec. 31	Balance c/d		3,750
			7,500				**7,500**
2005				2005			
Jan.01	Balance c/d		3,750	Dec. 31	Profit and Loss		2,500
				Dec. 31	Balance c/d		1,250
			3,750				**3,750**
2006				2006			
Jan.01	Balance c/d		1,250	Dec. 31	Profit and Loss		1,250
			1,250				**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 2002	3,00,000
Beginning of 2003	3,00,000
Beginning of 2004	3,00,000
Beginning of 2005	2,00,000
Beginning of 2006	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.***
2002	Rs. 15,000 $\frac{3}{12}$	3,750
2003	Rs. 15,000 $\frac{3}{12}$	3,750
2004	Rs. 15,000 $\frac{3}{12}$	3,750
2005	Rs. 15,000 $\frac{2}{12}$	2,500
2006	Rs. 15,000 $\frac{1}{12}$	1,250

It may be noted that the company will also have to transfer every year an amount equal to the nominal value of debentures redeemed and at the end of fifth year (31.12.2006), the same shall be transfered to general reserve.

2.13 Redemption by Purchase in Open Market

When a company purchases its own debentures in the open market for the purpose of immediate cancellation, the purchase and cancellation of such debentures are termed as redemption by purchase in the open market. The advantage of such an option is that a company can redeem the debentures at its convenience whenever it has surplus funds. Secondly, the company can purchase them when they are available in market at a discount.

When the debentures are purchased from the market at a discount and cancelled, the journal entries are recorded as follows :

1. *On purchase of our debentures for immediate cancellation*

   Debentures A/c Dr.

   To Bank A/c

   To Profit on Redemption of Debentures A/c

2. *On transfer of Profit on Redemption*

   Profit on Redemption of Debenture A/c Dr.

   To Capital Reserve

In case, the debentures are purchased from the market at a price which is above the nominal value of debenture, the excess will be debited to loss on redemption of debentures. The journal entry in that case will be

1. Debentures A/c Dr.

   Loss on Redemption of Debentures A/c Dr.

   To Bank A/c

2. Profit and Loss A/c Dr.

   To Loss on Redemption of Debentures A/c

Illustration 26

X Ltd. purchased its own debentures of Rs. 100 each of the face value of Rs. 20,000 from the open market for cancellation at Rs.92. Record necessary journal entries.

Solution

Books of X Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Debentures A/c Dr.		20,000	
	To Bank A/c			18,400
	To Profit on Redemption of Debentures A/c			1,600
	(Own debentures purchased at Rs.92 from the market)			

	Profit on Redemption of Debenture A/c Dr. To Capital Reserve (Transfer of profit on cancellation of debentures to capital reserve)		1,600	1,600
	Profit & Loss Appropriation A/c Dr. To Debenture Redemption Reserve A/c (Transfer of profits to Debenture Redemption Reserve)		20,000	20,000

Illustration 27

X Ltd. decided to redeem Rs. 25,000, 12% debentures. It purchased Rs.20,000 debentures in the open market at Rs.98.50 each, the expenses being Rs.100, and redeemed the balance of Rs.5,000 debentures by draw of lots. Journalise.

Solution

Books of X Ltd.
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	12% Debentures A/c Dr. To Bank A/c To Profit on Redemption of Debentures A/c (Purchase of 200 debentures @ Rs.98.5 plus Rs.100 for expenses)		20,000	19,800 200
	12% Debentures A/c Dr. To Bank A/c (Redemption of Rs.5,000 debentures)		5,000	5,000
	Profit on Redemption of Debenture A/c Dr. To Capital Reserve (Transfer of profits on Redemption of debentures to Capital Reserve A/c)		200	200
	Profit & Loss Appropriation A/c Dr. To Debenture Redemption Reserve A/c (Transfer of profit to Debenture Redemption Reserve)		25,000	25,000

Note : The balance of Debenture Redemption Reserve has not been transferred to general reserve under the assumption that the company still some has debenture liability to be redeemed in future.

Illustration 28

On January 01, 2004, a company made an issue of 1,000, 6% debentures of Rs.1,000 each at Rs.960 per debenture. The terms of issue provided for the redemption of 200 debentures every year starting from the end of 2005 either by purchase or by draw of lot at par at the company's option. Rs.10,000 was written-off the debenture discount account in 2004 and so also 2005. On 31.12.2005, the company purchased for cancellation debentures of the face value of Rs.80,000 at Rs.950 per debenture and of the face value of Rs.1,20,000 at Rs.900 per debenture.

Journalise the above transaction and show the profit on redemption would be treated.

Solution

Date	Particulars		L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
2004 Jan.01	Bank A/c	Dr.		9.60,000	
	To 6% Debentures Application & Allotment A/c				9,60,000
	(Debentures application money received)				
	6% Debenture Application & Allotment A/c	Dr.		9,60,000	
	Discount on Issue of Debentures A/c	Dr.		40,000	
	To 6% Debentures A/c				10,00,000
	(Debentures application money transferred to Debentures A/c)				
Dec.31	Profit & Loss A/c	Dr.		10,000	
	To Discount on Issue of Debenture A/c				10,000
	(Discount on issue of debentures written-off)				
2005 Dec.31	6% Debentures A/c	Dr.		80,000	
	To Bank A/c				76,000
	To Profit on Redemption of Debenture A/c				4,000
	(Redemption of 80 debentures by purchasing @ Rs.950 per debenture)				
Dec.31	6% Debentures A/c	Dr.		1,20,000	
	To Bank A/c				1,08,000
	To Profit on Redemption of Debentures A/c				12,000
	(Redemption of 120 debentures @ Rs.900 by purchasing in open market)				

Dec.31	Profit on Redemption of Debentures A/c Dr. To Capital Reserve A/c (Transfer of profits on cancellation of debentures to Capital Reserve A/c)		16,000	16,000
Dec.31	Profit & Loss Appropriation A/c Dr. To Debenture Redemption Reserve A/c (Transfer of profit to Debenture Redemption Reserve)		2,00,000	2,00,000
Dec.31	Profit & Loss A/c Dr. To Discount on Issue of Debentures A/c (Discount on debentures written-off)		10,000	10,000

2.14 Redemption by Conversion

As stated earlier the debentures can also be debentures redeemed by converting them into shares or new debentures. If debentureholders find that the offer is beneficial to them, they will take advantage of this offer. The new shares or debentures may be issued at par, at a discount or at a premium. It may be noted that no Debenture Redemption Reserve is required in case of convertible debentures because no funds are required for redemption.

Illustration 29

Arjun Plastics Limited redeemed 1,000, 15% debentures of Rs.100 each by converting them into equity shares of Rs.10 each at a premium of Rs.2.50 per share. The company also redeemed 500 debentures by utilising Rs.50,000 out of profit. Give the necessary journal entries.

Solution

Books of Arjun Plastic Limted
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	15% Debentures A/c Dr. To Debentureholders (Amount due to debentureholders)		1,00,000	1,00,000
	Debentureholders A/c Dr. To Equity Shares Capital A/c To Securities Premium A/c (Issue of 800 equity shares at a premium of Rs.2.50 per share)		1,00,000	80,000 20,000

	Debentures A/c Dr. To Debentureholders A/c (Amount due to debentureholders)		50,000	50,000
	Debentureholders Dr. To Bank A/c (Payment to debentureholders)		50,000	50,000
	Profit & Loss Appropriation A/c Dr. To Debenture Redemption Reserve A/c (Transfer of profit to Debenture Redemption Reserve)		50,000	50,000

2.15 Sinking Fund Method

Sufficient funds are required to redeem debentures at the end of a specified period. To meet this requirement, the company may decide to create a sinking fund and invest adequate amount in marketable securities or bonds of other business entities. Normally, a company ensures that an equal amount is set aside every year to arrange the necessary funds at the time of redemption. This is called Sinking Fund method according to while the company makes necessary arrangements is sets aside a part of divisible profit every year and invest the same outside the business in marketable securities. An appropriate amount is calculated by referring to on Sinking Fund Table depending upon the rate of return on investments and the number of years for which investments are made. The amount thus ascertained is transferred from profits every year to Debenture Redemption Fund and its investment is termed as Debenture Redemption Fund Investment. This investment earns as certain amount of income (call it interest) which is reinvested together with the fixed appropriated amount for the purpose in subsequent years. In last year, the interest earned and the appropriated fixed amount are not invested. In fact, at this stage the Debenture Redemption Fund Investments are encashed and the amount so obtained is used for the redemption of debentures. Any profit or loss made on the encashment of Debenture Redemption Fund investments is also transferred to Debenture Redemption Fund Account. The creation of Debenture Redemption Fund Account serves the purpose of Debenture Redemption Reserve as required by law and the SEBI guidelines, and is, after redemption is transferred to general reserve.

Thus, the steps involved in the working of Sinking Fund method are :

1. Calculate the amount of profit to be set-aside annually with the help of sinking fund table.
2. Set aside the amount of profit at the end of each year and credit to Debenture Redemption Fund (DRF) Account.

3. Purchase the investments of the equivalent amount at the end of first year and debit it Debenture Redemption Fund Investment (DRFI) Account.
4. Receive interest on investment at the end of each subsequent year.
5. Purchase the investments equivalent to the fixed amount of profit set aside and the interest earned every year except last year (year of redemption).
6. Receive interest on investment for the last year.
7. Set aside the fixed amount of profit for the last year.
8. Encash the investments at the end of the year of redemption.
9. Transfer the profit/loss on sale of investments reflected in the balance of Debenture Redemption Fund Investment Account to Debenture Redemption Fund Account.
10. Make payment to debenture holders.
11. Transfer Debenture Redemption Fund A/c balance to General Reserve.

The sinking fund method is used for redemption of debentures by payment in lump sum on naturily, and the journal passed from year to year are as follows.

1. *At the end of First Year*

(a) For setting aside the fixed amount of profit for redemption

Profit & Loss Appropriation A/c Dr.
    To Debenture Redemption Fund A/c

(b) For investing the amount set aside for redemption

Debenture Redemption Fund Investment A/c Dr.
    To Bank A/c

2. *At the end of second year and subsequent years other than last year*

(a) For receipt of interest on Debenture Redemption Fund Investments

Bank A/c Dr.
    To Interest on Debenture Redemption
    Fund Investment A/c

(b) For transfer of Interest on Debenture Redemption Fund Investment to Debenture Redemption Fund Account

Interest on Debenture Redemption Fund Investment A/c Dr.
    To Debenture Redemption Fund A/c

(c) For setting aside the fixed amount of profit for redemption

Profit & Loss Appropriation A/c Dr.
To Debenture Redemption Fund A/c

(d) For investments of the amount set aside for redemption and the interest earned on DRFI

Debenture Redemption Fund Investment A/c Dr.
To Bank A/c

3. *At the end of last year*

(a) For receipt of interest
Bank A/c Dr.
To Interest on Debenture Redemption Fund Investment A/c

(b) For transfer of interest on Debenture Redemption Fund Investment to Debenture Redemption Fund Investment A/c
Interest on Debenture Redemption Fund Investment A/c Dr.
To Debenture Redemption Fund A/c

(c) For setting aside the fixed amount of profit for redemption
Profit & Loss Appropriation A/c Dr.
To Debenture Redemption Fund A/c

(d) For encashment of Debenture Redemption Fund Investments
Bank A/c Dr.
To Debenture Redemption Fund Investment A/c

(e) For the transfer of profit/loss on realisation of Debenture Redemption Fund Investments
In case of Profit
Debenture Redemption Fund Investment A/c Dr.
To Debenture Redemption Fund A/c
In case of Loss
Debenture Redemption Fund A/c Dr.
To Debenture Redemption Fund Investment A/c

(f) For amount due to debentureholders on redemption
Debenture A/c Dr.
To Debentureholders A/c

(g) For payment to debentureholders
Debentureholders A/c Dr.
To Bank A/c

(h) For transfer of Debenture Redemption Fund Account balance to General Reserve

Debenture Redemption Fund A/c Dr.

To General Reserve A/c

Illustration 30

X Ltd. issued Rs.10,00,000 debentures on January 01, 2000. These were to be redeemed on December 31, 2002. For this purpose, the company established a sinking fund. The investments were expected to earn interest @ 5% p.a. Sinking fund table shows that Rs.0.317208 invested annually at 5% amount to Rs.1 in 3 years. On December 31, 2002, the bank balance was Rs.4,20,000 before receipt of interest on Sinking Fund Investments. On that date, the investments were sold for Rs.6,56,000.

Calculate the interest to nearest rupee and investments be made to the nearest of Rs.100. Record necessary journal entries. Show Debentures Account. Debenture Redemption Fund Account and Debenture Redemption Fund Investment Account in the books of the company.

Solution

Books of X Ltd.
Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
2004 Jan.1,	Bank A/c Dr.		10,00,000	
	To Debentures A/c			10,00,000
	(Issue of debentures of Rs.10,00,000)			
Dec.31,	Profit & Loss Appropriation A/c Dr.		3,17,208	
	To Debenture Redemption Fund A/c			3,17,208
	(Annual instalment for redemption debited to Profit & Loss Appropriation A/c)			
	Debenture Redemption Fund Investments A/c Dr.		3,17,200	
	To Bank A/c			3,17,200
	(Investment purchased)			
2001 Dec.31,	Bank A/c Dr.		15,860	
	To Interest on DRFI A/c			15,860
	(Interest received @5% on investment)			

	Interest on DRFI A/c Dr. To Debenture Redemption Fund Investment A/c (Interest on DRFI transferred to Debenture Redemption Fund)		15,860	15,860
	Profit & Loss Appropriation A/c Dr. To Debenture Redemption Fund A/c (Annual instalment debited to Profit and Loss Appropriation Account)		3,17,208	3,17,208
	Debenture Redemption Fund Investment A/c Dr. To Bank A/c (Investment purchased for annual instalment plus interest)		3,33,100	3,33,100
2002 Dec.31,	Bank A/c Dr. To Interest on DRFI A/c (Interest received @5% on investment)		32,516	32,516
	Interest on DRFI A/c Dr. To Debenture Redemption Fund A/c (Interest on DRFI transferred to Debenture Redemption Fund)		32,516	32,516
	Profit & Loss Appropriation A/c Dr. To Debenture Redemption Fund A/c (Annual instalment debited to Profit & Loss Appropriation Account)		3,17,208	3,17,208
	Bank A/c Dr. To Debenture Redemption Fund Investment A/c (Sale proceeds of DRFI)		6,56,000	6,56,000
	Debenture Redemption Fund Investment A/c Dr. To Debenture Redemption Fund A/c (Transfer of profit on sale of investments to Debenture Redemption Fund)		5,700	5,700
	Debentures A/c Dr. To Debenturesholders A/c (Debentures amount transferred to debentureholders)		10,00,000	10,00,000

	Debenturesholders A/c Dr. To Bank A/c (Debentures holders paid the money)		10,00,000	 10,00,000
	Debenture Redemption Fund A/c Dr. To General Reserve A/c (Transfer of credit balance of Debenture Redemption Fund General Reserve)		10,05,700	 10,05,700

Debenture Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2000 Dec.31	Balance c/d		10,00,000	2000 Jan.01	Bank		10,00,000
			10,00,000				**10,00,000**
2001 Dec.31	Balance c/d		10,00,000	2001 Jan.01	Balance b/d		10,00,000
			10,00,000				**10,00,000**
2002 Dec.31	Bank		10,00,000	2002 Jan.01	Balance b/d		10,00,000
			10,00,000				**10,00,000**

Debenture Redemption Fund Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2000 Dec.31	Balance c/d		3,17,208	2000 Jan.01	Profit & Loss Appropriation		3,17,208
			3,17,208				**3,17,208**
2001 Dec.31	Balance c/d		6,50,276	2001 Jan.01	Balance b/d Interest on DRFI Profit & Loss Appropriation		3,17,208 15,860 3,17,208
			6,50,276				**6,50,276**

2002				2002			
Dec.31	General Reserve		10,05,700	Jan.01	Balance b/d		6,50,276
					Interest on DRFI		32,516
					Profit & Loss Appropriation		3,17,208
					DRFI		5,700
			10,05,700				**10,05,700**

Debenture Redemption Fund Investment Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2000				2000			
Dec.31	Bank		3,17,200	Jan.01	Bank		3,17,200
			3,17,200				**3,17,200**
2001				2001			
Dec.31	Balance b/d		3,17,200	Jan.01	Balance c/d		6,50,300
	Bank		3,33,100				
			6,50,300				**6,50,300**
2002				2002			
Dec.31	Balance b/d		6,50,300	Jan.01	Bank (Sale Proceeds)		6,56,000
	DRF		5,700				
			6,56,000				**6,56,000**

Bank Account

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2002				2002			
Dec.31	Balance b/d		4,20,000	Dec.31	Debenture		10,00,000
	DRF		6,56,000		Balance c/d		76,000
			10,76,000				**10,76,000**
2003							
Jan.1	Balance b/d		76,000				

Note : The annual instalment of profit to be set aside for redemption has been worked out as 0.317208   10,00,000 = Rs. 3,17,208.

Illustration 31

The balance sheet of XYZ Ltd. disclosed the following information as on December, 31 2003.

	Rs.
15% debentures	15,00,000
Debenture Redemption Fund	11,63,600
Debenture Redemption Fund Investment	11,63,600
(10% Govt. Securities)	

The contribution to Debenture Redemption Fund was 1,30,800 p.a. for the year 2004 and 2005. Debentures are due for payment on December 31, 2005. Prepare the above accounts in the books of company assuming that securities were realised on December 31, 2005 for a sum of Rs.13,52,000 and interest on securities on December 31, was immediately invested.

Solution

Debenture Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2004				2004			
Dec.31	Balance c/d		15,00,000	Jan.01	Balance b/d		15,00,000
			15,00,000				**15,00,000**
2005				2005			
Dec.31	Bank		15,00,000	Jan.01	Balance b/d		15,00,000
			15,00,000				**15,00,000**

Debenture Redemption Fund Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2004				2004			
Dec.31	Balance c/d		14,10,760	Jan.01	Balance b/d		11,63,600
					Interest on DRFI		1,16,360
				Dec.31	Profit and Loss Appropration		1,30,800
			14,10,760				**14,10,760**
2005				2005			
Dec.31	Sinking Fund Investment		58,760	Jan.01	Balance b/d		14,10,760
	General Reserve		16,23,876	Dec.31	Interest on DRFI		1,41,076
					Profit and Loss Appropriation		1,30,800
			16,82,636				**16,82,636**

Debenture Redemption Fund Investment Account

Dr. Cr.

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2004 Jan.01	Balance b/d		11,63,600	2004 Dec.31	Balance c/d		14,10,760
Dec.31	Bank		2,47,160*				
			14,10,760				**14,10,760**
2005 Jan.01	Balance b/d		14,10,760	2005 Dec.31	Bank		13,52,000
					Debenture Redemption Reserve		58,760
			14,10,760				**14,10,760**

* (Interest + Instalment = Rs. 1,16,360 + Rs. 1,30,800 = Rs. 2,47,160)

Illustration 32

LCM Ltd. purchased for cancellation its own 10,00,000, 9% Debenture of Rs.500 each at Rs.480 each. Record necessary journal entries.

Solution

Books of LCM Ltd
Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Own Debentures A/c Dr.		48,00,00,000	
	To Bank A/c			48,00,00,000
	(Purchased its own debenture @ Rs. 480 each)			
	9% Debenture A/c Dr.		50,00,00,000	
	To Own Debenture			48,00,00,000
	To Profit on cancellation of debenture A/c			2,00,00,000
	(Own debenture purchased being cancelled)			
	Profit on cancellation of debentures A/c Dr.		2,00,00,000	
	To Capital Reserve			2,00,00,000
	(Profits on cancellation of debentures transferred to capital reserve)			

Illustration 33

The following balances appeared in the books of Madhu Ltd. as on April 01, 2000:

	(Rs.)
12% Debentures	1,50,000
Debenture Redemption Fund	1,25,000
Debenture Redemption Fund Investments	1,25,000

The Debenture Redemption Fund Investments were represented by Rs.1,30,000, 9% Govt. Securities.

The annual instalment added to the fund was Rs.20,600. On 31st March, 2001, the bank balance before the receipt of interest on investments was Rs.40,000. On the date, all the investments were sold at 84% and the debentures were duly redeemed.

Prepare Debentures Account, Debenture Redemption Fund Account, Debenture Redemption Fund Investment Account and Bank Account for 2000-2001. The company closes its books on March 31, every year.

Solution

Books of Madhu Ltd.

Debenture Redemption Fund Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2001				2000	Balance b/d		1,25,000
Mar.31	Debenture Redemption Fund Investment (Loss on Sale)		15,800	April 1			
	General Reserve (Transfer)		1,41,500	2001 Mar.31	Interest on Debenture Redemption Fund Investment A/c (9% on Rs.1,30,000)		11,700
					Profit & Loss Appropriation		20,600
			1,57,300				**1,57,300**

Debenture Redemption Fund Investment Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2001 April,01	Balance b/d (Face value Rs. 1,30,000)		1,25,000	2000 Mar.31	Bank (84% of Rs. 1,30,000)		1,09,200
					Loss transferred to Debenture Redemption Fund		15,800
			1,25,000				**1,25,000**

Bank Account

Dr. *Cr.*

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2001 Mar.31	Balance b/d		40,000	2000 Mar.31	Debenture		1,50,000
	Interest on Investment		11,700		Balance c/d		10,900
	Debenture Redemption Fund Investment (Sales Proceeds)		1,09,200				
			1,60,900				**1,60,900**

12% Debentures Account

Dr. *Cr.*

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2001 Mar.31	Bank A/c		1,50,000	2000 April 31	Balance b/d		1,50,000
			1,50,000				**1,50,000**

Working Notes :

1. Interest on Debenture Redemption Fund Investments of 1,30,000 at 9% will be Rs.11,700.
2. Investments realised at 84%. Hence, the investments of Rs.1,30,000 will realise Rs.1,09,200.

Test your Understanding – II

Select the correct answer for the following multiple choice questions:

1. Debentures which are transferable by mere delivery are:
   (a) Registered debentures, (b) First debentures,
   (c) Bearer debentures.
2. The following journal entry appears in the books of X Co. Ltd.

Bank a/c	Dr.	4,75,000	
Loss on issue of debenture a/c	Dr.	75,000	
To 12% Debentures a/c			5,00,000
To Premium on Redemption of Debenture A/c			50,000

   Debentures have been issued at a discount of:
   (a) 15%, (b) 5%, (c) 10%.

3. X Co. Ltd. purchased assets worth Rs.28,80,000. It issued debentures of Rs.100 each at a discount of 4 per cent in full satisfaction of the purchase consideration. The number of debentures issued to vendor is:
   (a) 30,000, (b) 28,800, (c) 32,000.
4. Convertible debentures cannot be issued at a discount if:
   (a) They are to be immediately converted,
   (b) They are not to be immediately converted,
   (c) None of the above.
5. Discount on issue of debentures is shown under the following head in the Balance Sheet:
   (a) Profit & Loss Account,
   (b) Miscellaneous Expenditure,
   (c) Debentures Account.
6. When debentures are issued at par and are redeemable at a premium, the loss on such an issue debited to :
   (a) Profit & Loss Account,
   (b) Debentures Applications & Allotment Account,
   (c) Loss on issue of debentures account.
7. Excess value of net assets over purchase consideration at the time of purchase of business is credited to :
   (a) General reserve,
   (b) Capital reserve,
   (c) Vendors' account.
8. When all the debentures are redeemed, balance in the debentures redemption fund account is transferred to :
   (a) Capital reserve,
   (b) General reserve,
   (c) Profits and loss appropriation account.
9. The nominal and book values of debenture redemption fund investments account are respectively Rs.1,00,000 and Rs.96,000. The company sold investments of nominal value of Rs.30,000 at a price which was just sufficient to redeem debentures of Rs.30,000 at 10% premium, the profit on sale of investment is :
   (a) Rs.4,200, (b) Rs.3,000, (c) Rs. Nil.
10. Own debentures are those debentures of the company which:
    (a) The company allots to its own promoters,
    (b) The company allots to its Director,
    (c) The company purchases from the market and keeps them as investments.
11. Profit on cancellation of own debentures is transferred to :
    (a) Profit and loss appropriation a/c,
    (b) Debenture redemption reserve,
    (c) Capital reserve.

12. When debentures are redeemed out of profits, an equal amount is transferred to :
    (a) General reserve,
    (b) Debenture redemption reserve,
    (c) Capital reserve.
13. Profit on sale of debenture redemption fund investments in the first instance is credited to :
    (a) Debenture redemption fund account,
    (b) Profit and loss appropriation account,
    (c) General reserve account.
14. The balance of sinking fund investment account after the realisation of investments is transferred to:
    (a) Profit and loss account,
    (b) Debentures account,
    (c) Sinking fund account.
15. When debentures are issued at a discount and are redeemable at a premium, which of the following accounts is debited at the time of issue:
    (a) Debentures account,
    (b) Premium on redemption of debentures account,
    (c) Loss on issue of debentures account.

Test your Understanding – III

I Indicate in the column below, the account to be debited in case of the following transactions.

Transaction	**Account to be Debited**
1. Issue of debentures to a vendor in consideration of the business purchase.	
2. Setting aside the amount for creating sinking fund for redemption of debentures.	
3. The balance of debenture redemption reserve account after redemption of the debentures.	
4. Purchase of own debentures by the company.	
5. Writing off discount on issue of debentures.	

II. Indicate in the column below, the account to be credited in case of the following transactions.

Transaction	**Account to be Credited**
6. Debentures issued at a discount and are redeemable at par	
7. Transfer of interest on Sinking fund investments to sinking fund account	
8. Balance of DRR account after the redemption of Debentures	
9. Profit on sale of sinking fund investment account	
10. Writing off the loss on issue of debentures	

Do it YourSelf

1. G Ltd. has 800 lakhs, 10% debentures of Rs.100 each due for redemption on March 31, 2003. Assume that Debenture Redemption Reserve has a balance of Rs. 3,40,00,00,000 on that date. Record necessary entries at the time of redemption of debenture.
2. R Ltd. issued 88,00,000, 8 % debenture of Rs. 50 each at a premium of 5 % on July 1, 2000 redeemable at par by conversion of debenture into shares of Rs.20 each at a premium of Rs.2 per share on June 30, 2003. Record necessary entries for redemption of debenture.
3. C Ltd. has outstanding 11,00,000, 10% debentures of Rs.200 each, on April 1, 2003. The Board of Directors have decided to purchase 20% of own debenture for cancellation at Rs.200 each. Record necessary entries for the same.
4. Record necessary journal entries in the books of the Company in following case for redemption of 1,000, 12% Debentures of Rs.10 each issued at par:
   (a) Debentures redeemed at par by conversion into 12% Preference Shares of Rs.100 each,
   (b) Debentures redeemed at a premium of 10% by conversion into Equity Share issued at par,
   (c) Debentures redeemed at a premium of 10% by conversion into Equity Shares issued at a premium of 25%.
5. On 31.1.2005 Janta Ltd. converted its Rs.88,00,000, 6% debentures into equity shares of Rs.20 each at a premium of Rs.2 per share. Record necessary journal entries in the books of the company for redemption of debentures.
6. Anirudh Ltd. has 4,000, 8% debentures of Rs.100 each due for redemption on March 31, 2005. The company has a debenture redemption reserve of Rs.1,50,000 on that date. Assuming that no interest is due record the necessary journal entries at the time of redemption of debentures.

Illustration 34

The following balances appeared in the books of a company on January 01, 2000:

12% Debentures	Rs.4,00,000
12% Debentures Sinking Fund	Rs.3,00,000
12% Debentures Sinking Fund Investment	Rs.3,00,000

(Represented by 10% Rs.4,00,000 secured Bonds of Govt. of India)

Annual contribution to the sinking fund was Rs.60,000 made on 31st December each year. On 31st December 2000, balance at bank was Rs.3,00,000 after receipt of interest on Debenture Sinking Fund Investment. The company sold the investment at a loss of 18% and the debentures were paid off. You are required to prepare the following accounts for the year 2000:

(i) Debentures Account,
(ii) Debentures Sinking Fund Account,
(iii) Debentures Sinking Fund Investment Account,
(iv) Bank Account.

Solution

12% Debentures Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2000 Dec.31	Bank		4,00,000	2000 Jan.01	Balance b/d		4,00,000
			4,00,000				**4,00,000**

12% Debenture Sinking Fund Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2000 Dec.31	General Reserve		4,28,000	2000 Jan.01	Balance b/d		3,00,000
				Dec.31	Profit and Loss Appropriation		60,000
				Dec.31	Interest on Debenture Sinking Fund Investment A/c		40,000
				Dec.31	Debenture Fund Investment A/c		28,000
			4,28,000				**4,28,000**

12% Debenture Sinking Fund Investment Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2000 Jan.01	Balance b/d		3,00,000	2000 Dec.31	Bank		3,28,000
Dec.31	Profit transferred to Debenture Sinking Fund		28,000				
			3,28,000				**3,28,000**

Bank Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
2000 Jan.1	Balance b/d (The balance of Rs.3,00,000 includes Rs.40,000, interest @ 10% on Rs.4,00,000 (10% Rs. 4,00,000 Secured Bonds of Govt. of India)		3,00,000	2000 Dec.31	12% Debentures		4,00,000
					Balance c/d		2,28,000
Dec.31	12% Debentures Sinking Fund Investment		3,28,000				
			6,28,000				**6,28,000**

Illustration 35

The following balances stood as on 31.3.2003 in the books of a Company:

12% Debentures	Rs.10,00,000
Debenture Redemption Fund	Rs.10,00,360

Debenture Redemption Fund Investments represented by:

Rs. 4,00,000	9% Loan	Rs.3,80,000
Rs. 7,00,000	8% Govt. Paper	Rs.6,20,360

On the above date, the investments were sold as follows: 9% loan at par, and 8% Govt. Paper at 90% of nominal value. The Debentures were also redeemed accordingly. Show the necessary ledger accounts.

Solution

12% Debentures Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
31.3.2003	Bank		10,00,000	31.3.2003	Balance b/d		10,00,000
			10,00,000				**10,00,000**

Debenture Redemption Fund Account

Dr. *Cr.*

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
31.3.2003	General Reserve		10,30,000	31.3.2003	balance b/d		10,00,360
					Debenture Redemption Fund Investment		29,640
			10,30,000				**10,30,000**

Debenture Redemption Fund Investment Account

Dr. *Cr.*

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
31.3.2003	Balance b/d			31.3.2003	Bank (9% Loan)		4,00,000
	9% Loan		3,80,000	31.3.2003	Bank (8% Govt.Paper)		6,30,000
	8% Govt.Paper		6,20,360				
	Debenture Redemption Fund		29,640				
			10,30,000				**10,30,000**

Bank Account

Dr. *Cr.*

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
	To Debenture Redemption Fund Investment:			31.3.2003	By 12% Debentures		10,00,000
				31.3.2003	By Balance c/d		30,000
	9% Loan		4,00,000				
	8% Govt. Paper		6,30,000				
			10,30,000				**10,30,000**

The Bank Balance has not been given.

Terms Introduced in the Chapter

1. Debenture
2. Bond
3. Mortgaged Debenture
4. Perpetual Debenture
5. Zero Coupon Rate Debenture
6. Specific Coupon Rate Debenture
7. Registered Debenture
8. Bearer Debenture
9. Charge
10. Fixed Charge
11. Floating Charge
12. First Charge
13. Maturity Date
14. Principal
15. Discount/Loss on Issue of Debenture
16. Purchase Consideration
17. Redemption of Debenture
18. Draw by Lots
19. Own Debenture
20. Redemption out of Capital
21. Redemption out of Profits
22. Redemption of Convertible Debenture
23. Debentures Sinking Fund
24. Collateral Security
25. Second Charge
26. Purchase of Debenture from Open Market

Summary

*Debenture:*Debenture is the acknowledgements of debt. It is a loan capital raised by the company from general public. A person/holder of such a written acknowledgement is called 'debenture holder'.

Bond: Bond is similar to debenture in terms of contents and texture. The only difference is with respect of issue condition, i.e bonds can be issued without predetermined rate of interest as is in case of deep discount bonds.

Charge: Charge is an incumbrance to meet the obligation under trust deed under which company agrees to mortgage specific portion either by way of first or second charge. First charge implies the priority in repayment of loan. Those who hold first charge against any specific assets will realise their claim from the net realisable value of such assets. Any amount of surplus from assets given under first charge will be utilised for setting the claims for second chargeholder.

Types of Debenture: Debentures are of various types such as: secured and unsecured debentures redeemable and perpetual debentures, convertible and non-convertible debentures, zero coupon rate and specific rate, registered and bearer debentures.

Issue of Debenture: Debenture are said to be issued at par when the amount to be collected on them is equal to their nominal or face value. If the issue price is more than nominal or face value, it is said to be issued at a premium. If the issue price is less than the nominal or face value, it is said to be issued on discount. The amount received as premium is credited to 'securities premium account' whereas amount of discount allowed is debited to "loss/discount on issue" and is written-off over the years.

Issue of Debenture other than Cash: Sometimes debenture can be issued to vendor or suppliers of patents, copyrights and for transfer of intellectual property rights on preferential basis without receiving money in cash.

Purchase Consideration: Purchase consideration is amount paid by purchasing company in consideration for purchase of assets/business firm, another enterprise/vendor.

Collateral Security: Any security in addition to primary security is called 'collateral security'.

Redemption of Debenture: Means discharge of liability on account of debenture/bond by repayment made to debenture holders. Normally, the redemption takes place on the expiry of period for which they have been issued, depending upon the terms and conditions of issue.

Question for Practice

Short Answer Questions

1. What is meant by a Debenture?
2. What does a Bearer Debenture mean?
3. State the meaning of 'Debentures issued as a Collateral Security'.
4. What is meant by 'Issue of debentures for Consideration other than Cash'?
5. What is meant by 'Issue of debenture at discount and redeemable at premium?
6. What is 'Capital Reserve'?
7. What is meant by a 'Irredeemable Debenture'?
8. What is a 'Convertible Debenture'?
9. What is meant by 'Mortgaged Debentures'?
10. What is discount on issue of debentures?
11. What is meant by 'Premium on Redemption of Debentures'?
12. How debentures are different from shares? Give two points.
13. Name the head under which 'discount on issue of debentures' appears in the Balance Sheet of a company.
14. What is meant by redemption of debentures?
15. Can the company purchase its own debentures?
16. What is meant by redemption of debentures by conversion?
17. How would you deal with 'Premium on Redemption of Debentures?
18. What is meant by 'Redemption out of Capital?
19. What is meant by redemption of debentures by 'Purchase in the Open Market'?
20. Under which head is the 'Debenture Redemption Reserve' shown in the Balance Sheet.

Long Answer Questions

1. What is meant by a debenture? Explain the different types of debentures?
2. Distinguish between a debenture and a share. Why debenture is known as loan capital? Explain.
3. Describe the meaning of 'Debenture Issued as Collateral Securities'. What accounting treatment is given to the issue of debentures in the books of accounts?

4. How is 'Discount on Issue of Debentures' treated in the books of accounts? How will you deal with the 'discount in issue of debentures' when the debentures are to be redeemed in instalments?
5. Explain the different terms for the issue of debentures with reference to their redemption.
6. Differentiate between redemption of debentures out of capital and out of profits.
7. Explain the guidelines of SEBI for creating Debenture Redemption Reserve.
8. Describe the steps for creating Sinking Fund for redemption of debentures.
9. Can a company purchase its own debentures in the open market? Explain.
10. What is meant by conversion of debentures? Describe the method of such a conversion.

Numerical Questions

1. G.Ltd. issued 75,00,000, 6% Debenture of Rs.50 each at par payable Rs.15 on application and Rs.35 on allotment, redeemable at par after 7 years from the date of issue of debenture. Record necessary entries in the books of Company.
2. Y.Ltd. issued 2,000, 6% Debentures of Rs.100 each payable as follows: Rs.25 on application; Rs.50 on allotment and Rs.25 on First and Final call.
3. A.Ltd. issued 10,000, 10% Debentures of Rs.100 each at a premium of 5% payable as follows:

   Rs.10 on Application;

   Rs.20 along with premium on allotment and balance on First and Final call.

   Record necessary Journal Entries.
4. A. Ltd. issued 90,00,000, 9% Debenture of Rs.50 each at a discount of 8%, redeemable at par any time after 9 years. Record necessary entries in the books of A. Ltd.
5. A.Ltd. issued 4,000, 9% Debentures of Rs.100 each on the following terms:

   Rs.20 on Application;

   Rs.20 on Allotment;

   Rs.30 on First call; and

   Rs.30 on Final call.

   The public applied for 4,800 Debentures. Applications for 3,600 Debentures were accepted in full. Applications for 800 Debentures were allotted 400 Debentures and applications for 400 Debentures were rejected.
6. T. Ltd. offered 2,00,000, 8% Debenture of Rs.500 each on June 30, 2002 at a premium of 10% payable as Rs.200 on application (including premium) and balance on allotment, redeemable at par after 8 years. But application are received for 3,00,000 debenture and the allotment is made on pro-rata basis. All the money due on application and allotment is received. Record necessary entries regarding issue of debenture.

7. X.Ltd. invites application for the issue of 10,000, 14% debentures of Rs.100 each payable as to Rs.20 on application, Rs.60 on allotment and the balance on call. The company receives applications for 13,500 debentures, out of which applications for 8,000 debentures are allotted in full, 5,000 only 40% and the remaining rejected. The surplus money on partially allotted applications is utilised towards allotment. All the sums due are duly received.

8. R.Ltd. offered 20,00,000, 10% Debenture of Rs.200 each at a discount of 7% redeemable at premium of 8% after 9 years. Record necessary entries in the books of R. Ltd.

9. M.Ltd. took over assets of Rs.9,00,00,000 and liabilities of Rs.70,00,000 of S.Ltd. and issued 8%Debenture of Rs.100 each. Record necessary entries in the books of M. Ltd.

10. B.Ltd. purchased assets of the book value of Rs.4,00,000 and took over the liability of Rs.50,000 from Mohan Bros. It was agreed that the purchase consideration, settled at Rs,3,80,000, be paid by issuing debentures of Rs.100 each.

    What Journal entries will be made in the following three cases, if debentures are issued: (a) at par; (b) at discount; (c) at premium of 10%? It was agreed that any fraction of debentures be paid in cash.

11. X.Ltd. purchased a Machinery from Y for an agreed purchase consideration of Rs.4,40,000 to be satisfied by the issue of 12% debentures of Rs.100 each at a premium of Rs.10 per debenture. Journalise the transactions.

12. X.Ltd. issued 15,000, 10% debentures of Rs.100 each. Give journal entries and the Balance Sheet in each of the following cases:
    (i) The debentures are issued at a premium of 10%;
    (ii) The debentures are issued at a discount of 5%;
    (iii) The debentures are issued as a collateral security to bank against a loan of Rs.12,00,000; and
    (iv) The debentures are issued to a supplier of machinery costing Rs.13,50,000.

13. Journalise the following:
    (i) A debenture issued at Rs.95, repayable at Rs.100;
    (ii) A debenture issued at Rs.95, repayable at Rs.105; and
    (iii) A debenture issued at Rs.100, repayable at Rs.105;

    The face value of debenture in each of the above cases is Rs.100.

14. A.Ltd. issued 50,00,000, 8% Debenture of Rs.100 at a discount of 6% on April 01, 2000 redeemable at premium of 4% by draw of lots as under:

    20,00,000 Debentures on March, 2002

    10,00,000 Debentures on March, 2004

    20,00,000 Debentures on March, 2005

    Compute the amount of discount to be written-off in each year till debentures are paid. Also prepare discount/loss on issue of debenture account.

15. A company issues the following debentures:

(i) 10,000, 12% debentures of Rs.100 each at par but redeemable at premium of 5% after 5 years;

(ii) 10,000, 12% debentures of Rs.100 each at a discount of 10% but redeemable at par after 5 years;

(iii) 5,000, 12% debentures of Rs.1000 each at a premium of 5% but redeemable at par after 5 years;

(iv) 1,000, 12% debentures of Rs.100 each issued to a supplier of machinery costing Rs.95,000. The debentures are repayable after 5 years; and

(v) 300, 12% debentures of Rs.100 each as a collateral security to a bank which has advanced a loan of Rs.25,000 to the company for a period of 5 years.

Pass the journal entries to record the: (a) issue of debentures; and (b) repayment of debentures after the given period.

16. A company issued debentures of the face value of Rs,5,00,000 at a discount of 6% on January 01, 2001. These debentures are redeemable by annual drawings of Rs,1,00,000 made on December 31 each year. The directors decided to write off discount based on the debentures outstanding each year.

    Calculate the amount of discount to be written-off each year. Give journal entries also.

17. A company issued 10% Debentures of the face value of Rs,1,20,000 at a discount of 6% on January 01, 2001. The debentures are payable by annual drawings of Rs.40,000 commencing from the end of third year.

    How will you deal with discount on debentures?

    Show the discount on debentures account in the company ledger for the period of duration of debentures. Assume accounts are closed on December 31.

18. B.Ltd. issued debentures at 94% for Rs.4,00,000 on April 01, 2000 repayable by five equal drawings of Rs.80,000 each. The company prepares its final accounts on December 31 every year.

    Indicate the amount of discount to be written-off every accounting year assuming that the company decides to write off the debentures discount during the life of debentures. (Amount to be written-off: 2000 Rs.6,000; 2001 Rs.6,800; 2002 Rs.5,200; 2003 Rs.3,600; 2004 Rs.2,000; 2005 Rs.400).

19. B. Ltd. issued 1,000, 12% debentures of Rs.100 each on January 01, 2005 at a discount of 5% redeemable at a premium of 10%.

    Give journal entries relating to the issue of debentures and debentures interest for the period ending December 31, 2005 assuming that interest is paid half yearly on June 30 and December 31 and tax deducted at source is 10%. B.Ltd. follows calendar year as its accounting year.

20. What journal entries will be made in the following cases when company redeems debentures at the expiry of period by serving the notice: (a) when debentures were issued at par with a condition to redeem them at premium; (b) when debentures were issued at premium with a condition to redeem that at par; and (c) when debentures were issued at discount with a condition to redeem them at premium?

21. On January 01, 1998, X. Ltd. issues 5,000, 8% Debentures of Rs.100 each repayable at par at the end of three years. It has been decided to set up a cumulative sinking fund for the purpose of their redemption. The investments are expected to realise 4% net. The Sinking Fund Table shows that Rs.0.320348 amounts to one rupee @4% per annum in three years. On December 31, 2000 the balance at bank was Rs.2,42,360 and the investments realised Rs.3,25,000. The debentures were paid off.

    Give journal entries and show ledger account.

    [**Ans**. Loss on Sale of Investments Rs.2,246].

22. On January 01, 2003 a company issued 15% debentures of Rs.10,00,000 at par. The debentures were redeemable at par after three years on December 31, 2003. A sinking fund was set up to raise funds for redemption of debentures. The amount for the purpose was invested in 6% Government securities of Rs.100 each available at par. The sinking fund table shows that if investments earn 6% per annum, to get Re.1 at the end of 3 years, one has to invest Rs.0.31411 every year together with interest that will be earned. On December 31, 2005, all the Government securities were sold at a total loss of Rs. 6,000 and the debentures were redeemed at par.

    Prepare Debentures Account Sinking Fund Account, Sinking Fund Investment Account and Interest on Sinking Fund Investment Company closes its books of accounts every year on December 31.

23. On January 01, 2004 the following balances appeared in the books of Z. Ltd.:

	Rs.
6% Debentures	1,00,000
Debentures Redemption Reserve Fund	80,000
D.R. Reserve Fund Investments	80,000

    The investments consisted of 4% Government securities of the face value of Rs.90,000.

    The annual instalment was Rs.16,400. On December 31, 2004, the balance at Bank was Rs.26,000 (after receipt of interest on D.R.Reserve Fund Investment). Investments were realised at 92% and the Debentures were redeemed. The interest for the year had already been paid.

    Show the ledger accounts affecting redemption.
    [**Ans**. Profit on Sale of Investment Rs. 2,800]

24. The following balances appeared in the books of A.Ltd. on January 01, 2004

	Rs.
12% Debentures	4,00,000
Debentures Redemption Fund	3,60,000
Debentures Redemption Fund Investment	3,60,000
Securities Premium	30,000
Bank Balance	1,00,000

    On January 01, 2004, the company redeemed all the debentures at 105 per cent out of funds raised by selling all the investments at Rs.3,48,000. Prepare the necessary ledger accounts.

25. The following balances appeared in the books of Z.Ltd. on January 01, 2004

	Rs.
12% Debentures	1,50,000
Debentures Redemption Fund	1,25,000
Debentures Redemption Fund Investment	1,25,000
(Represented by Rs.1,47,500, 3% Govt. Securities	1,25,000

The annual instalment added to the fund is Rs.20,575. On December 31, 2004, the bank balance after the receipt of interest on the investment was Rs.39,100. On that date, all the investments were sold at 83 per cent and the debentures were duly redeemed.

Show the necessary ledger accounts for the year 2004.

[**Ans**. Loss on Sale Rs.2,575]

26. What entries for the redemption of debentures will be done when : (a) debentures are redeemed by annual drawings out of profits; (b) debentures are redeemed by drawing a lot out of capital; and (c) debentures are redeemed by purchasing them in the open market when sinking fund for the redemption of debentures is not maintained – (i) when out of profit, and (ii) when out of capital?

27. A. Ltd. Company issued Rs,5,00,000 Debentures at a discount of 5% repayable at par by annual drawings of Rs.1,00,000.

Make the necessary ledger accounts in the books of the company for the first year.

28. X.Ltd. issued 5,000, 15% debentures of Rs.100 each on January 01, 2004 at a discount of 10%, redeemable at a premium of 10% in equal annual drawings in 4 years out of capital.

Give journal entries both at the time of issue and redemption of debentures. (Ignore the treatment of loss on issue of debentures and interest.)

29. Z.Ltd. issued 2,000, 14% debentures of Rs.100 each on January 01, 2005 at a discount of 10%, redeemable at a premium of 10% in equal annual drawings in 4 years out of profits.

Give journal entries both at the time of issue and redemption of debentures. (Ignore the treatment of loss on issue of debentures and interest.)

30. A.Ltd. purchased its own debentures of the face value of Rs.2,00,000 from the open market for immediate cancellation at Rs.92. Pass the journal entries.

31. A.Ltd. purchased for cancellation Rs.50,000 of its 15% debentures at Rs.98. The expenses of purchase amounted to Rs.50.

On January 01, 2002, X.Ltd. issued 40,000, 9% debentures of Rs.100 each at Rs.95.

The terms of issue provided that, beginning with 1999, Rs.2,00,000 debentures should be redeemed either by drawings at par or by purchase in the open market every year. The expenses of issue amounted to Rs.12,000 which were written-off in 2002. The company also wrote off Rs.40,000 every year from Discount on Debentures

Account. At the end of 2004, debentures to be redeemed were repaid by drawings. During 2005, the company purchased for cancellation 2,000 debentures at the market price of Rs.98 on December 31, the expenses being Rs.400. Interest on debentures is payable at the end of every calendar year.

Pass the journal entries in the books of the company to record these transactions.

32. A.Ltd. redeemed 8,000, 12% debentures of Rs.100 each which were issued at a discount of 5%, by converting them into equity shares of Rs.10 each at par.

33. Y.Ltd. redeemed 4,800, 12% debentures of Rs.100 each which were issued at par, at 110 per cent by converting them into equity shares of Rs.10 each issued at a discount of 4%. Journalise.

34. Z.Ltd. redeemed 2,000, 12% debentures of Rs.100 each which were issued at a discount of 5%, by converting them into equity shares of Rs.10 each issued at a premium of 25%. Journalise.

35. X.Ltd. redeemed 1,000, 12% debentures of Rs.50 each by converting them into 15% New Debentures of Rs.100 each. Journalise.

Answers to Test your Understanding

Test your Understanding – I

1. True, 2. False, 3. True, 4. False, 5. True, 6. True, 7. False, 8. False, 9. True, 10. False, 11. False, 12. False.

Test your Understanding – II

1 (c), 2 (b), 3 (a), 4 (a), 5 (b), 6 (c), 7 (b), 8 (b), 9 (a), 10 (c),

11 (c), 12 (b), 13 (a), 14 (c), 15 (c).

Test your Understanding – III

(I) Vendors Account, (2)Profit & Loss Appropriation Account, (3)Debenture Redemption Reserve Account, (4) Own Debentures Account, (5)Profit & Loss Account.

(II) (1) Debenture Account, (2) Sinking Fund Account, (3) General Reserve Account, (4) Debenture Redemption Reserve Account, (5) Loss on Issue of Debentures Account.

Financial Statements of a Company

3

Learning Objectives

After studying this chapter, you will be able to :

- *Explain the nature and objectives of financial statements of a company;*
- *Describe the form and content of income statement of a company;*
- *Describe the form and content of balance sheet of a company;*
- *Explain the significance and limitations of financial statements; and*
- *Prepare the financial statements.*

Having understood how a company raises its capital, we have to learn the nature, objectives and types of financial statements it has to prepare including their contents, format, uses and limitations. The financial statements are the end products of accounting process. They are prepared following the consistent accounting concepts, principles, procedures and also the legal environment in which the business organisations operate. These statements are the outcome of the summarising process of accounting and are, therefore, the sources of information on the basis of which conclusions are drawn about the profitability and the financial position of a company. Hence, they need to be arranged in a proper form with suitable contents so that the shareholders and other users of financial statements can easily understand and use them in their economic decisions in a meaningful way.

3.1 Meaning of Financial Statements

Financial statements are the basic and formal annual reports through which the corporate management communicates financial information to its owners and various other external parties which include–investors, tax authorities, government, employees, etc. These normally refer to (a) the balance sheet (position statement) as at the end of accounting period, and (b) the profit and loss account (income statement) of a company. Now a days, the cash flow statement is also taken as an integral component of the financial statements of a company.

Box 1

In the words of *John N. Myer*, "The Financial statements provide a summary of accounts of a business enterprise, the balance sheet reflecting the assets, liabilities and capital as on a certain date and the income statement showing the results of operations during a certain period".

Smith and Asburne define financial statements as "the end product of financial accounting in a set of financial statements prepared by the accounts of a business enterprise that purport to reveal the financial position of the enterprise, the result of its recent activities and an analysis of what has been done with earnings".

In the words of *Anthony*, "Financial statements, essentially, are interim reports presented annually and reflect a division of the life of an enterprise into more or less arbitrary accounting period more frequently a year".

3.2 Nature of Financial Statements

The chronologically recorded facts about events expressed in monetary terms for a defined period of time are the basis for the preparation of periodical financial statements which reveal the financial position as on a date and the financial results obtained during a period. The American Institute of Certified Public Accountants states the nature of financial statements as, "the statements prepared for the purpose of presenting a periodical review of report on progress by the management and deal with the status of investment in the business and the results achieved during the period under review. They reflect a combination of recorded facts, accounting principles and personal judgements."

The following points explain the nature of financial statements:

1. *Recorded facts:* Financial statements are prepared on the basis of facts in the form of cost data recorded in accounting books. The original cost or historical cost is the basis of recording transactions. The figures of various accounts such as cash in hand, cash at bank, bills receivable, sundry debtors, fixed assets, etc. are taken as per the figures recorded in the accounting books. The assets purchased at different times and at different prices are put together and shown at costs. As these are not based on market prices, the financial statements do not show current financial condition of the concern.
2. *Accounting Conventions:* Certain accounting conventions are followed while preparing financial statements. The convention of valuing inventory at cost or market price, whichever is lower, is followed. The valuing of assets at cost *less* depreciation principle for balance sheet purposes is followed. The convention of materiality is followed in dealing with small items like pencils, pens, postage stamps, etc. These items are treated as expenditure in the year in which they are purchased even though they are assets in nature. The stationery is valued at cost

and not on the principle of cost or market price, whichever is less. The use of accounting conventions makes financial statements comparable, simple and realistic.

3. *Postulates:* Financial statements are prepared on certain basic assumptions (pre-requisites) known as postulates such as going concern postulate, money measurement postulate, realisation postulate, etc. Going concern postulate assumes that the enterprise is treated as a going concern and exists for a longer period of time. So the assets are shown on historical cost basis. Money measurement postulate assumes that the value of money will remain the same in different periods. Though there is drastic change in purchasing power of money, the assets purchased at different times will be shown at the amount paid for them. While, preparing profit and loss account the revenue is included in the sales of the year in which the sale was undertaken even though the sale price may be received over a number of years. The assumption is known as realisation postulate.
4. *Personal Judgments:* Under more than one circumstance, facts and figures presented through financial statements are based on personal opinion, estimates and judgments. The depreciation is provided taking into consideration the useful economic life of fixed assets. Provisions for doubtful debts are made on estimates and personal judgments. In valuing inventory, cost or market value, whichever is less is being followed. While deciding either cost of inventory or market value of inventory many personal judgments are to be made based on certain considerations. Personal opinion, judgments and estimates are made while preparing the financial statements to avoid any possibility of over statement of assets and liabilities, income and expenditure, keeping in mind the convention of conservatism.

Thus, financial statements are the summarised reports of recorded facts and are prepared following the accounting concepts, conventions and requirements of Law.

3.3 Objectives of Financial Statements

Financial statements are the basic sources of information to the shareholders and other external parties for understanding the profitability and financial position of any concern. They provide information about the results of the concern during a specified period of time and status of the concern in terms of assets and liabilities, which provide the basis for taking decisions. Thus, the primary objective of financial statements is to assist the users in their decision-making. The specific objectives include the following:

1. *To provide information about economic resources and obligations of a business:* They are prepared to provide adequate, reliable and periodical information about economic resources and obligations of a business firm to investors and other external parties who have limited authority, ability or resources to obtain information.
2. *To provide information about the earning capacity of the business:* They are to provide useful financial information which can gainfully be utilised to predict, compare, and evaluate the business firm's earning capacity.
3. *To provide information about cash flows:* They are to provide information useful to investors and creditors for predicting, comparing and evaluating, potential cash flows in terms of amount, timing and related uncertainties.
4. *To judge effectiveness of management:* They supply information useful for judging management's ability to utilise the resources of a business effectively.
5. *Information about activities of business affecting the society:* They have to report the activities of the business organisation affecting the society, which can be determined and described or measured and which are important in its social environment.
6. *Disclosing accounting policies:* These reports have to provide the significant policies, concepts followed in the process of accounting and changes taken up in them during the year to understand these statements in a better way.

3.4 Types of Financial Statements

The financial statements generally include two statements known as balance sheet and profit and loss account which are required for external reporting and also for internal needs of the management like planning, decision-making and control. These two basic statements are supported by number schedules, annexures, supplementing the data contained in the balance sheet and profit and loss account. Apart from these two basic financial statements, there is a need to know about movements of funds and changes in the financial position of the company. For this purpose, a statement of changes in financial position of the company or a cash flow statement help in this direction.

Balance Sheet : The purpose of balance sheet is to show its resources and obligations for acquiring its resources i.e., assets and liabilities. According to American Institute of Public Accountants, balance sheet is "a tabular statement of summary of balances (debits and credits) carried forward after an actual and constructive closing of books of accounts and kept according to principles of accounting". Balance sheet is the statement prepared on a particular date and shows classified properties and assets on the right hand side and obligations or liabilities on the left hand side.

Profit and Loss Account or Income Statement : The profit and loss account is the accounting report which summarises the revenues and expenses and ascertains the profit/loss for a specified accounting period. It also represents the changes in the owner's equity between two successive periods. It is an essential statement for preparation of balance sheet and hence annexed to it. Income statement is the moving picture of an organisation and reflects the results of operations for a period. Income statement gives a quantitative interpretation of policies, expenses, knowledge, foresight and aggressiveness of the management of a business from the point of view of income, expenses, gross profit, operating profit and net profit or loss.

As per the accounting concept of income, income (profit) is excess of realised revenues over related expired cost of the period and loss is known as excess of expired cost of a period over related realised revenues of the period. Thus, profit or loss is the difference between the realised revenues of the period and the related expired costs. It may be noted that normally accrual basis of accounting is followed for measuring the revenues and expenses for the period. In addition, another statement called Profit and Loss Appropriation Account is prepared to record various appropriations of profits like transfer to reserve and provision for dividends.

Test your Understanding – I

1. State whether the following statements are 'True' or 'False'.
   (a) Financial statements are the end products of accounting process.
   (b) Financial statements are primarily directed towards the needs of owners.
   (c) Facts and figures presented in financial statements are not at all based on personal judgements.
   (d) Recorded facts are based on replacement cost.
   (e) Going Concern concept assumes that the enterprise continues for a long-period of time.
2. Fill in the blanks with appropriate word(s):
   (a) Financial statements are the ——— of information to interested parties.
   (b) The owners of a company are called ———.
   (c) For income measurement ——— basis of accounting is followed.
   (d) The statement which shows the assets and liabilities of a company is known as ———.
   (e) Profit and loss account is also called ——— statement.

3.5 Form and Contents of Income Statement

Income statement may be divided into three components viz., (a) trading account which shows the gross profit earned, (b) profit and loss account which shows net profit earned or net loss incurred, and (c) profit and loss appropriation account which shows all appropriations from the current year and balance of profit or loss of last year and surplus or deficit at the end of the period. In this context, it should also be noted that its heading does not including the word 'Trading', and that it must also show the name of the company concerned.

The simplified form and contents of Profit and Loss Account and Profit and Loss Appropriation part are given below:

Profit and Loss Account of ..... Company Ltd.
for the year ended.....

Expenses		*Amount* (Rs.)	*Revenues*		*Amount* (Rs.)
Opening stock		xxx	Sales	xxx	
			Less: Sale returns	x	xxx
Purchases	xxx		By Closing Stock		xxx
Less: Purchase returns	xx	xxx			
Carriage inwards		xxx	Gross loss c/d (if any)		xxx
Wages		xxx			
Other direct expenses		xxx			
Gross profit c/d		xxx			
		xxxx			**xxxx**
Gross loss b/d(if any)		xxx	Gross profit b/d		xxx
Salaries		xxx			
Office Rent		xxx			
Advertising		xxx			
Carriage outwards		xxx			
Discount allowed		xxx			
Provision for bad and doubtful debts		xxx			
Depreciation:					
Office building	xx				
Furniture	xx	xxx			
Provision for taxation		xxx			
Net Profit c/d		xxx			
		xxxx			**xxxx**
Transfer to general reserve		xxx	Balance b/f (previous year balance of profit)		xxx
Transfer to other Reserves, if any		xxx	Net profit b/d (for the current year)		xxx
Proposed dividend		xxx			
Balance c/d		xxx			
		xxxx			**xxxx**

Fig. 3.2 : *Format of Profit and Loss Appropriation Account of Company*

Income statement may also be presented in vertical form with detailed data. This is considered more suitable for further analysis and providing necessary data for decision-making. The form and contents of vertical income statement is shown below (Vertical Form):

Income Statement of ... Company Ltd.
for the year ended...

Elements of Revenues and Expenses	*Amount Rs.*	*Amount Rs.*
Sales :		
Cash sales	xxx	
Credit sales	xxx	
Total sales	xxx	
Less: Sale Returns	xx	
Net Sales – (1)		xxx
Less: Cost of Goods Sold:		
Opening Stock	xxx	
+Purchases including (incidental expenses and materials) + wages	xxx	
+ Manufacturing expenses	xxx	
+ any other direct expenses	xxx	
	xxx	
Less: Closing Stock	xxx	
Total of Cost of Goods Sold – (2)		xxx
Gross Profit – (3) i.e. (1) minus (2)		xxx
Less: Operating Expenses – (4)		
+ Salaries	xxx	
+ Administrative Expenses	xxx	
+ Selling Expenses	xxx	
+ Distribution Expenses	xxx	
+ Depreciation	xxx	xxx
Operating Profit – (5) (i.e. 3–4)		xxx
***Add:* Non-Operating Income, if any, such as Commission, Profit on sale of Assets, Income from Investments, etc.**		xxx
		xxx
***Less:* Non-Operating Expenses, if any, such as Loss by Fire**		xxx
Net Profit before interest and taxes – (6)		xxx
Less: **Interest Charges – (7)**		
Interest on Loans	xxx	
Interest on Debentures	xxx	xxx
		xxx
Net Profit before Tax – (8) (i.e. 6–7)		
***Less:* Provision for Tax – (9)**		xxx
		xxx
Net Profit – (10) (i.e. 8–9) (Profit after tax)		

Fig. 3.3 : *Format of Income Statement of Company*

The following process is to be followed for preparation of income statement in account form:

1. Recording all the revenue receipts appearing on the credit side of the trial balance on the credit side of income statement after making suitable adjustments for revenues received in advance or revenues realised but not received, etc.
2. Recording all the revenue expenditure items appeared on the debit side of trial balance on the debit side of income statement after making adjustments for outstanding, prepaid expenses, depreciation, provisions for bad debts, taxes, etc.
3. Recording non-operating incomes and gains on the credit side of income statement.
4. Recording non-operating losses on the debit side of the income statement.
5. Asertaining the difference between totals of credit items and totals of debit items.
6. If the credit items are more than the debit items, it is known as net profit and if it is the other way round, it will be treated as loss.
7. In India, the accounting year for preparing financial statements for companies is April 01 to March 31 (same as that of financial year of Government).

It may be noted that The Companies Act does not prescribe any format for the profit and loss account. However, Part II of Schedule VI of the Act gives detailed requirements as to the profit and loss account and clearly states that it "shall be made out as clearly to disclose the result the working of the company during the period covered by the account, and shall disclose every material feature."

3.6 Form and Contents of Balance Sheet

Balance sheet is usually prepared in horizontal ('T') form with assets shown on the right hand side and capital and liabilities on the left. In case of companies, the assets and liabilities are arranged on permanency basis. Accordingly, all permanent long term assets, and capital and liabilities are shown at the beginning and liquid assets and liabilities are shown subsequently in order of their liquidity or maturity. The registered companies are required to follow Part I of Schedule VI of The Companies Act for recording assets and liabilities in the balance sheet. According to section 211(i) of The Companies Act, the balance sheet shall be prepared in a prescribed format, depict true and fair view of financial position and follow general instructions for preparation of balance sheet under the given headings with notes at the end. This format is not applicable to banking and insurance companies which have to follow the formats prescribed by their respective legislations. The prescribed form of balance sheet as per Part I of

Schedule VI of The Companies Act has been duly given in Appendix I of this chapter for perusal and clarily.

It may be noted that the balance sheet of a company may be prepared either in horizontal form or in vertical form. These are as follows.

Horizontal Form of Balance Sheet

Balance Sheet of ..... (Name of the company) as on .....

(1) *Figures for the previous year (Rs.)*	(2) *Liabilities*	(3) *Figures for the current year (Rs.)*	(4) *Figures for the previous year (Rs.)*	(5) *Assets*	(6) *Figures for the current year (Rs.)*
	<u>Share Capital:</u>			<u>Fixed Assets:</u>	
	Authorised:			Goodwill	
	Preference			Land	
	Equity			Building	
	Issued :			Household Premises	
	Preference			Railway Sidings	
	Equity			Plant and Machinery	
	Less: Calls Unpaid:			Furniture	
	Add: Forefeited			Patents and Trademarks	
	Shares			Live stock	
	Reserves and			Vehicles	
	Surplus:			**Investments:**	
	Capital Reserve			Government or Trust	
	Capital			Securities	
	Redemption			Shares, Debentures,	
	Reserve			Bonds	
	Securities Premium			**Current Assets, Loans**	
	Other Reserves			**and Advances:**	
	Profit and Loss			**(A) Current Assets:**	
	Account			Interest Accrued	
	Secured Loans:			Stores and Spare parts	
	Debentures			Loose Tools	
	Loans and			Stock in Trade	
	Advance from			Work in Progress	
	Banks			Sundry Debtors	
	Loans and			Cash and Bank balances	
	Advances from			**(B) Loans and Advances:**	
	Subsidiary			Advances and Loans to	
	Companies			Subsidiary Companies	
	Other Loans and			Bills Receivable	
	Advances			Advance Payments	

	Unsecured Loans: Fixed Deposits Loans and Advances from Subsidieries Short Term Loans and Advances Other Loans and Advances **Current Liabilities and Provisions:** **A. Current Liabilities:** Acceptances Sundry Creditors Outstanding Expenses **B. Provisions:** For Taxation For Dividends For Contingencies For Provident Fund Schemes For Insurance, Pension and other similar benefits			**Miscellaneous – Expenditure:** Preliminary Expenses Discount on Issue of Shares and Debentures Other Deferred Expenses **Profit and Loss Account (debit Balance: if any)**	

The Balance sheet can be prepared in the abridged form also which is shown below:

Abridged Balance Sheet

Liabilities	*Amount Rs.*	*Assets*	*Amount Rs.*
1. Share Capital 2. Reserves and Surplus 3. Secured Loans 4. Unsecured Loans 5. Current Liabilities and Provisions: (a) Current Liabilities (b) Provisions		1. Fixed Assets 2. Investments 3. Current Assets, Loans and Advances: (a) Current Assets (b) Loans and Advances 4. Miscellaneous Expenditure 5. Profit and Loss Account (debit balance, if any)	

Vertical Form of Balance Sheet

Balance Sheet of ..... as on .....

Particulars	*Schedule Number*	*Figures as at the end of current year*	*Figures as at the end of previous financial year*
I. Source of Funds:			
1. Shareholder's Funds:			
(a) Share capital		xxx	xxx
(b) Reserves and Surplus		xxx	xxx
Net Worth or Shareholders Funds		**xxx**	**xxx**
2. Loan Funds:			
(a) Secured loans		xxx	xxx
(b) Unsecured loans		xxx	xxx
Total (Capital Employed)		**xxx**	**xxx**
II. Application of Funds			
1. Fixed Assets:			
(a) Gross block		xxx	xxx
(b) *Less:* depreciation		(xx)	xxx
(c) Net block		xxx	xxx
(d) Capital work-in-Progress		xxx	xxx
		xxxx	**xxxx**
2. Investments:		xxx	xxx
3. Current Assets, Loans and Advances:			
(a) Inventories		xxx	xxx
(b) Sundry Debtors		xxx	xxx
(c) Cash and Bank Balances		xxx	xxx
(d) Other Current Assets		xxx	xxx
(e) Loans and Advances		xxx	xxx
Less: Current Liabilities and Provisions:		**xxx**	**xxx**
(a) Current liabilities		(xxx)	(xxx)
(b) Provisions		(xxx)	(xxx)
		xxx	**xxx**
Net Current Assets			
4. (a) Miscellaneous expenditure to the extent not written-off or adjusted.		xxx	xxx
(b) Profit and Loss account (debit balance, if any)		xxx	xxx
TOTAL		**xxxx**	**xxxx**

The schedules, accounting policies and other explanatory notes form part of the financial statements. Schedules contain the detailed information relating to all items appearing in the balance sheet and profit and loss account as they appear in the Annual Report of a company. The details to be provided under various heads of liabilities and assets are as follows.

3.6.1 Liabilities Side

1. *Share Capital:* It is the first item on the liabilities side of the balance sheet and shows details of authorised capital, and issued and paid-up capital in terms of the number and amount of each type of share, and so also the amounts of calls in arears and the forefeited shares as explained Chapter 1.
2. *Reserves and Surplus:* This item includes various reserves such as capital reserves, capital redemption reserves, balance of securities premium account, general reserve, credit balance of profit and loss account, and other reserves specifying the nature of each reserve and the amount in respect thereof including the additions during the current year.
3. *Secured Loans:* Long-term loans, which are taken against some security, are included under this head. Debentures and secured loans and advances from banks, subsidiary companies, etc., are fall under this category and are shown separetely under this head.
4. *Unsecured Loans:* Loans and advances for which no security is given are shown under this heading. This item includes public deposits, unsecured loans and advances from subsidiary companies, short-term loans and advances and other loans and advances from banks.
5. *Current Liabilities and Provisions:* Current liabilities refer to such liabilities, which mature within a period of one year. They include acceptances, (bills payable), sundry creditors, advance payments and un-expired discounts, unclaimed dividends, interest accrued but not paid, and other liabilities. Provisions refer to the amounts set aside out of revenue profits for some specific liabilities payable within a period of one year. Those include provision for taxation, proposed dividends, provision for contingencies, provision for provident fund, provision for insurance, pension and similar staff benefit schemes, etc.

3.6.2 Assets Side

1. *Fixed Assets:* The expenditure incurred on various fixed are to be shown separately for various fixed assets which include goodwill, land, buildings, leaseholds, plant and machinery, railway sidings, furniture and fittings,

patents, livestock, vehicles, etc. These assets are shown at cost less depreciation till the date.

2. *Investments:* Under this head, various investments made such as investment in government securities or trust securities; investment in shares, debentures, and bonds of other companies, immovable properties, etc., are to be shown separately in the balance sheet.
3. *Current Assets, Loans and Advances:* Current assets include interest accrued on investments, inventories, sundry debtors, bills receivables, cash and bank balances, and other advances like prepaid expenses, etc.
4. *Miscellaneous Expenditure:* The expenditure which has not been written of fully its balance is shown under this heading. These expenses include preliminary expenses, advertisement expenditure, discount on issue of shares and debentures, share issue expenses, etc.
5. *Profit and Loss Account:* When the Profit and Loss account shows a debit balance, i.e., loss which could not be adjusted against general reserves, the same is shown as a last item on the asset side.

Test your Understanding – II

1. What are the items shown under the heading 'Reserves and Surplus'?

....

....

....

....

2. What are the items shown under the heading 'Miscellaneous expenditure?'

....

....

....

....

3. Match the following:

(i)	Gross profit	(a)	The explanatory notes to financial statements	( )
(ii)	Operating profit	(b)	Amounts receivable by the company	( )
(iii)	Sundry Debtors	(c)	Amounts payable by the company	( )
(iv)	Sundry Creditors	(d)	Sales – Cost of goods sold	( )
(v)	Schedules	(e)	Gross profit – Operating expenses	( )
(vi)	Net Profit	(f)	Operating profit – interest and tax	( )

Exhibit – I

Asian Paints (India) Ltd.
Balance Sheet as on March 31, 2005

(Rs. In Millions)

	Schedules		As on 31.3.2005	As on 31.3.2004
Funds Employed				
Shareholder's Funds:				
Share Capital	A	959.20		959.20
Reserves and Surplus	B	4,763.00		4,356.21
			5,722.20	5,315.41
Loan Funds	C			
Secured Loans		283.65		229.23
Unsecured Loans		555.12		475.50
			838.77	704.73
Deferred Tax Liability (Net) (Refer Note B – 27 in Schedule 'M')			305.38	486.56
Total			**6,866.35**	**6,506.70**
Application of Funds				
Fixed Assets	D			
Gross Block		7,127.04		6,511.93
Less : Depreciation/Amortisation/Impairment		4,014.73		3,106.49
Net Block		3,112.31		3,405.44
Add : Capital Work in Progress		82.78		38.89
			3,195.09	3,444.33
Investments	E		2,584.27	2,424.84
Current Assets, Loans and Advances	F			
Interest accrued on investments		0.03		0.83
Inventories		3,307.89		2,114.90
Sundry debtors		1,489.63		1,379.20
Cash and Bank Balances		210.42		245.53
Other receivables		190.12		81.45
Loans and Advances		727.25		787.88
		5,925.34		4,609.79
Less: Current Liabilities and Provisions	G			
Current Liabilities		3,721.32		3,087.23
Provisions		1,117.03		885.03
		4,838.35		3,972.26
Net Current Assets			1.086.99	637.53
Total	M		**6,866.35**	**6,506.70**

Notes:

As per our report of even date	**For and on behalf of the Board**			
For Shah & Co.	Ashwin C. Choksi	Ashwin S. Dani	Abhay A. Vakil	Tarjani Vakil
Chartered Accountants	**Chairman**	**Vice Chairman & Managing Director**	**Managing Director**	**Director**
H.N. Shah				
Partner	Jayesh Merchant			
Membership No. 8152	**Vice President Corporate Finance & Company Secretary**			
Mumbai	Mumbai			
11th May, 2005	**11th May, 2005**			

Contd...

Asian Paints (India) Ltd.
Profit & Loss Account for the year ended March 31, 2005

(Rs. In Millions)

	Schedules	Year 2004–2005	Year 2003–2004
INCOME			
Sales and operating income (Net of discounts)	H	22,553.86	19,531.92
Less: Excise		3,138.71	2,565.46
Sales and operating income (Net of discounts and excise)		19,415.15	16,966.46
Other income		316.14	216.77
EXPENDITURE		**19,731.29**	**17,183.23**
Materials Consumed	J	11,154.04	9,441.50
Employees' remuneration and benefits	K	1,179.30	1,015.56
Manufacturing, administrative, selling and distribution expenses	L	4,144.05	3,814.02
		16,477.39	**14,271.08**
PROFIT BEFORE INTEREST, DEPRECIATION, EXTRAORDINARY ITEM AND TAX		3,253.90	2,912.15
Less: Interest (Refer Note B – 17 in Schedule 'M')		27.54	52.65
Less: Depreciation/Amortisation (Refer Note B – 19 in Schedule 'M')	D	476.05	480.10
PROFIT BEFORE TAX AND EXTRAORDINARY ITEM		2,750.31	2,379.40
Less: Extraordinary item (Refer Note B–23 in Schedule 'M')	42.31	68.06	
PROFIT BEFORE TAX		**2,708.00**	**2,311.34**
Less: Provision For Current Tax		988.00	880.00
Less: Provision For Deferred Tax Liability/(Asset) (Refer Note B – 27 in Schedule 'M')		(18.16)	(44.46)
PROFIT AFTER TAX AND BEFORE PRIOR PERIOD ITEMS		1,738.16	1,475.80
Add/(Less) : Prior period items		(3.34)	2.07
PROFIT AFTER TAX		**1,734.82**	**1,477.87**
Add: Balance of Profit & Loss Account brought forward of Pentasia Investments Ltd. on merger		–	8.40
Add: Balance brought forward from previous year		820.00	720.00
DISPOSABLE PROFIT		**2,554.82**	**2,206.27**
DISPOSAL OF ABOVE PROFIT			
Dividend : Equity Shares – Interim		383.69	335.73
– Final		527.56	479.60
Tax on Dividend		125.36	104.47
Transfer to General Reserve		518.21	466.47
Balance carried to Balance Sheet		1,000.00	820.00
		2,554.82	**2,206.27**
Earnings per share (Rs.) Basic and diluted (Face value of Rs. 10 each) (Refer Note B – 30 in Schedule 'M')	M	18.53	16.12

Notes:

As per our report of even date
For Shah & Co.
Chartered Accountants

H.N. Shah
Partner
Membership No. 8152

Mumbai
11th May, 2005

For and on behalf of the Board

Ashwin C. Choksi
Chairman

Ashwin S. Dani
Vice Chairman & Managing Director

Abhay A. Vakil
Managing Director

Tarjani Vakil
Director

Jayesh Merchant
Vice President Corporate Finance & Company Secretary

Mumbai
11th May, 2005

Asian Paints (India) Ltd.
Annual Report 2004-05

3.7 Some Peculiar Items

There are certain items relating to financial statements of companies which need clarification to ensure their correct treatment while preparing the final accounts of a company. Some of these have already been clarified in the previous chapters which include items like share capital, discount on issue of shares, securities premium, calls in arears, calls in advance, forefeited shares, discount (or loss) on issue of debentures, etc. The nature and treatment of some other peculiar items is explained hereunder.

(a) *Preliminary expenses:* This refers to the expenses that are incurred in connection with the formation of a company which include items like cost of printing various documents, fees paid to the lawyers for drafting of such documents, stamp duty, registration and filing fees paid at the time of registration of the company, etc. The amount spent on these items is put under one head called 'preliminary expenses' which is written-off over a period of 3 to 5 years. The amount to be written-off annually is debited to the profit and loss account, and the balance is shown under the heading 'Miscellaneous expenditure' on the assets side of the balance sheet.

(b) *Expenses on Issue of Shares and Debentures:* When shares and debentures are issued to the public, the company has to incur expenses on preparation and printing of prospectus, advertisement on the issue, merchant bankers fees, brokerage, etc. Such expenses are also capitalised and written-off over a period of 3 to 5 years, and treated in the same manner as preliminary expenses, but are shown separately.

(c) *Interest on Debentures:* The rate of interest payable on debentures is always mentioned with the debentrures, and paid half yearly on September 30 and March 31 (or June 30 and December 31). The amount of interest paid on debentures is given in the trial balance which is usually for the half year. This implies that a provision must be made for the remaining half year whether or not it is specified in adjustments. In other words, one has to ensure that full years interest on debentures is charged to profit and loss account and the unpaid part, if any, must be shown as outstanding interest in the balance sheet on the liabilities side.

(d) *Provision for Taxation:* This refers to the provision for income tax (corporation tax) chargeable on profits, and it is made by debiting the profit and loss account and crediting the provision for taxation account which is shown on the liabilities side under the heading 'Current liabilities and Provisions' in the balance sheet.

(e) *Dividends:* Dividend refers to that part of profits which is distributed among its shareholders. The general practice is to declare the dividend for an accounting year at the annual general meeting of the company while presenting the Annual Report (including Financial Statements) for approval, and it is shown as proposed dividend in the appropriation part of the profit and loss account (debit side) and so also in the balance sheet on the liabilitieis side under the heading 'Current Liabilities and

Provisions'. Sometimes, the companies also declare and pay some dividend during the course of an accounting year in anticipation of profits. This is known as interim dividend and since the same stands paid, it is simply shown in the appropriation part of the Profit and Loss Account (debit side). In such a situation, the dividend declared in addition to the interim dividend at the time of presenting the Annual Report is termed as final dividend which is treated in the same manner in accounts as the proposed dividend. It may be noted that no dividend is payable on the calls-in-arears.

Any amount of dividend, interim or final, which remains unclaimed (unpaid) is shown as unclaimed dividend under the heading current liabilities.

In this context, there is another important aspect to be kept in view namely, 'Dividend Tax' payable by the company. While dividends are tax free in the hands of shareholders, the company has to pay tax on dividends declared at the prescribed rate which is termed as 'Corporate Dividend Tax' and a provision has to be made thereof. The is shown along with dividends in the appropriation part of the profit and loss account on the debit side, and so also in balance sheet under current liabilities and provisions.

- *Transfer to Reserves:* Invariably, the companies transfer a part of their profits to reserves. The amount transferred to general reserve or any specific reserve is shown in the appropriation part of the profit and loss account and added to the concerned reserve shown under the heading 'Reserves and Surplus' in the balance sheet.

Illustration 1

Big & Co. Ltd. is a company with an authorised capital of Rs. 5,00,000 divided into 5,000 equity shares of Rs. 100 each. 2,500 shares were fully paid-up on 31.12.2005.

The following are the balances extracted from the books of the company as on 31.12.2005:

	(Rs.)		(Rs.)
Stock	50,000	Advertisement	3,800
Sales	4,25,000	Bonus	10,500
Purchases	3,00,000	Debtors	38,700
Wages (productive)	70,000	Creditors	35,200
Discount allowed	4,200	Plant and Machinery	80,500
Discount received	3,150	Furniture	17,100
Insurance paid-up to 31.3.2006	6,720	Cash and bank	1,34,700
Salaries	18,500	General Reserve	25,000
Rent	6,000	Loan from managing director	15,700
General expenses	8,950	Bad debts	3,200
Profit and Loss Account balance (Cr.)	6,220	Calls-in-arrears	5,000
Printing and Stationery	2,400		

You are required to prepare profit and loss account for the year ended 31.12.05 and the balance sheet as on that date of the company. The following further information is given: (1) Closing stock, Rs. 91,500 (2) Depreciation to be charged on plants, machinery and furniture at 15% and 10% respectively. (3) Outstanding liabilities: wages Rs. 5,200, salary Rs.1,200 and rent Rs.600. (4) Dividend @ 5% on paid-up share capital is to be provided.

Solution

Big & Co. Ltd. Profit and Loss Account
for the year ended December 31, 2005

Expenses/Losses		*Amount Rs.*	*Revenues/Gains*	*Amount Rs.*
Opening stock		50,000	Sales	4,25,000
Purchases		3,00,000	Closing Stock	91,500
Wages	70,000			
Add: Outstanding	5,200	75,200		
Gross profit c/d		91,300		
		5,16,500		**5,16,500**
Salaries	18,500			
Add: Outstanding	1,200	19,700	Gross profit b/d	91,300
Discount allowed		4,200	Discount received	3,150
Insurance	6,720			
Less: prepaid	1,680	5,040		
Rent	6,000			
Add: Outstanding	600	6,600		
General expenses		8,950		
Printing and Stationery		2,400		
Advertisement		3,800		
Bonus		10,500		
Bad debts		3,200		
Depreciation:				
Plant & Machinery	12,075			
Furniture	1,710	13,785		
Net Profit c/d		16,275		
		94,450		**94,450**
Proposed dividend 5% on Rs. 2,45,000 (i.e., excluding calls in arrears)		12,250	Net profit for the year b/d	16,275
Balance c/d		10,245	Balance b/d	6,220
		22,495		**22,495**

Balance Sheet
as on December 31, 2005

Liabilities		*Rs.*	*Assets*		*Rs.*
SHARE CAPITAL:			**FIXED ASSETS:**		
Authorised:			Plant and Machinery	80,500	
5,000 shares of Rs. 100 each		5,00,000	*Less:* Depreciation	12,075	
Issued and Subscribed:				———	68,425
2,500 shares of Rs. 100			Furniture	17,100	
each fully called	2,50,000		*Less:* Depreciation	1.710	15,390
Less: Calls-in-arrears	5,000	2,55,000			
		2,45,000			83,815
RESERVES AND SURPLUS:			**INVESTMENTS:**		Nil
General Reserve		25,000			
Profit and Loss Account		10,245	**Current assets loans**		
			and advances:		
			A: Current assets:		
			Stock (assumed at cost)		91,500
			Debtors		38,700
			Cash and bank balance		1,34,700
			B: Loans and Advances:		
			Prepaid Insurance		1,680
Secured Loans:		Nil	**MISCELLANEOUS**		
Unsecured Loans:			**EXPENDITURE NOT YET**		
Loan from managing		15,700	**ADJUSTED**		Nil
director (assumed unsecured)			Profit and Loss Account (Debit)		
CURRENT LIABILITIES					
AND PROVISIONS:					
A: Current Liabilities:					
Creditors		35,200			
Expenses outstanding		7,000			
(Wages, Salaries & Rent)					
B: Provisions:					
Proposed dividend		12,250			
		3,50,395			**3,50,395**

Illustration 2

The following is the trial balance of Vaibhavi Co. Ltd. as at 30th June, 2006:

	(Rs.)	(Rs.)
Stock (30th June, 2005)	75,000	–
Sales	–	3,50,000
Purchases	2,45,000	–
Wages	50,000	–
Discount	–	5,000
Furniture and Fittings	17,000	–
Salaries	7,500	–
Rent	4,950	–
Sundry expenses	7,050	–
Profit and Loss Appropriation Accounts (30th June, 2005)	–	15,030
Dividends paid	9,000	–
Share capital	–	1,00,000
Debtors and Creditors	37,500	17,500
Plant and Machinery	29,000	–
Cash and Bank	16,703	–
General reserve	–	16,003
Patens and Trademark	4,830	–
Total	**5,03,533**	**5,03,533**

Prepare Profit and Loss Account for the year ended 30th June, 2006 and the Balance Sheet as at that date. Take into consideration the following adjustments:

1. Stock on 30th June, 2006 was valued at Rs. 82,000.
2. Depreciation on fixed assets @ 10%.
3. Make a provision for income-tax @ 50% of the net profit.

Solution

Vaibhavi Co. Ltd. Profit and Loss Account
for the year ended June 30, 2006

Expenses/Losses	*Amount Rs.*	*Revenues/Gains*	*Amount Rs.*
Opening stock	75,000	Sales	3,50,000
Purchases	2,45,000	Closing stock	82,000
Wages	50,000		
Gross profit c/d	62,000		
	4,32,000		**4,32,000**
Salaries	7,500	Gross profit b/d	62,000
Rent	4,950	Discount	5,000
Sundry expenses	7,050		
Depreciation :			
Plant and Machinery	2,900		
Patent and Trademarks	483		
Furniture and Fittings	1,700		
Provision for income tax	21,209		
Net Profit c/d	21,208		
	67,000		**67,000**
Dividend paid	9,000	Balance b/d	15,030
Balance c/d	27,238	Net Profit for current year	21,208
	36,238		**36,238**

Balance Sheet of Vaibhavi Co. Ltd.
as on June 30, 2006

Liabilities	*(Rs.)*	*Assets*		*(Rs.)*
Share Capital	1,00,000	**Fixed Assets**		
Authorised		Plant and Machinery	29,000	
.... shares of		*Less:* Depreciation	2,900	
Rs. .... each			– – – –	26,100
Issued		Furniture & Fittings	17,000	
.... shares of		*Less:* Depreciation	1,700	
Rs. .... each			– – – –	15,300
		Patents & Trade Marks	4,830	
		Less: Depreciation	483	
			– – – –	4,347
Reserves & Surplus		**Current Assets**		
General Reserve	16,003	Stock		82,000
Profit & Loss Account	27,238	Debtors		37,500
		Cash at bank		16,703
Current Liabilities and Provisions:				
Creditors	17,500			
Provision for Taxation	21,209			
	181,950			**1,81,950**

The following illustration will further explain the process of preparation of Profit & Loss Account and Balance Sheet in respect of companies.

Illustration 3

Mahavir Manufacturing Co. Ltd., was registered with a nominal capital of Rs.25,00,000 divided into shares of Rs.10 each. On March 31, 2006 the following were the balances as per the books of the company:

Details	*Amount Rs.*	*Details*	*Amount Rs.*
Plant and Machinery	9,00,000	Freight	42,750
Stock (1.4.2005)	2,87,500	Goodwill	1,90,250
Fixtures	18,000	Wages	1,77,000
Sundry debtors	3,47,500	Cash in hand	15,875
Buildings	6,00,000	Cash at bank	85,750
Purchases	3,62,500	Director's fees	10,350
Interim dividend paid	28,750	Bad debts	9,27
General expenses	30,250	Salaries	48,250
Debenture interest	22,250	6 % Debentures	7,50,000
Bills payable	45,000	Sales	10,87,500
General reserve	66,250	4 % Govt. Bonds	1,50,000
Profit and Loss Account (Cr)	86,250	Provision for doubtful debts	10,000
Share capital	12,50,000	Sundry creditors	80,000
Calls in arrears	38,750	Preliminary expenses	10,000

The stock on the March 31, 2006 was estimated at Rs. 2,02,500. The following adjustments have to be made:

1. Depreciation on Plant and Machinery at 10%, on Fixtures @ 5%.
2. Final dividend @ 5% is to be provided.
3. Preliminary expenses are to be written–off by 25%.
4. A provision of Rs. 8,215 on Sundry debtors is to be provided.
5. Rs. 20,000 is to be transferred to general reserve.
6. A provision for income tax to the extent of Rs. 65,500 is to be made.

You are required to prepare the Profit and Loss Account, Profit and Loss Appropriation Account and balance sheet as on the March 31, 2006.

Solution

Mahavir Manufacturing Co., Ltd
Profit and Loss Account
for the year ending on March 31, 2006

Dr. *Cr.*

Expenses/Losses		*Amount Rs.*	*Revenues/Gains*	*Amount Rs.*
Stock (1-4-05)		1,87,500	Sales	10,87,500
Purchases		3,62,500	Closing stock	2,02,500
Wages		1,77,000		
Freight		42,750		
Gross Profit c/d		4,20,250		
		11,90,000		**12,90,000**
Salaries		48,250	Gross Profit b/d	4,20,250
General expenses		30,250	Interest	6,000
Debenture interest paid	22,250			
Add: Outstanding	22,750	45,000		
Directors fees		10,350		
Preliminary expenses (25%)		2,500		
Depreciation: on Plant and Machinery @ 10%	90,000			
on Fixtures @ 5%	900	90,900		
Bad debts	9,275			
Add: Provision for doubtful debts	8,125			
	17,400			
Less: Existing provision	10,000	7,400		
Provision for tax		65,500		
Net Profit c/d		1,26,100		
		4,26,250		**4,26,250**

Profit and Loss Appropriation Account

Dr. *Cr.*

	(Rs.)		(Rs.)
General reserve	20,000	Balance b/d	86,250
Interim dividend	28,750	Net profit for current year	1,26,100
Proposed final dividend	60,562		
Balance c/d	1,03,038		
	2,12,350		**2,12,350**

Notes:

1. 6% debenture interest on Rs. 7,50,000 comes to Rs. 45,000, of which Rs. 22,250 have already been paid. The balance of Rs. 22,750 is treated as outstanding
2. Paid up share capital Rs. 12,50,000 – 38,750 (calls-in-arrears) is Rs. 12,11,250, on which 5%, Final dividend is Rs. 60,562.

Mahavir Manufacturing Company Limited
Balance Sheet as on the of March 31, 2006

Liabilities		(Rs.)	*Assets*		(Rs.)
Share Capital:			**Fixed Assets:**		
Authorised:			Goodwill		1,90,250
2,50,000 shares of			Buildings		6,00,000
Rs. 10 each		25,00,000			
Issued & Paid Up :			Plant and Machinery	9,00,000	
1,25,000 shares of			*Less:* Depreciation	90,000	
Rs. 10 each	12,50,000			–––––	8,10,000
Less: Calls-in-			Fixtures	18,000	
Arrears	38,750		*Less:* Depreciation	900	
	–––––	12,11,250		–––––	17,100
Reserves and Surplus:			**Investments:**		
General Reserve	66,250		4% Government bonds		1,50,000
Add: Transfer from					
Profit and Loss A/c	20,000				
		86,250			
P&L Account balance		1,03,038			
Secured Loans:			**Current Assets, Loans and Advances:**		
6% Debentures		45,000	A. Current Assets		
			Interest on bonds		6,000
			Stock in trade		2,02,500
			Sundry debtors	3,47,500	
			Less: Provision for		
			doubtful debts	8,125	3,39,375

		Cash at Hand		15,875
		Cash at Bank		85,750
		B. Loans and Advances:		
Unsecured Loans:	Nil	**Miscellaneous Expenditure:**		
		Preliminary expenses	10,000	
		Less: Written off	2,500	
			------	7,500
Current Liabilities & Provisions				
A. Current Liabilities:				
Bills payable	45,000			
Sundry creditors	80,000			
Debentures interest	22,750			
B. Provisions:				
Provisions for Income tax	65,500			
Proposed final dividend	60,562			
	24,24,350			**24,24,350**

Exhibit – 2

Balance Sheet and Profit and Loss Account of Grasim Industries Ltd. for the year ending March 31, 2006 be given in this Box as attached.

Grasim Industries Ltd.
Balance Sheet as on March 31, 2006

	Schedules No.		*Rs. in Crores Previous Year*	*Rs. in Crores Current Year*
Sources of Funds				
Shareholders' Funds				
Share Capital	1 A	91.67		91.67
Share Capital Suspense	1 B	0.02		0.02
Reserves and Surplus	2	4,890.39		4,236.66
			4,982.08	4,328.35
Loan Funds				
Secured Loans	3	1,331.08		1,439.02
Unsecured Loans	4	586.27		535.79
Documentary Bills Discounted with Banks	5	62.32		33.53
			1,979.67	2008.34
Deferred Tax Liabilities			584.38	599.50
Total			**7546.13**	**6,936.19**
Application of Funds				
Fixed Assets				
Gross Block	6	6,114.12		5,897.04
Less: Depreciation & Amortisation		3,109.49		2,848.17
Net Block		3,004.63		3,048.87
Capital Work-in-Progress		293.64		145.94
			3,298.27	3,194.81
Fixed Assets held for disposal			12.76	13.73
Investments	7		3,481.71	2,982.02
Current Assets, Loans and Advances				
Interest accrued on Investments		1.46		1.09
Inventories	8	750.73		678.59
Sundry Debtors	9	413.45		522.01
Cash and Bank Balances	10	155.58		86.70
Loans and Advances	11	705.54		565.54
		2,026.76		8,044.49
Less :				
Current Liabilities and Provisions				
Liabilities	12	969.15		827.89
Provisions	13	304.22		280.41
		1,273.37		1,108.30
Net Current Assets			753.39	745.63
Total			**7,546.13**	**6,936.19**
Accounting Policies and Notes on Accounts	22 & 23			

Exhibit – 3

Grasim Industries Ltd.
Profit & Loss Account for the year ended March 31, 2006

	Schedules		*Rs.in Crores Previous Year*	*Rs.in Crores Current Year*
Income				
Gross Sales		7,607.20		7,201.06
Less: Excise Duty		986.69		971.80
Net Sales			6,620.51	6,229.26
Interest and Dividend Income	14		67.53	114.75
Other Income	15		136.71	72.44
Increase/(Decrease) in Stocks	16		(43.48)	100.67
			6,781.27	**6,517.12**
EXPENDITURE				
Raw Materials Consumed	17		1,822.69	1,873.05
Manufacturing Expenses	18		1,580.34	1,498.77
Purchase of Finished and Other Products			240.15	49.02
Payments to and Provisions for Employees	19		407.64	373.13
Selling, Distribution, Administration and Other Expenses	20		1,139.59	938.46
Interest	21		97.32	138.76
Depreciation and Amortisation [Note A of Schedule 6]			291.64	284.57
			5,579.37	**5,155.76**
Profit before Tax & Exceptional Items			1,201.90	1,361.36
Surplus on pre-payment of sales tax loan			4.13	34.35
Provision for diminution in value of investment and loans				(92.00)
Profit before Tax			1,206.03	1,303.71
Provision for Current Tax			(369.82)	(451.00)
Deferred Tax			27.00	33.00
Profit after Tax			863.21	885.71
Debenture Redemption Reserve No Longer Required			8.62	6.86
Investment Allowance Reserve No Longer Required			0.25	0.16
Balance brought forward from Previous Year			815.35	790.20
Profit available for Appropriation			**1,687.43**	**1,682.93**
Appropriations :				
Proposed Dividend			183.35	146.68
Corporate Dividend Tax			25.71	20.90
General Reserve			600.00	700.00
Balance carried to Balance Sheet			878.37	815.35
			1,687.43	**1,682.93**
Basic and diluted earnings per share (in Rs.)			94.14	96.60
Accounting Policies and Notes on Accounts	22 & 23			

3.8 Uses and Importance of Financial Statements

The users of financial statements include management, investors, shareholders, creditors, government, bankers, employees and public at large. Financial statements, provide the necessary information about the performance of the management to these parties interested in the organisation and help in taking appropriate economic decisions. It may be noted that the financial statements constitute an integral part of the Annual Reports of the companies which is included to are concerned which include in addition, the directors report, auditors report, corporate governance report, and management discussion and analysis.

The various uses and importance of financial statements are as follows:

1. *Report on stewardship function:* Financial statements report the performance of the management to the shareholders. The gaps between the management performance and ownership expectations can be understood with the help of financial statements.
2. *Basis for fiscal policies:* The fiscal policies, particularly taxation policies of the government, are related with the financial performance of corporate undertakings. The financial statements provide basic input for industrial, taxation and other economic policies of the government.
3. *Basis for granting of credit:* Corporate undertakings have to borrow funds from banks and other financial institutions for different purposes. Credit granting institutions take decisions based on the financial performance of the undertakings. Thus, financial statements form the basis for granting of credit.
4. *Basis for prospective investors:* The investors include both short-term and long-term investors. Their prime considerations in their investment decisions are security and liquidity of their investment with reasonable profitability. Financial statements help the investors to assess long-term and short-term solvency as well as the profitability of the concern.
5. *Guide to the value of the investment Already Made:* Shareholders of companies are interested in knowing the status, safety and return on their investment. They may also need information to take decision about continuation or discontinuation of their investment in the business. Financial statements provide information to the shareholders in taking such important decisions.
6. *Aids trade associations in helping their members:* Trade associations may analyse the financial statements for the purpose of providing service and protection to their members. They may develop standard ratios and design uniform system of accounts.

7. *Helps stock exchanges:* Financial statements help the stock exchanges to understand the extent of transparency in reporting on financial performance and enables them to call for required information to protect the interest of investors. The financial statements enable the stock brokers to judge the financial position of different concerns and take decisions about the prices to be quoted.

3.9 Limitations of Financial Statements

Though utmost care is taken in the preparation of the financial statements and provide detailed information to the users, they suffer from the following limitations:

1. *Do not reflect current situation:* Financial statements are prepared on the basis of historical cost. Since the purchasing power of money is changing, the values of assets and liabilities shown in financial statement do not reflect current market situation.
2. *Assets may not realise:* Accounting is done on the basis of certain conventions. Some of the assets may not realise the stated values, if the liquidation is forced on the company. Assets shown in the balance sheet reflect merely unexpired or unamortised cost.
3. *Bias:* Financial statements are the outcome of recorded facts, accounting concepts and conventions used and personal judgments made in different situations by the accountants. Hence, bias may be observed in the results, and the financial position depicted in financial statements may not be realistic.
4. *Aggregate information:* Financial statements show aggregate information but not detailed information. Hence, they may not help the users in decision-making much.
5. *Vital Information missing:* Balance sheet does not disclose information relating to loss of markets, and cessation of agreements, which have vital bearing on the enterprise.
6. *No Qualitative information:* Financial statements contain only monetary information but not qualitative information like industrial relations, industrial climate, labour relations, quality of work, etc.
7. *They are only interim reports:* Profit and loss account discloses the profit/loss for a specified period. It does not give an idea about the earning capacity over time similarly, the financial position reflected in balance sheet is true at that point of time, the likely change on a future date is not depicted.

Terms Introduced in the Chapter

1. Financial statements
2. Profit and Loss Account
3. Balance Sheet
4. Accounting Concept of Income
5. Cost of Goods Sold
6. Permanency Order
7. Liquidity Order
8. Preliminary Expenses
9. Postulates
10. Operating Profit
11. Non Operating Income
12. Sources of Funds
13. Uses of Funds
14. Operating Profit
15. Interim Dividend
16. Share Capital

Summary

Financial Statements: Financial statements are the end products of accounting process, which reveal the financial results of a specified period and financial position as on a particular date. They are the general purpose financial statements prepared and published by every corporate undertaking for the benefit of the parties interested. These statements include income statement and balance sheet. The basic objective of these statements is to provide information required for decision-making by the management as well as other outsiders who are interested in the affairs of the undertaking.

Balance Sheet: The balance sheet shows all the assets owned by the concern, all the obligations or liabilities payable to outsiders or creditors and claims of the owners on a particular date. It is one of the important statements depicting the financial position or status or strength of an undertaking. It gives a concise summary of firm’s resources and obligations and measures the firm’s liquidity and solvency. Balance sheet can be presented either in liquidity or permanency order. However all companies established under The Companies Act have to prepare their financial statements in permanency order classifying under suitable heads. Balance sheet is prepared on the basis of accrual and going concern basis. Financial statements are prepared for the period starting with 1st April and ending 31st March.

Income statement: The Income Statement or Profit and Loss Account is prepared for the above period to determine the operational results of an undertaking. It is a statement of revenue earned and the expenses incurred for earning the revenue. It is a performance report showing the changes in income, expenses, profits and losses as a result of business operations during the year between two balance sheet dates.

Significance of Financial Statements: The users of financial statements include Shareholders, Investors, Creditors, Lenders, Customers, Management, Government, etc. Financial statements help all the users in their decision-making process. They provide data about general purpose needs of these members.

Limitations of Financial Statements: Financial statements are not free from limitations. They provide only aggregate information to satisfy the general purpose needs of the users but not for the specific purpose needs. They are technical statements understood by only persons having some accounting knowledge. They reflect historical information but not current situation, which is essential in any decision making. In addition, one can get idea about the organisation's performance in terms of quantitative changes but not in qualitative terms like labour relations, quality of work, employees satisfaction, etc. the financial statements are neither complete nor accurate as the flow of income and expenses are segregated using best judgment apart from accepted concepts. Hence, these statements need proper analysis before their use in decision-making.

Questions for Practice

Short Answer Questions

1. What is public company?
2. What is private limited company.
3. Define Government Company?
4. What do you mean by a listed company?
5. What are the uses of securities premium?
6. What is buy-back of shares?
7. Write a brief note on 'Minimum Subscription".

Long Answer Questions

1. Explain the nature of the financial statements.
2. Explain in detail about the significance of the financial statements.
3. Explain the limitations of financial statements.
4. Prepare the format of income statement and explain its elements.
5. Prepare the format of balance sheet and explain the various elements of balance sheet.
6. Explain how financial statements are useful to the various parties who are interested in the affairs of an undertaking?
7. 'Financial statements reflect a combination of recorded facts, accounting conventions and personal judgments' discuss.
8. Explain the process of preparing income statement and balance sheet.

Numerical Questions

1. The following is the trial balance on June 30, 2006 of the Modern Manufacturing Company Ltd.

Details	Amount (Rs.)	Details	Amount (Rs.)
Stock, 30th June, 2005	7,500	Dividend paid in, August, 2005	500
Sales	35,000	Interim Dividend paid in Feb., 2006	400
Purchases	24,500	Capital– 10,000 Rs. 1 shares full paid	10,000
Productive wages	5,000	Debtors	3,750
Discounts (Dr.)	700	Creditors	1,750
Discounts (Cr.)	500	Plant and machinery	2,900
Salaries	750	Cash in Bank	1,620
Rent	495	Reserve	1,550
General expenses	1,705	Loan to Managing Director	325
Profit and loss account, 30th June 2005 (Cr.)	1,503	Bad debts	158

Stock, on June 30, 2006 Rs. 8,200. You are required to make out the trading account, and profit and loss account for the year ended June 30, 2006 and the balance sheet as on the date. You are also to make provision in respect of the following: (i) Depreciate machinery @ 10% per annum; (ii) Reserve 5% for discount on debtors; (iii) One month rent Rs. 45 was due on 30th June; and (iv) Six month's insurance, included in general expenses, was unexpired at Rs. 75.

(*Gross profit Rs. 6,200; Net profit Rs. 2,044.50; Balance Sheet total Rs. 16,392.50*)

2. The following is the trial balance of Alfa Ltd., for the year ended June 30, 2005

Details	Amount (Rs.)	Details	Amount (Rs.)
Land and Buildings	3,00,000	Sundry creditors	40,000
Plant and Machinery	4,50,000	Bills payable	20,000
Furniture and fittings	40,000	General Reserve	2,00,000
Goodwill	60,000	Profit and Loss account balance (on 1.7.04)	90,000
Sundry debtors	60,000	Sales	6,25,000
Bills receivable	26,000	Purchase returns	15,000
Investments (5% Govt. Securities)	30,000	Equity share capital	5,00,000
Cash in hand	2,000	8% Preference share capital	2,00,000

Cash at bank	55,000		
Preliminary expenses	29,000		
Purchases	4,00,000		
Sales return	10,000		
Stock on 1-7-04	85,000		
Wages	47,000		
Salaries	55,000		
Rent, rates and taxes	9,000		
Carriage inwards	6,500		
Law charges	2,500		
Trade expenses	23,000		
	16,90,000		**16,90,000**

Prepare the Profit and Loss Account and Balance Sheet of the company after taking the following particulars into consideration:

a) The original cost of land and building plant and machinery and furniture and fittings was Rs. 2,50,000, Rs. 6,00,000 and Rs. 60,000 respectively. Additions during the year were : building Rs. 50,000 and plant Rs. 20,000.

b) Depreciation is to be charged on plant and machinery and furniture and fitting at 10 per cent on original cost.

c) Of the sundry debtors, Rs. 10,000 are outstanding for a period exceeding 6 months, Rs. 5,000 are considered doubtful, while the others are considered good.

d) The directors are entitled to a commission at 1 per cent of the net profits before charging such commission.

e) Stock on 30th June, 2005 is Rs. 1,30,000.

f) Provide Rs. 34,800 for income tax

(*Gross profit Rs. 2,21,500; Net profit Rs. 25,095; Balance sheet total Rs. 11,10,500*)

3. The following balances appeared in the books of Parasuram Flour Mills Ltd., as on December 31, 2005 :

Details	*(Rs.)*	*Details*	*(Rs.)*
Stock of wheat	9,500	Furniture	5,100
Stock of flour	16,000	Vehicles	5,100
Wheat purchases	4,05,000	Stores and spare parts	18,300
Manufacturing expenses	90,000	Advances	24,500
Flour sales	5,55,000	Book debts	51,700
Salaries and wages	13,000	Investments	4,000
Establishment	4,700	Share capital	72,000

Interest (Cr.)	500	Pension fund	23,000
Rent Received	800	Dividend equalisation fund	10,000
Profit and loss account (Cr.)	15,000	Taxation provision	8,500
Director's fees	1,200	Unclaimed dividends	900
Dividend for 2004	9,000	Deposits (Cr.)	1,600
Land	12,000	Trade creditors	1,24,000
Buildings	50,500	Cash in hand	1,200
Plants and machinery	50,500	Cash at bank	40,000

Prepare the company's trading and profit and loss account for the year and balance sheet as on December 31, 2005 after taking the following adjustments into account:

(a) Stock on December 31, 2005 were: Wheat at cost, Rs. 14,900: Flour at market price, Rs. 21,700; (b) Outstanding expenses: Manufacturing expenses, Rs. 23,500; and salaries and wages, Rs. 1,200; (c) Provide depreciation : Building at 2% ; Plant and machinery at 10%: Furniture at 10% ; and Vehicle 20%. (d) Interest accrued on Government Securities, Rs.100: (e) A tax provision of Rs. 8,000 is considered necessary. (f) The directors propose a dividend of 20%. (g) The authorised capital consists of 12,000 equity shares of Rs. 10 each of which 7,200 shares were issued and fully paid up.

(*Gross profit Rs. 47,600; Net profit Rs. 21,310; Profit and loss appropriation balance Rs. 13,410; Balance sheet total Rs. 2,92,010*).

4. An unexperienced accountant prepared the following trial balance of Bang Vikas Ltd., for the year ending 31.12.2005. The cash in hand on 31.12.2005 was Rs. 750.

Details	*Rs.*	*Details*	*Rs.*
Depreciation on machinery	33,000	Authorised Capital: 6,000 shares of Rs. 10 each	60,000
Calls in arrear	7,500	Subscribed capital	4,00,000
Land and buildings	3,00,000	6% debentures	3,00,000
Machinery	2,97,000	Profit and loss account (Cr.)	13,625
Interim dividend paid	37,500	Sundry debtors	87,000
Stock on 1-1-2005	75,000	Sales	4,15,000
Sundry Creditors	40,000	Sinking fund	75,000
Bills payable	38,000	Preliminary expenses	5,000
Furniture	7,200		
Bank balance	39,900		
Purchases	1,85,000		
Provision for bad debts	4,375		

Investments	75,000		
Salary and wages	99,300		
Repairs	4,300		
Fuel	2,500		
Rates and taxes	1,800		
Travelling expenses	2,000		
Discounts	6,400		
Director's fees	5,700		
Bad debts	2,100		
Debenture interest	9,000		
Carriage	1,800		
Freight	8,900		
Sundry expenses	2,350		
Public deposits	10,000		
	12,95,625		**12,95,625**

After locating the mistakes and making the following adjustments prepare trading and profit and loss account and balance sheet in the prescribed form.

Adjustments: (i) Stock on 31.12.2005 Rs. 95,000 and (ii) Write-off preliminary expenses.

Note: Rectified trial balance need not be prepared.

(*Gross profit Rs. 2,36,800; Net profit Rs. 60,475; Balance of profit and loss appropriation account Rs. 36,600; Balance sheet Rs. 9,01,100; Difference in trial balance Rs. 750*)

5. The Silver Ore Co. Ltd. was formed on April 1, 2005 with an authorised capital of Rs.6,00,000 in shares of Rs. 10 each. Of these 52,000 shares had been issued and subscribed but there were calls in arrear on 100 shares @ Rs. 2.50. From the following trial balance as on March 31, 2006 prepare the trading and profit and loss account and the balance sheet:

	(Rs.)		(Rs.)
Cash at bank	1,05,500	Advertising	5,000
Share capital	5,19,750	Cartage on plant	1,800
Plant	40,000	Furniture and buildings	20,900
Sale of silver	1,79,500	Administrative expenses	28,000
Mines	2,20,000	Repairs to plant	900
Promotion expenses	6,000	Coal and oil	6,500
Interest of F.D. up to Dec.31,2005	3,900	Cash	530

Dividend on investment	3,200	Investments-share of tin mines	80,000
Royalties paid	10,000	Brokerage on above	1,000
Railway track and wagons	17,000	6% F.D. in Syndicate Bank	89,000
Wages of mines	74,220		

(i) Depreciate plant and railways by 10%; furniture and building by 5%; (ii) Write off a third of the promotion expenses; (iii) Value of silver ore on March 31, 1969 Rs. 15,000, The directors forfeited on December 20, 1968, 100 shares on which only Rs. 7.50 had been paid.

(*Gross profit Rs. 97,900; Net profit Rs. 70,398; Balance sheet total Rs. 5,90,148*)

Answers to Test your Understanding

Test your Understanding – I

1. (i) True (ii) True (iii) False (iv) False (v) True
2. (i) Basic sources (ii) Shareholders (iii) Accrual
   (iv) Balance sheet (v) Income.

Test your Understanding – II

1. Capital reserves, capital redemption reserves, balance of securities premium account, general reserve, credit balance of profit and loss account
2. Preliminary expenses, advertisement expenditure, discount on issue of shares and debentures, share issue expenses
3. (i) (d) (ii) (e) (iii) (d) (iv) (c) (v) (a) (vi) (f)

SCHEDULE VI

[See Section 211]

[4][Part 1

FORM OF BALANCE SHEET

[5]*[The balance Sheet of a company shall be either in horizontal form or vertical form]:*

A. [HORIZONTAL FORM]

BALANCE SHEET OF ....

[Here enter the name of the company]

AS ON..

[Here enter the date as at which the balance sheet is made out]

(1)	**(2)**		**(3)**		**(4)**
	Liabilities		Assets		
Instructions in accordance with which liabilities should be made out	Figures for the previous year Rs. (b)	Figures for the current year Rs. (b)	Figures for the previous year Rs. (b)	Figures for the current year Rs. (b)	Instructions in accordance with which assets should be made out
(1)	(2)		(3)		(4)
+Terms of redemption or conversion (if any) of any redeemable preference capital to be stated, together with earliest date of redemption of capital and stating the or conversion. +Particulars of any option on unissued share capital to be specified. +Particulars of the different classes of preference share to be given.	**+SHARE CAPITAL** Authorised .... shares of Rs. .... each +Issued (distinguishing between the various classes of capital and stating the particulars specified below, in respect of each class) .... shares of Rs. ..... each. +Subscribed (distinguishing between the various classes of capital and stating the particulars specified below, in respect of each class). (c) .... shares of Rs. .... each.		**+FIXED ASSETS** Distinguishing as far as expenditure upon (a) goodwill, (b) land, (c) building, (d) leaseholds, (e) railway sidings, (f) plant and machinery, (g) furniture and fittings, (h) development of property, (i) partnets, trade marks and designs, (j) livestock, and (k) vehicles, etc.		+Under each head the original cost and the additions thereto and deductions therefrom during the year, and the total depreciation written off or provided up to the end of the year to be stated.

4. Substituted by the Companies (Amendment) Act, 1960
5. Inserted by Notification No. GSR 220 (E), dated 12.3.1979.

Rs. .... called up.
Of the above shares ....,
shares are allotted as fully paid-up pursuant to a contract without payments being received in cash.]

[6][*Specify the source from which bonus shares are issued, eg capitalisation of profits or Reserves or from Share Premium Account.]

[7][Of the above share......, shares are allotted as fully paid-up by way of bonus shares *]

Less : Calls unpaid:

(i) By managing agent of secretaries and treasurers and where the managing agent of secretaries and treasurers are a firm, by the partners thereof, and where the managing agent or secretaries and treasurers are a private company, by the directors or members of that company.]

(ii) By Directors.

(iii) By others.

[9][+Any capital profit on reissue of forfeitted shares should be transferred to Capital Reserve]

[10][+*Add:* Forfeited shares (amount) originally paid-up.)]

[8][Where the original cost aforesaid and additions and deductions thereto, relate to any fixed asset which has been acquired from a country outside India, and in consequence of a change in the rate of exchange at any time after the acquisition of such asset, there has been an increase or reduction in the liability of the company, as expressed in Indian currency, for making payment towards the whole or a part of the cost of the asset or for repayment of the whole or a part of money borrowed by the company from any person, directly or indirectly, in any foreign currency specifically for the purpose of acquiring the assets (being in either case the liability existing immediately before the date on which the change in the rate of exchange takes effect), the amount by which the liability is so increased or reduced during the year, shall be added to, or, as the case may be, deducted from the cost, and the amount arrived at after such

---

6. Inserted by Notification No. GSR 414, dated 21.3.1961
7. *Substituted, ibid.*
8. Inserted by Notification No. GSR 129, dated 3.1.1968
9. Inserted by Notification No. GSR 414, dated 21.3.1961
10. *Substituted, ibid.*

addition or deduction shall be taken to be the cost of the fixed asset.

Explanation 1: This paragraph shall apply in relation to all balance sheets that may be made out as at the 6th day of June, 1966, or any day thereafter and where, at the date of issue of the notification of the Government of India, in the Ministry of Industrial Development and Company Affairs (Department of Company Affairs), G.S.R. No. 129, dated the 3rd day of January, 1968, any balance sheet, in relation to which this paragraph applies, has already been made out and laid before the company in Annual General Meeting, the adjustment referred to in this paragraph may be made in the first balance sheet made out after the issue of the said notification.

Explanation 2: In this paragraph, unless the context otherwise requires, the expression "rate of exchange", "foreign currency" and "Indian currency" shall have the meanings respectively assigned to them under sub-section (1) of section 43A of the Income-tax Act, 1961 (43 of 1961), and *Explanation 2* and *Explanation 3* of the said sub-section shall,

11. Substituted by Notification No. GSR 414, dated 21.3.1961.

as far as may be, apply in relation to the said paragraph as they apply to the said sub-section (1).

[11][In every case where the original cost cannot be ascertained, without unreasonable expense or delay, the valuation shown by the books shall be given. For the purposes of this paragraph, such valuation shall be the net amount at which an asset stood in the company's books at the commencement of this Act after deduction of the amounts previously provided or written off for depreciation or diminution in value, and where any such asset is sold, the amount of sale proceeds shall be shown as deduction.]

Where sums have been written-off on a reduction of capital or a revaluation of assets, every balance sheet, (after the first balance sheet) subsequent to the reduction or revaluation shall show the reduced figures and with the date of the reduction in place of the original cost.

Each balance sheet for the first five years subsequent to the date of the reduction, shall show also the amount of the reduction made. Similarly, where sums have been added by writing up the assets, every

13. Substituted by Notification No. GSR 414, dated 21.3.1961.

*Additions and deductions since last balance sheet to be shown, under each of the specified heads.

The word "fund" in relation to any "Reserve" should be used only where such Reserve is specifically represented by earmarked investments.

***RESERVES AND SURPLUS :**

[13](1) Capital Reserves.

(2) Capital Redemption Reserve.

(3) Share Premium Account (cc).

(4) Other reserves specifying the nature of each reserve and the amount in respect thereof.

Less : Debit balance in profit and loss account (if any) (h).

(5) Surplus, i.e. balance in profit and loss account after providing for proposed allocations, namely, dividend, bonus or reserves.

(6) Proposed additions to reserves.

(7) Sinking Funds]

INVESTMENTS:

Showing nature of investments and mode of valuation, for example, cost or market value and distinguishing between —

* (1) Investments in Government

(2) Investments shares, debenture or bonds (showing separately shares, fully paid-up and partly paid-up and also distinguishing the different classes of shares and showing also in similar details investments in shares, debentures or bonds of subsidiary companies.

(3) Immovable properties.

[14](4) Investments in the capital of partnership firms.

[16][(5) Balance of unutilised money raised by issue]

balance sheet subsequent to such writing up shall show the increased figures with the date of the increase in place of the original cost. Each balance sheet for the first five years subsequent to the date of writing up shall also show the amount of increase made.

[12][*Explanation :* Nothing contained in the preceding two paragraphs shall apply to any adjustment made in accordance with the second paragraph.]

*Aggregate amount of company's quoted investment and also the market value thereof shall be shown.

Aggregate amount of company's unquoted investments shall also be shown.

[15][All unutilised money out of the issue must be separately disclosed in the balance sheet of the company indicating the form in which such unutilised funds have been invested]

++ Mode of valuation of stock shall be stated and the amount in respect of raw material shall also be stated separately where practicable.

[17][Loans from Directors, $[the Managing Agents, Secretaries and Treasures] Managers should be shown separately.

SECURED LOANS:

*(1) Debentures+

*(2) Loans and Advances from banks.

CURRENT ASSETS, LOANS AND ADVANCES :

(A) CURRENT ASSETS

(1) Interest accrued on Investments.

**Mode of valuation of work-in-progress shall be stated.

+ In regard to sundry debtors, particulars to be given separately of — (a) debts

14. Inserted by Notification No. GSR 494 (E), dated 9.11.1973.
15. Inserted by Notification No. GSR 423 (E), dated 13.9.1996
16. Inserted by Notification No. GSR 423 (E), dated 13.9.1996
17. Substituted by Notification No. GSR 414, dated 21.3.1961.

Interest accrued and due on Secured Loans should be included under the appropriate sub-heads under the head "Secured Loans".]

*The nature of the security to be specified in each case.

Where loans have been guaranteed by [$][managing agents, secretaries and treasurers] managers and/or directors, a mention thereof shall also be made and also the aggregate amount of such loans under the head.

+Terms of redemption or conversion (if any) of debentures issued to be stated together with earliest date-of-redemption or conversion.

*(3) Loans and Advances from subsidiaries.

*(4) Other loans and advances

++(2) Stores and spare parts.

[17](3) Loose tools.

++(4) Stock-in-trade.

**(5) Works-in-progress.

+(6) Sundry debtors —

(a) Debts outstanding for a period exceeding six months.

(b) Other debts.

[17][*Less :* Provision]

considered goods and in respect of which the company is fully secured; and (b) debts considered goods for which the company holds no security other than the debtor's personal security; and (c) debts considered doubtful or bad.

Debts due by directors or other officers of the company or other officers of the company or any of them either severally or jointly with any other person or debts due by firms or private companies respectively in which any director is a partner or a director or a member to be separately stated.

[18][Debts due from other companies under the same management within the meaning of sub-section (1B) of section 370, to be disclosed with the names of the companies).

The maximum amount due by directors or other officers of the company at any time during the year to be shown by way of a note.

The [19][provisions] to be shown under this head should not exceed the amount of debts stated to be considered doubtful or bad and any surplus of such [19][provision], if already created, should be shown at every closing under "Reserves and Surplus" (in the Liabilities

18. Substituted by Notification No. GSR 78, dated 4.1.1963.
19. Substituted by Notification No. GSR 414, dated 21.3.1961.
20. Substituted by Notification No. GSR 78, dated 4.1.1963.

side) under a separate sub-head "Reserve for Doubtful or Bad Debts".

[20][(7A) Cash balance on hand.

*(7B) Bank balances —

(a) with Scheduled banks; and

(b) with others.]

[20][*In regard to bank balances, particulars to be given separatly of—

(a) the balances lying with Scheduled Banks on current accounts, call accounts, and deposit accounts;

(b) The names of the bankers other than Scheduled Banks and the balance lying with each such banker on current accounts. call accounts and deposit accounts and the maximum amount outstanding at any time during the year from each such banker; and

(c) the nature of the interest, if any, of any director or his relative $[or the managing agent/secretaries and treasurers of any associate of the latter] in each of the bankers (other than) Scheduled Banks) referred to in (b) above.]

[21][Loans from Directors, $[the managing agents, secretaries and

UNSECURED LOANS:

(1) Fixed deposits.

[22][All unutilised money out of the issue must be separately

21. Inserted by Notification No. GSR 414, dated 21.3.1961.
22. Inserted by Notification No. GSR 423(E), dated 13.9.1996.
23. Existing item 8 lettered as sub-item(a) and sub-item (b) inserted by Notification No. GSR 494(E), dated 31-10-1973.

treasurers] managers, should be shown separately. Interest accrued and due on Unsecured Loans should be included under the appropriate sub-heads under The head "UNSECURED LOANS".]

+(2) Loans and advances from subsidiaries.

+*(3) Short-term loans and advances :
(a) From Banks.
(b) From others.

+(4) Other loans and advnaces:
(a) From Banks.
(b) From others.

disclosed in the balance sheet of the company indicating the form in which such unutilised funds have been invested.]

+The above instructions regarding "Sundry Debtors" apply to "Loans and Advances" also.

+Where loans have been guaranteed by [$][managing agents, secretaries and treasurers] managers and/or directors, a mention thereof shall also be made and also the aggregate amount of such and also the aggregate amount of such loans under each head.

*See note (*d*) at foot of Form.

[24][*The name(s) of small scale industrial undertaking(s) to whom the company owe any sum together with interest outstanding for more than thirty days, are to be disclosed.*]

CURRENT LIABILITIES AND PROVISIONS :

A. CURRENT LIABILITIES:

[25][(1) Acceptances.

(2) Sundry creditors

[25a](i) Total outstanding dues to small scale industrial under-taking (s); and (ii) Total outstanding dues of creditors other than small scale industrial undertaking(s);]

(3) Subsidiary companies.

(4) Advance payments and unexpired discounts for

+(B) LOANS AND ADVANCES

(8)[23] (a) Advances and loans to subsidiaries.

[23][(b) Advances and loans to partinership firms in which the company or any of its subsidiaries is a partner.]

(9) Bills of Exchange.

(10) Advances recoverable in cash or in kind or for value to be received, eg rates, taxes, insurance, etc.

[$](11) [Balance on current account with managing agents or secretaries and treasurers]

(12) Balances with customs, port trust, etc (where payable on demand).

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24. Substituted by Notification No. GSR 376(E), dated 22.5.2002. Earlier it was inserted by Notification No. GSR 129(E), dated 22.2.1999.
25. Substituted by Notification No. GSR 78, dated 4.1.1963.
25a. Inserted by Notification No. GSR 129(E), dated 22.2.1999.
26. Substituted by Notification No. GSR 414, dated 21.3.1961.

the portion, for which value has still to be given e.g. in the case of the following classes of companies: newspapers, fire insurance, theatres, clubs, banking, steam-ship companies, etc.

(5) Unclaimed dividends.

(6) Other liabilities (if any)

(7) Interest accrued but not due on loans.]

B. PROVISIONS

[26][(8) Provision for taxation.

(9) Proposed dividends.

(10) For contingencies.

(11) For provident fund scheme.

(12) For insurance, pension and similar staff benefit schemes.

(13) Other provisions.]

[A foot note to the balance sheet may be added to show separately:

(1) Claims against the company not acknowledged as debts.

(2) Uncalled liability on shares partly paid.]

++(3) Arrears of fixed cumulative dividends

(4) Estimated amount of contracts remaining to be executed on capital account and not provided for.

+(5) Other money for which the company is contingently liable.]

27. Inserted by Notification No. GSR 414, dated 21.3.1961.
28. Substituted, *ibid.*
29. Inserted, *ibid.*

++The period for which the dividends are in arrear or if there is more than one class of shares, the dividends on each such class are in arrear, shall be stated.

The amount shall be stated before deduction of income-tax, except that in the case of tax-free dividends, the amount shall be shown free of income-tax and the fact that it is so shown, shall be stated.

+The amount of any guarantees given by the company on behalf of directors or other officers of the company shall be stated and where practicable, the general nature and amount of each such contingent liability, if material, shall also be specified.

MISCELLANEOUS EXPENDITURE :

(to the extent not written-off [27][or adjusted]):

(1) Preliminary expenses.

(2) Expenses including commission or brokerage on underwriting or subscription of shares or debentures.

(3) Discount allowed on the issue of shares or debentures.

(4) Interest paid out of capital during construction (also stating the rate of interest).

(5) Development expenditure not adjusted.

(6) Other items (specifying nature).

[28]**[+PROFIT AND LOSS ACCOUNT]**

[29][+ Show here the debit balance of profit and loss account carried forward after deduction of the uncommitted reserves, if any.]

NOTES

General Instructions for Preparation of Balance Sheet

(a) The information required to be given under any of the items or sub-items in this Form, if it cannot be conveniently included in the balance sheet itself, shall be furnished in a separate Schedule to be annexed to and to form part of the balance sheet. This is recommended when items are numerous.

(b) Naye Paise can also be given in addition to Rupees, if desired.

(c) In the case of 75 [subsidiary companies] the number of shares held by the holding company as well as by the ultimate holding company and its subsidiaries must be separately stated.

The auditor is not required to certify the correctness of such shareholdings as certified by the management.

[30][(cc) The item "Share Premium Account" shall include details of its utilisation in the manner provided in section 78 in the year of utilisation.]

(d) Short-term loans will include those which are due for not more than one year as at the date of the balance sheet.

(e) Depreciation written-off or provided shall be allocated under the different asset heads and deducted in arriving at the value of fixed assets.

(f) Dividends declared by subsidiary companies after the date of the balance sheet [should] not be included unless they are in respect of period which closed on or before the date of the balance sheet.

(g) Any reference to benefits expected from contracts to the extent not executed shall not be made in the balance sheet but shall be made in the Board's report.

[31][(h) The debit balance in the Profit and Loss Account shall be shown as a deduction from the uncommitted reserves, if any.]

(i) As regards Loans and Advances, [amounts due by the Managing Agents or Secretaries and Treasurers, either severally or jointly with any other persons to be separately stated;] [the amounts due from other companies under the same management within the meaning of sub-section (1B) of section 370 should also be given with the names of the companies], the maximum amount due from every one of these at any time during the year must be shown.

(j) Particulars of any redeemed debentures which the company has power to issue should be given.

(k) Where any of the company's debentures are held by a nominee or a trustee for the company, the nominal amount of the debentures and the amount at which they are stated in the books of the company shall be stated.

[32](l) A statement of investments (whether shown under "Investment" or under "Current Assets" as stock-in-trade) separately classifying trade investments and other investments should be annexed to the balance sheet, showing the names of the body corporates (indicating separately the names of the body corporates under the

30.
31.
32.

same management) in whose shares or debentures, investments have been made (including all investments, whether existing or not, made subsequent to the date as at which the previous balance sheet was made out) and the nature and extent of the investment so made in each such body corporate; provided that in the case of an investment company, that is to say, a company whose principal business is the acquisition of shares, stock, debentures or other securities, it shall be sufficient if the statement shows only the investments existing on the date as at which the balance sheet has been made out. In regard to the investments in the capital of partnership firms, the name of the firms (with the names of all their partners, total capital and the shares of each partner), shall be given in the statement.]

(m) If, in the opinion of the Board, any of the current assets, loans and advances have not a value on realisation in the ordinary course of business at least equal to the amount at which they are stated, the fact that the Board is of the opinion shall be stated.

(n) Except in the case of the first balance sheet laid before the company after the commencement of the Act, the corresponding amounts for the immediate preceding financial year for all items shown in the balance sheet shall also be given in the balance sheet. The requirement in this behalf shall, in the case of companies preparing quarterly or half-hearly accounts, etc relate to the balance sheet for the corresponding date in the previous year.

(o) The amounts to be shown under Sundry Debtors shall include the amounts due in respect of goods sold or services rendered or in respect of other contractual obligations but shall not include the amounts which are in the nature of loans or advances.

[33] (p) Current accounts with directors [$][managing agents, secretaries and treasurers] and managers, whether they are in credit, or debit, shall be shown separately.]

[34] (q) A small scale industrial undertaking has the same meaning as assigned to it under clause (j) of section 3 of the Industries (Development and Regulation) Act, 1951.]

Note : [$]References to managing agents, secretaries and treasurers should be omitted.

33. Substituted by Notification No. GSR 414, dated 21.3.1961.
34. Inserted by Notification No. GSR 129(E), dated 21.3.1961.

VERTICAL FORM OF BALANCE SHEET

B. VERTICAL FORM

Name of the Company ....

Balance Sheet as on ....

	Schedule No.	*Figures as at the end of current financial year*	*Figures as at the end of previous financial year*
1 2	*3*	*4*	*5*
I. Sources of Funds			
(1) *Shareholders' funds :*			
(a) Capital			
(b) Reserves and surplus			
(2) *Loan funds:*			
(a) Secured loans			
(b) Unsecured loans			
TOTAL			
II. Application of funds			
(1) *Fixed assets :*			
(a) Gross block			
(b) Less : Depreciation			
(c) Net block			
(d) Capital work-in-progress			
(2) *Investments*			
(3) *Current assets, loans and advances:*			
(a) Inventories			
(b) Sundry debtors			
(c) Cash and bank balance			
(d) Other current assets			
(e) Loans and advances			
Less :			
Current liabilities and provisions :			
(a) Liabilities			
(b) Provisions			
Net current assets			
(4) (a) Miscellaneous expenditure to the extent not written-off or adjusted			
(b) Profit and loss account			
TOTAL			

Analysis of Financial Statements

4

You have learnt about the financial statements (Income Statement and Balance Sheet) of companies. Basically, these are summarised financial reports which provide the operating results and financial position of companies, and the detailed information contained therein is useful for assessing the operational efficiency and financial soundness of a company. This requires proper analysis and interpretation of such information for which a number of techniques (tools) have been developed by financial experts. In this chapter we will have an overview of these techniques.

Learning Objectives

After studying this chapter, you will be able to :

- *explain the nature and significance of financial analysis;*
- *identify the objectives of financial analysis;*
- *describe the various tools of financial analysis;*
- *state the limitations of financial analysis;*
- *prepare comparative and commonsize statements and interpret the data given therein; and*
- *calculate the trend percentages and interpret them.*

4.1 Meaning of Analysis of Financial Statements

The process of critical evaluation of the financial information contained in the financial statements in order to understand and make decisions regarding the operations of the firm is called 'Financial Statement Analysis'. It is basically a study of relationship among various financial facts and figures as given in a set of financial statements, and the interpretation thereof to gain an insight into the profitability and operational efficiency of the firm to assess its financial health and future prospects.

The term 'financial analysis' includes both 'analysis and interpretation'. The term analysis means simplification of financial data by methodical classification given in the financial statements. Interpretation means explaining the meaning and significance of the data. These two are complimentary to each other. Analysis is useless without interpretation, and interpretation without analysis is difficult or even impossible.

> **Box**
> Financial statement analysis is very aptly defined by Bernstein as, "a judgemental process which aims to estimate current and past financial positions and the results of the operation of an enterprise, with primary objective of determining the best possible estimates and predictions about the future conditions." It essentially involves regrouping and analysis of information provided by financial statements to establish relationships and throw light on the points of strengths and weaknesses of a business enterprise, which can be useful in decision-making involving comparison with other firms (cross sectional analysis) and with firms' own performance, over a time period (time series analysis).

4.2 Significance of Financial Analysis

Financial analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationships between the various items of the balance sheet and the profit and loss account. Financial analysis can be undertaken by management of the firm, or by parties outside the firm, viz. owners, trade creditors, lenders, investors, labour unions, analysts and others. The nature of analysis will differ depending on the purpose of the analyst. A technique frequently used by an analyst need not necessarily serve the purpose of other analysts because of the difference in the interests of the analysts. Financial analysis is useful and significant to different users in the following ways:

(a) *Finance manager:* Financial analysis focusses on the facts and relationships related to managerial performance, corporate efficiency, financial strengths and weaknesses and creditworthiness of the company. A finance manager must be well-equipped with the different tools of analysis to make rational decisions for the firm. The tools for analysis help in studying accounting data so as to determine the continuity of the operating policies, investment value of the business, credit ratings and testing the efficiency of operations. The techniques are equally important in the area of financial control, enabling the finance manager to make constant reviews of the actual financial operations of the firm to analyse the causes of major deviations, which may help in corrective action wherever indicated.

(b) *Top management:* The importance of financial analysis is not limited to the finance manager alone. Its scope of importance is quite broad which includes top management in general and the other functional managers.

Management of the firm would be interested in every aspect of the financial analysis. It is their overall responsibility to see that the resources of the firm are used most efficiently, and that the firm's financial condition is sound. Financial analysis helps the management in measuring the success or otherwise of the company's operations, appraising the individual's performance and evaluating the system of internal control.

(c) *Trade creditors:* A trade creditor, through an analysis of financial statements, appraises not only the urgent ability of the company to meet its obligations, but also judges the probability of its continued ability to meet all its financial obligations in future. Trade creditors are particularly interested in the firm's ability to meet their claims over a very short period of time. Their analysis will, therefore, confine to the evaluation of the firm's liquidity position.

(d) *Lenders:* Suppliers of long-term debt are concerned with the firm's long-term solvency and survival. They analyse the firm's profitability overtime, its ability to generate cash to be able to pay interest and repay the principal and the relationship between various sources of funds (capital structure relationships). Long-term tenders do analyse the historical financial statements. But they place more emphasis on the firm's projected financial statements to make analysis about its future solvency and profitability.

(e) *Investors:* Investors, who have invested their money in the firm's shares, are interested about the firm's earnings. As such, they concentrate on the analysis of the firm's present and future profitability. They are also interested in the firm's capital structure to ascertain its influences on firm's earning and risk. They also evaluate the efficiency of the management and determine whether a change is needed or not. However, in some large companies, the shareholders' interest is limited to decide whether to buy, sell or hold the shares.

(f) *Labour unions:* Labour unions analyse the financial statements to assess whether it can presently afford a wage increase and whether it can absorb a wage increase through increased productivity or by raising the prices.

(g) *Others:* The economists, researchers, etc. analyse the financial statements to study the present business and economic conditions. The government agencies need it for price regulations, taxation and other similar purposes.

4.3 Objectives of Financial Analysis

Analysis of financial statements reveals important facts concerning managerial performance and the efficiency of the firm. Broadly speaking, the objectives of the analysis are to apprehend the information contained in financial statements with a view to know the weaknesses and strengths of the firm and to make a forecast about the future prospects of the firm thereby, enabling the analysts to take decisions regarding the operation of, and further investment in, the firm. To be more specific, the analysis is undertaken to serve the following purposes (objectives):

- to assess the current profitability and operational efficiency of the firm as a whole as well as its different departments so as to judge the financial health of the firm.
- to ascertain the relative importance of different components of the financial position of the firm.
- to identify the reasons for change in the profitability/financial position of the firm.
- to judge the ability of the firm to repay its debt and assessing the short-term as well as the long-term liquidity position of the firm.

Through the analysis of financial statements of various firms, an economist can judge the extent of concentration of economic power and pitfalls in the financial policies pursued. The analysis also provides the basis for many governmental actions relating to licensing, controls, fixing of prices, ceiling on profits, dividend freeze, tax subsidy and other concessions to the corporate sector.

It also helps the management in self-appraisal and the shareholders (owners) and others to judge the performance of the management.

4.4 Tools of Financial Analysis

The most commonly used techniques of financial analysis are as follows:

1. *Comparative Statements:* These are the statements showing the profitability and financial position of a firm for different periods of time in a comparative form to give an idea about the position of two or more periods. It usually applies to the two important financial statements, namely, Balance Sheet and Income Statement prepared in a comparative form. The financial data will be comparative only when same accounting principles are used in preparing these statements. If this is not the case, the deviation in the use of accounting principles should be mentioned as a footnote. Comparative figures indicate the trend and direction of financial position and operating results. This analysis is also known as 'horizontal analysis'.

2. *Common Size Statements:* These are the statements which indicate the relationship of different items of a financial statement with some common item by expressing each item as a percentage of the common item. The percentage thus calculated can be easily compared with the results corresponding percentages of the previous year or of some other firms, as

the numbers are brought to common base. Such statements also allow an analyst to compare the operating and financing characteristics of two companies of different sizes in the same industry. Thus, common-size statements are useful, both, in intra-firm comparisons over different years and also in making inter-firm comparisons for the same year or for several years. This analysis is also known as 'Vertical analysis'.

3. *Trend Analysis:* It is a technique of studying the operational results and financial position over a series of years. Using the previous years' data of a business enterprise, trend analysis can be done to observe the percentage changes over time in the selected data. The trend percentage is the percentage relationship, which each item of different years bear to the same item in the base year. Trend analysis is important because, with its long run view, it may point to basic changes in the nature of the business. By looking at a trend in a particular ratio, one may find whether the ratio is falling, rising or remaining relatively constant. From this observation, a problem is detected or the sign of good management is found.

4. *Ratio Analysis:* It describes the significant relationship which exists between various items of a balance sheet and a profit and loss account of a firm. As a technique of financial analysis, accounting ratios measure the comparative significance of the individual items of the income and position statements. It is possible to assess the profitability, solvency and efficiency of an enterprise through the technique of ratio analysis.

5. *Cash Flow Analysis:* It refers to the analysis of actual movement of cash into and out of an organisation. The flow of cash into the business is called as cash inflow or positive cash flow and the flow of cash out of the firm is called as cash outflow or a negative cash flow. The difference between the inflow and outflow of cash is the net cash flow. Cash flow statement is prepared to project the manner in which the cash has been received and has been utilised during an accounting year as it shows the sources of cash receipts and also the purposes for which payments are made. Thus, it summarises the causes for the changes in cash position of a business enterprise between dates of two balance sheets.

In this chapter, we shall have a brief idea about the first three techniques, viz. comparative statements common size statements and trend analysis. The ratio analysis and cash flow analysis is covered in detail in chapters 5 and 6 respectively.

Test your Understanding – I

Fill in the blanks with appropriate word(s),

1. Analysis simply means——————data.
2. Interpretation means ——————data.
3. Comparative analysis is also known as —————————— analysis.
4. Common size analysis is also known as —————————— analysis.
5. The analysis of actual movement of money inflow and outflow in an organisation is called———————— analysis.

4.5 Comparative Statements

As stated earlier, these statements refer to the Profit and Loss Account and Balance Sheet prepared by providing columns for the figures for both the current year as well as for the previous year and for the changes during the year, both in absolute and relative terms. As a result, it is possible to find out not only the balances of account as on different dates and summaries of different operational activities of different periods, but also the extent of their increase or decrease between these dates. The figures in the comparative statements can be used for identifying the direction of changes and also the trends in different indicators of performance of an organisation.

The following steps may be followed to prepare the comparative statements:

Step 1 : List out absolute figures in rupees relating to two points of time (as shown in columns 2 and 3 of Figure 4.1.).

Step 2 : Find out change in absolute figures by subtracting the first year (Col.2) from the second year (Col.3) and indicate the change as increase (+) or decrease (–) and put it in column 4.

Step 3 : Preferably, also calculate the percentage change as follows and put it in Column 5.

$$\frac{\text{Second year absolute figure (Col.3)}}{\text{First year absolute figure (Col.2)}} \times 100 - 100,$$

Particulars	First Year	Second Year	Absolute Increase (+) or Decrease (–)	Percentage Increase (+) or Decrease (–)
Column 1	2	3	4	5
	Rs.	**Rs.**	**Rs.**	**%.**

Fig. 4.1

Illustration 1

Convert the following Income Statement into a comparative income statement of BCR Co. Ltd and interpret the changes in 2005 in the light of the conditions in 2004.

Particulars	*2004* (Rs.)	*2005* (Rs.)
Gross Sales	30,600	36,720
Less: Sales Return	600	700
	– – – –	– – – –
Net Sales	30,000	36,020
Less: Cost of Goods Sold	18,200	20,250
	– – – –	– – – –
Gross Profit	**11,800**	**15,770**
	– – – –	– – – –
Less: Operating Expenses –		
Administration Expenses	3,000	3,400
Selling Expenses	6,000	6,600
	– – – –	– – – –
Total Operating Expenses	**9,000**	**10,000**
	– – – –	– – – –
Profit form Operations	2,800	5,770
Add: Non-Operating Income	300	400
	– – – –	– – – –
	3,100	6,170
Less: Non-Operating Expenses	400	600
	– – – –	– – – –
Net Profit before Tax	2,700	5,570
Less: Tax @ 50%	1,350	2,785
	– – – –	– – – –
Net Profit after Tax	**1,350**	**2,785**
	– – – –	– – – –

Solution

Comparative Income Statement for the year ended March 31, 2004 and 2005.

Particulars	*2004*	*2005*	*Absolute Increase (+) or Decrease (–)*	*Percentage Increase (+) or Decrease (–)*
Column 1	2	3	4	5
	Rs.	Rs.	Rs.	%.
Gross Sales	30,600	36,720	**+6,120**	**+20.00**
Less: Sales Return	600	700	+100	+16.67
Net Sales	**30,000**	**36,020**	**+6,020**	+20.07
Less: Cost of Goods Sold	18,200	20,250	+2,050	+11.26
Gross Profit (A)	**11,800**	**15,770**	**+3,970**	**+33.64**
Less: Operating Expenses (B)				
Administration Expenses	3,000	3,400	+400	+13.33
Selling Expenses	6,000	6,600	+600	+10.00
	9,000	**10,000**	**+1,000**	**+11.11**
Operating Profit (A–B)	**2,800**	**5,770**	**+2,970**	**+106.07**
Add: Non-operating Income	300	400	+100	+33.33
	3,100	**6,170**		
Less: Non-operating Expenses	400	600	+200	+50.00
Net Profit before Tax	**2,700**	**5,570**	**+2,870**	**+106.30**
Less: Tax @ 50%	1,350	2,785	+1,435	+106.30
Net Profit after Tax	**1,350**	**2,785**	**+1,435**	**+106.30**

Interpretation

1. The company has made efforts to reduce the cost which is evident from the fact that the cost of goods sold has not increased in the same ratio as the amount sales.
2. The gross profit has increased in 2005 as compared to 2004 considerably, 33.64% with an increase 20% in sales;
3. The company has also concentrated on reducing the operating cost; hence, the percentage of operating profit has also considerably increased, i.e. 106.07%.

Thus, the overall performance of the company has immensely improved in the year 2005.

Illustration 2

From the following Income Statement of Madhu Co.Ltd., prepare Comparative Income Statement for the year ended March 31, 2005 and 2006 and interpret the same.

Particulars	*2005 (Rs.)*	*2006 (Rs.)*
Sales	4,00,000	6,50,000
Purchases	2,00,000	2,50,000
Opening Stock	20,600	32,675
Closing Stock	32,675	20,000
Salaries	16,010	18,000
Rent	5,100	6,000
Postage and Stationery	3,200	4,100
Advertising	2,600	4,600
Commission on Sales	3,160	3,500
Depreciation	200	500
Loss on Sale of Asset	4,000	2,000
Profit on Sale of Investment	3,000	4,500

Solution

Comparative Income Statement of Madhu Co. Ltd for the year ended March 31, 2005 and 2006

Particulars	*2005*	*2006*	*Absolute Increase (+)/ Decrease (–)*	*Percentage Increase (+) /Decrease (–)*
	Rs.	Rs.	Rs.	
Sales	4,00,000	6,50,000	+2,50,000	+62.50
Less: Cost of Goods Sold:				
Opening Stock	20,600	32,675	+12,075	+58.62
Add: Purchases	2,00,000	2,50,000	+50,000	+25.00
Less: Closing Stock	32,675	20,000	(–)12,675	(–)38.79
	1,87,925	2,62,675	+74,750	+39.78
Gross Profit (A)	**2,12,075**	**3,87,325**	**+1,75,250**	**+82.64**
Less: Operating Expenses (B)	16,010	18,000	+1,990	+12.43
Salaries	5,100	6,000	+900	+17.65
Rent	3,200	4,100	+900	+28.13
Postage and Stationery	2,600	4,600	+2,000	+76.92
Advertising				
Commission on Sales	3,160	3,500	+340	+10.76

Depreciation	200	500	+300	+150.00
	30,270	**36,700**	**+6,430**	**+21.24**
Operating Profit (A–B)	**1,81,805**	**3,50,625**	**+1,68,820**	**+92.86**
Add: Non-operating Income				
Profit on Sale of Investment	3,000	4,500	+1,500	+50.00
	1,84,805	**3,55,125**		
Less: Non-operating Expenses				
Loss on Sale of Assets	4,000	2,000	(–)2,000	(–)50.00
Net Profit	**1,80,805**	**3,53,125**	**+ 1,72,320**	**+95.31**

Interpretation

1. The comparative balance sheet of the company reveals that there has been an increase in sales by Rs.2,50,000, i.e. 62.5% whereas cost of goods sold has increased only by Rs.74,750, i.e. 39.78%. This reveals that the company has made efforts to reduce the cost of goods sold thereby the gross profit of the company has increased by Rs.1,75,250, i.e. 82.64%.
2. The expenses of the company have increased by Rs.6,430, i.e. 21.24% only, and the operating profit has increased by Rs.1,68,820, i.e. 92.86%.
3. The net profit of the company has increased by 95.31%,
4. The overall performance of the company is good.

Illustration 3

The following are the Balance Sheets of J. Ltd. for the year ended March 31, 2005 and 2006.

Prepare a Comparative Balance Sheet and comment on the financial position of the business firm.

Rs.('000)

Liabilities	*2005 Rs.*	*2006 Rs.*	*Assets*	*2005 Rs.*	*2006 Rs.*
Equity Share Capital	600	800	Land and Building	370	270
Reserves and Surplus	330	222	Plant and Machinery	400	600
Debentures	200	300	Furniture and Fixtures	20	25
Long-term Loans	150	200	Other Fixed Assets	25	30
Bills Payable	50	45	Cash in Hand and at Bank	20	80
Sundry Creditors	100	120	Bills Receivable	150	90
Other Current Liabilities	5	10	Sundry Debtors	200	250
			Stock	250	350
			Pre-paid Expenses	-	2
	1,435	**1,697**		**1,435**	**1,697**

Solution

Comparative Balance Sheets of J Ltd.
as on March 31, 2005 and 2006.

(Rs.'000)

Particulars	*2005 (Rs.)*	*2006 (Rs.)*	*Absolute Increase (+)/ Decrease (–)*	*Change (%) Increase (+) /Decrease (–)*
Assets:				
Current Assets				
Cash and Bank	20	80	60	300
Bills Receivable	150	90	(–)60	(–)40
Sundry Debtors	200	250	+50	+25
Stock	250	350	+100	+40
Prepaid Expenses	–	2	+2	+200
Total Current Assets	**620**	**772**	**+152**	**+24.52**
Fixed Assets				
Land and Building	370	270	**(–)100**	(–)27.03
Plant and Machinery	400	600	**+200**	+50
Furniture and Fixtures	20	25	**+5**	+25
Other Fixed Assets	25	30	**+5**	+20
Total Fixed Assets	**815**	**925**	**+110**	**+13.5**
Total Assets	**1,435**	**1,697**	**+262**	**+18.26**
Liabilities:				
Current Liabilities				
Bills Payable	50	45	(–)5	**(–)10**
Sundry Creditors	100	120	+20	**+20**
Other Current Liabilities	5	10	+5	**+100**
Total Current Liabilities	**155**	**175**	**+20**	**+12.90**
Debentures	200	300	+100	**+50**
Long-term Loans	150	200	+50	**+33.33**
Total External Liabilities	**505**	**675**	**+170**	**+33.66**
Equity Share Capital	600	800	+200	**+33.33**
Reserves and Surplus	330	222	(–)108	**(–)32.73**
Shareholders Fund	930	1022	92	+ 0.98
Total Liabilities and Capital	**1,435**	**1,697**	**262**	**18.26**

Note : For the purpose of analysis, the balance sheet may be presented vertically with major heads of assets and liabilities.

Interpretation

1. The comparative balance sheet of the company reveals that during the year 2006, there has been an increase in fixed assets by Rs.1,10,000, i.e. 13.5% while long-term liabilities have relatively increased by Rs.1,50,000 and equity share capital has increased by Rs.2 lakhs. This fact depicts that the policy of the company is to purchase fixed assets from long-term source of finance, thereby not affecting the working capital.
2. The current assets have increased by Rs.1,52,000, i.e. 24.52%. The current liabilities have increased only by Rs.20,000, i.e. 12.9%. This shows an improvement in the liquid position of the Company.
3. Shareholder's funds (share capital plus reserves) have shown an increase of Rs. 92,000.
4. The overall financial position of the company is satisfactory.

Exhibit – 1

Sterlite Optical Technologies Ltd.
Financial Overview 2001-2005

US$ in million	2005-06	2004-05	2003-04	2002-03	2001-02
Revenues (Gross)	140.90	82.46	22.49	27.27	146.72
Revenues (Net)	123.61	72.72	20.02	25.05	130.28
Earning before Interest Tax and Depreciation	18.81	10.53	4.24	(6.93)	34.60
Interest	3.64	2.32	2.81	5.14	3.13
Profit before Depreciation and Tax	15.16	8.22	1.42	(12.07)	31.47
Depreciation	6.55	5.93	6.13	5.72	4.49
Profit before Tax	8.64	2.28	(4.12)	(17.79)	26.98
Tax	(0.59)	0.01	(0.58)	–	5.98
Profit after Tax	9.21	2.27	(4.12)	(17.79)	21.00
Earning per Share	0.16	0.04	(0.07)	(0.32)	0.38
Capital Employed	127.71	93.15	96.42	126.36	119.47
Rs. in million					
Turnover	6,239.33	2,706.74	1,032.95	1,319.84	6,997.78
% Growth	68.32	258.85	(21.74)	(81.14)	–
Turnover (Net)	5,473.72	3,268.76	919.23	1,212.46	6,213.49
% Growth	67.46	255.60	(24.18)	(80.49)	–
% to Net sales	15.22	14.48	21.16	(27.67)	26.55
Interest	161.36	104.12	129.16	248.78	149.21
Profit before Depreciation and Tax	671.49	369.28	65.38	(584.25)	1,500.78
% to Net Sales	12.27	11.30	7.11	(48.19)	24.15
Depreciation	289.92	266.76	281.66	276.90	214.05
Profit before Tax	381.57	102.52	(216.28)	(861.15)	1,286.73
% to Net sales	6.97	3.14	(23.53)	(71.03)	20.71
Tax	(26.10)	0.32	(26.58)	–	284.98
Profit after Tax	407.66	102.20	(189.43)	(861.15)	1,001.75
% to Net Sales	7.45	3.13	(20.61)	(71.03)	16.12
Capital Employed	5,696.95	4,075.28	4,183.71	6,002.03	5,830.11
Return on Capital Employed %	9.53	5.07	(2.08)	(10.20)	24.63
Interest Coverage ratio	5.16	4.55	1.51	(1.35)	11.06
Working Capital Ratio	2.91	1.64	2.06	2.86	2.24
Debt Equity Ratio	0.72	0.56	0.67	0.95	0.47
Earning per Share	7.27	1.83	–3.38	–15.38	17.86

Do it Yourself

From the following balance sheet and income statement of Day Dreaming Co.Ltd., for the year ending 2002 and 2003, prepare the comparative statements.

Income Statement

(Rs. in Lakhs)

Particulars	***2005***	***2006***
Net Sales	900	1,050
Cost of Goods Sold	650	850
Administrative Expenses	40	40
Selling Expenses	20	20
Net Profit	190	140

Balance Sheet

	2005	***2006***
Equity Share Capital	600	600
6% Preference Share Capital	500	500
Reserves	400	445
Debenture	300	350
Bills Payable	250	275
Creditors	150	200
Tax payable	150	200
Total Liabilities	**2,350**	**2,570**
Land	300	300
Buildings	500	470
Plant	400	470
Furniture	300	340
Stock	400	500
Cash	450	490
Total Assets	**2,350**	**2,570**

4.6 Common Size Statement

Common Size Statement, also known as component percentage statement, is a financial tool for studying the key changes and trends in the financial position and operational result of a company. Here, each item in the statement is stated as a percentage of the aggregate, of which that item is a part. For example, a common size balance sheet shows the percentage of each asset to the total assets, and that of each liability to the total liabilities. Similarly, in the common size income statement, the items of expenditure are shown as a percentage of the net sales. If such a statement is prepared for successive periods, it shows the changes of the respective percentages over time. [See the Five year Review of Asian paints (India) Ltd. Exhibit 2].

Common size analysis is of immense use for comparing enterprises which differ substantially in size as it provides an insight into the structure of financial statements. Inter-firm comparison or comparison of the company's position with the related industry as a whole is possible with the help of common size statement analysis.

The following procedure may be adopted for preparing the common size statements.

1. List out absolute figures in rupees at two points of time, say year 1, and year 2 (Column 2 & 4 of Exhibit 2)
2. Choose a common base (as 100). For example, Sales revenue total may be taken as base (100) in case of income statement, and total assets or total liabilities (100) in case of balance sheet.
3. For all items of Col. 2 and 4 work out the percentage of that total. Column 3 and 5 portray these percentages in Figures 4.2.

Common Size Statement

Particulars	**Year one**	**Percentage**	**Year two**	**Percentage**
Column 1	**2**	**3**	**4**	**5**

Figure 4.2

Illustration 4

Convert the following Balance Sheet into Common Size Balance Sheets and interpret the results there of.

Balance Sheet as on March 31, 2004 and 2005

(Rs. in lakhs)

Liabilities	*2004 (Rs.)*	*2005 (Rs.)*	*Assets*	*2004 (Rs.)*	*2005 (Rs.)*
Equity Share Capital	1,000	1,200	Debtors	450	390
Capital Reserve	90	185	Cash	200	15
General Reserve	500	450	Stock	320	250
Sinking Fund	90	100	Investment	300	250
Debentures	450	650	Building *Less* Depreciation	800	1,400
Sundry Creditors	200	150	Land	198	345
Others	15	20	Furniture & Fittings	77	105
	2,345	**2,755**		**2,345**	**2,755**

Solution

Common Size Balance Sheets
at the end of the year ended March 31, 2004 and 2005

(Rs. in lakhs)

Particulars	*2004*		*2005*	
	Rs.	*%*	*Rs.*	*%*
Share Capital				
Equity Share Capital	1,000	42.64	1,200	43.56
Capital Reserve	90	3.84	185	6.72
General Reserve	500	21.32	450	16.33
Sinking Fund	90	3.84	100	3.63
	1,680	**71.64**	**1,935**	**70.24**
Shareholder's Fund				
Long-term Debt (Net worth)				
Debentures	**450**	**19.19**	**650**	**23.59**
Current Liabilities				
Sundry Creditors	200	8.53	150	5.44
Other Creditors	15	0.64	20	0.73
	215	**9.17**	**170**	**6.17**
Total Liabilities	**2,345**	**100.00**	**2,755**	**100.00**
Fixed Assets				
Buildings	800	34.12	1,400	50.82
Land	198	8.44	345	12.52
Furniture and Fittings	77	3.28	105	3.81
Total Fixed Assets	**1,075**	**45.84**	**1,850**	**67.15**
Current Assets				
Debtors	450	19.19	390	14.16
Cash	200	8.53	15	0.05
Stock	320	13.64	250	9.07
Total Current Assets	**970**	**41.36**	**655**	**23.78**
Investments	**300**	**12.08**	**250**	**9.07**
Total Assets	**2,345**	**100.00**	**2,755**	**100.00**

Interpretation :

1. In 2005, both current assets and current liabilities decreased as compared to 2004, but the decrease in current assets is more than the decrease in the current liabilities. As a result, the firm may face liquidity problem.
2. In 2005 both fixed assets and the long-term liabilities increased, but the increase in the fixed assets is more than the increase in long-term liabilities. The firm sold some investments to acquire fixed assets and used short-term funds to purchase fixed assets.
3. The firm has undertaken expansion programme reflected in addition to land and buildings.

The overall financial position of the firm is satisfactory. It should improve its liquidity.

Illustration 5

From the following financial statements, prepare Common Size Statements for the year ended March 31, 2004 and 2005.

Income Statement

Particulars	*2004*	*2005*
Net Sales	5,00,000	49,500
Cost of Goods Sold	3,78,000	3,60,000
Operating Expenses	62,500	60,000
Depreciation	22,000	22,000
Income from Investments	70,000	89,000
Income Tax	32,500	40,000

Balance Sheets as on March 31, 2004 and 2005

Particulars	*March 31, 2004 (Rs.)*	*March 31, 2005 (Rs.)*
Liabilities		
Share Capital	2,00,000	2,90,000
Reserves	40,220	40,000
Profit and Loss	15,555	14,292
Long-term Loan	18,965	19,262
Creditors	5,125	5,125
Bills Payable	2,300	2,195
Creditors	13,000	15,000
Outstanding Expenses	2,220	1,011
Total Liabilities	**2,97,385**	**3,86,885**
Assets		
Land and Building	50,000	70,000
Plant and Machinery	1,00,000	1,00,000
Furniture	30,000	62,500
Stock	7,165	8,192
Debtors	40,000	52,000
Bills Receivable	50,000	49,020
Cash	–	20,000
Pre-paid Expenses	20,220	25,173
Total Assets	**2,97,385**	**3,86,885**

Solution

Common Size Income Statement for the year ended March 31, 2004 and 2005

Particulars	*2004*		*2005*	
	Rs.	*%*	*Rs.*	*%*
Net Sales	5,00,000	100	4,95,000	100
Less: Cost of Goods Sold	3,78,000	75.6	3,60,000	72.72
Gross Profit	1,22,000	24.4	1,35,000	27.28
Less: Operating Expenses	62,500	12.5	60,000	12.12
Less: Depreciation	22,000	4.4	22,000	4.44
Operating Profit	37,500	11.9	53,000	5.15
Add: Income from Investment	70,000	14	89,000	16.16
Profit before Tax	1,07,500	21.5	1,42,000	28.68
Less: Income Tax	32,500	6.5	40,000	8.08
Net Profit after Tax	75,000	15	1,40,000	28.28

Common Size Balance Sheet as on March 31, 2004 and 2005

Particulars	*2004*		*2005*	
	Rs.	*%*	*Rs.*	*%*
Liabilities				
Share Capital	2,00,000	67.25	2,90,000	74.96
Reserves	40,220	13.52	40,000	10.34
Profit and Loss Account	15,555	5.23	14,292	3.69
Long-term Loan	18,965	6.38	19,262	4.98
Creditors	5,125	1.72	5,125	1.32
Bills Payable	2,300	0.77	2,195	0.57
Creditors	13,000	4.37	15,000	3.88
Outstanding Expenses	2,220	0.76	1,011	0.26
Total Liabilities	**2,97,385**	**100.00**	**3,86,885**	**100.00**
Assets				
Land and Building	50,000	16.81	70,000	18.09
Plant and Machinery	1,00,000	33.63	1,00,000	25.85
Furnitures	30,000	10.09	62,500	16.15
Stock	7,165	2.41	8,192	2.12
Debtors	40,000	13.45	52,000	13.44
Bills Receivable	50,000	16.81	49,020	12.67
Cash	–		20,000	5.17
Pre-paid Expenses	20,220	6.80	25,173	6.51
Total Assets	**2,97,385**	**100.00**	**3,86,885**	**100.00**

Interpretation :

1. On comparison of the percentage of the cost of goods sold, it is observed that the company has tried to reduce its cost to improve its profit margin.
2. The profitability of the company has improved as compared to the previous year as the profit after tax percentage has gone up by 13.28%.
3. The company has issued share capital in order to finance the purchase of fixed assets like furniture and land and buildings.
4. The company has improved its liquidity position as reflected in the increase of its current assets.

Thus, there is an improvement in the working of the company.

Illustration 6

Prepare Common Size Statement from the following income statement of Karan Ltd. for the year ended March 31, 2006.

INCOME STALEMENT

Particulars	*(Rs.'000)*
Income	
Sales	2,538
Miscellaneous Income	26
Total Income	2,564
Expenses	
Cost of Goods Sold	1,422
Administrative Expenses	184
Selling Expenses	720
Other Non-Operating Expenses	40
Total Expenses	**2,366**
Tax	68

Solution

Common Size Income Statement of Karan Ltd.
for the year ended March 31, 2006

Particulars	(Rs.'000)	%
Sales	2,538	100
Less: Cost of Goods Sold	1,422	56.03
Gross Profit (A)	**1,116**	**43.97**
Operating Expenses		
Administrative Expenses	184	7.25
Selling Expenses	720	28.37
Total Expenses (B)	**904**	**35.62**
Operating Profit (A–B)	**212**	**8.35**
Add: Miscellaneous Income	26	1.02
	238	**9.38**
Less: Non-operating Expenses	40	1.58
Profit before Tax	**198**	**7.8**
Less: Tax	68	2.68
Profit after Tax	130	5.12

Interpretation :

The company's profitability as a percentage of sales is rather low. This is primarily on account of higher operating expenses. Hence, the company has to find ways and means to reduce cost of goods sold and operating expenses.

Exhibit – 2

Asian Paints (India) Ltd.

Results for the Accounting Year	2004-2005	2003-2004	2002-2003	2001-2002	2000-2001
Revenue Account –					
Gross Sales	22,388.04	20,259.05	18,066.06	15,984.05	14,695.01
Net Sales and Operating Income	19,415.01	16,966.05	15,302.05	13,613.05	12,333.05
Growth Rates (%)	14.43	10.87	12.41	10.38	13.18
Materials Consumed	11,154.00	9,441.05	8,023.05	7,173.6	6,611.06
% to Net Sales	57.45	55.65	52.43	52.70	53.61
Overheads	5,323.03	4,829.06	4,587.07	4,176.08	3,699.04
% to Net sales	27.42	28.47	29.98	30.68	29.99
Operating Profit	3,253.09	2,912.02	2,817.02	2,407.08	2,115.00
Interest Charges	27.05	52.07	83.05	145.08	221.02
Depreciation	476.01	480.01	485.02	447.09	334.09
Profit Before Tax and Extraordinary item	2,750.03	2,379.04	2,248.05	1,814.01	1,558.09

% to Net Sales	14.17	14.02	14.69	13.33	12.64
Extraordinary Items	42.3	68.1	–	–	–
Profit Before Tax and after Extraordinary item	2,708.00	2,311.03	2,248.50	1,814.10	1,558.90
% to Net Sales	13.95	13.62	14.69	13.33	12.64
Profit After Tax	1,738.02	1,475.08	1,433.07	1,153.03	1,063.09
Prior period items	(3.3)	2.1	(13.6)	(10.2)	(8.1)
Profit After Tax and prior period items	1,734.08	1,477.09	1,420.01	1,143.01	1,055.08
Return on overage net worth (RONW) (%)*	31.43	29.32	32.01	27.82	27.47
Capital Account					
Share Capital	959.02	959.02	641.09	641.09	641.09
Reserves and Surplus	4,763.00	4,356.02	4,124.03	3,463.07	3,470.01
Deferred Tax Liability (Net)	305.04	486.06	581.06	611.08	-
Loan Funds	838.08	704.07	1,036.02	1,107.07	2,268.02
Fixed Assets	3,195.01	3,444.03	3,662.04	3,895.00	3,804.06
Investments	2,584.03	2,424.09	1,476.09	633.04	440.07
Net Current Assets	1,087.02	637.05	1,244.58	1,296.07	2,134.09
Debt-Equity Ratio	0.15:1	0.13:1	0.22:1	0.27:1	0.55:1
Per Share Data					
Earnings Per Share (Rs.)	18.5	#16.1	#14.8	17.8	16.5
Dividend (%)	95.0	$85.0	110.0	90.0	70.0
Book Value (Rs.)	59.7	$55.4	74.3	64.0	64.1
Other Information					
Number of Employees	3,627	3,430	3,400	3,258	3,197

- RONW is calculated after provision for impairment on fixed assets in 2004-2005

EPS is calculated after adjusting for Bonus issue and the reduction of capital on account of merger of Pentasia Investments Ltd. in accordance with Accounting Standard (AS 20) – Earnings per share

$ On increased Capital

Do it Yourself

The following are the Balance Sheets of Harsha Ltd. as on March 31, 2006 and March 31, 2007

Liabilities	*2005 (Rs.)*	*2006 (Rs.)*	*Assets*	*2005 (Rs.)*	*2006 (Rs.)*
Equity Capital	1,00,000	1,65,000	Fixed Assets	1,20,000	1,75,000
Preference Capital	50,000	75,000	Stock	20,000	25,000
Reserves	10,000	15,000	Debtors	50,000	62,500
Profit and Loss Account	7,500	10,000	Bills Receivable	10,000	30,000
Bank Overdraft	25,000	25,000	Prepaid Expenses	5,000	6,000
Creditors	20,000	25,000	Cash at Bank	20,000	26,500
Provision for Taxation	10,000	12,500	Cash in hand	5,000	15,000
Proposed Dividend	7,500	12,500			
	2,30,000	3,40,000		2,30,000	3,40,000

Prepare Common Size Balance Sheet and interpret the same.

Test your Understanding – II

Choose the right answer :

1. The financial statements of a business enterprise include:
   (a) Balance sheet
   (b) Profit and loss account
   (c) Cash flow statement
   (d) All the above
2. The most commonly used tools for financial analysis are:
   (a) Horizontal analysis
   (b) Vertical analysis
   (c) Ratio analysis
   (d) All the above
3. An Annual Report is issued by a company to its:
   (a) Directors
   (b) Auditors
   (c) Shareholders
   (d) Management
4. Balance Sheet provides information about financial position of the enterprise:
   (a) At a point in time
   (b) Over a period of time
   (c) For a period of time
   (d) None of the above
5. Comparative statement are also known as:
   (a) Dynamic analysis
   (b) Horizontal analysis
   (c) Vertical analysis
   (d) External analysis

4.7 Trend Analysis

The financial statements may be analysed by computing trends of series of information. Trend analysis determines the direction upwards or downwards and involves the computation of the percentage relationship that each item bears to the same item in the base year. In case of comparative statement, an item is compared with itself in the previous year to know whether it has increased or decreased or remained constant. Common size is observed to know whether the proportion of an item (say cost of goods sold) is increasing or decreasing in the common base (say sales). But in case of trend analysis, we learn about the behaviour of the same item over a given period, say, during the last 5 years. Take for example, administrative expenses, whether they are exhibiting increasing tendency or decreasing tendency or remaining constant over the period of comparison, generally trend analysis is done for a reasonably long period. Many companies present their financial data for a period of 5 or 10 years in various forms in their annual reports.

4.7.1 Procedure for Calculating Trend Percentage

One year is taken as the base year. Generally, the first year is taken as the base year. The figure of base year is taken as 100. The trend percentages are calculated in relation to this base year. If a figure in other year is less than the figure in base year, the trend percentage will be less than 100 and it will be more than 100 if figure is more than the base year figure. Each year's figure is divided by the base year figure.

$$\text{Trend Percentage} = \frac{\text{Present year value}}{\text{Base year value}} \quad 100$$

The accounting procedures and conventions used for collecting data and preparation of financial statements should be similar; otherwise the figures will not be comparable.

***Illustration* 7**

Calculate the trend percentages from the following figures of sales, stock and profit of X Ltd., taking 2001 as the base year and interpret them.

(Rs. in lakhs)

Year	*Sales (Rs.)*	*Stock (Rs.)*	*Profit before tax (Rs.)*
2001	1,881	709	321
2002	2,340	781	435
2003	2,655	816	458
2004	3,021	944	527
2005	3,768	1,154	627

Solution

Trend Percentages (base year 2001 = 100)

(Rs. in lakhs)

Year	*Sales Rs.*	*Trend %*	*Stock Rs.*	*Trend %*	*Profit Rs.*	*Trend %*
2001	1881	100	709	100	321	100
2002	2340	124	781	110	435	136
2003	2655	141	816	115	458	143
2004	3021	161	944	133	527	164
2005	3768	200	1154	163	627	195

Interpretation :

1. The sales have continuously increased in all the years up to 2005, though in different proportions. The percentage in 2005 is 200 as compared to 100 in 2001. The increase in sales is quite satisfactory.
2. The figures of stock have also increased over a period of five years. The increase in stock is more in 2004 and 2005 as compared to earlier years.
3. Profit has substantially increased. The profits have increased in greater proportion than sales which implies that the company has been able to reduce their cost of goods sold and control the operating expenses.

Do it Yourself

The following data is available from the P&L A/c of Deepak Ltd.

Particulars	*2003 (Rs.)*	*2004 (Rs.)*	*2005 (Rs.)*	*2006 (Rs.)*
Sales	3,10,000	3,27,500	3,20,000	3,32,500
Wages	1,07,500	1,07,500	1,15,000	1,20,000
Selling Expenses	27,250	29,000	29,750	27,750
Gross Profit	90,000	95,000	77,500	80,000

You are required to show Trend Percentages of different items.

Illustration 8

From the following data relating to the assets side of Balance Sheet of ABC Ltd., for the period ended March 31, 2003 to March 31, 2006, calculate trend percentages.

(Rs. in Lakhs)

Particulars	*2003*	*2004*	*2005*	*2006*
Cash	100	120	80	140
Debtors	200	250	325	400
Stock	300	400	350	500
Other current assets	50	75	125	150
Land	400	500	500	500
Buildings	800	1000	1200	1500
Plant	1000	1000	1200	1500

Solution

Trend Percentages

(Rs. in lakhs)

Assets	*2003 %*	*Trend*	*2004 %*	*Trend*	*2005*	*Trend %*	*2006*	*Trend %*
Current Assets								
Cash	100	100	120	120	80	80	140	140
Debtors	200	100	250	125	325	162.5	400	200
Stock	300	100	400	133.33	350	116.67	500	166.67
Other Current Assets	50	100	75	150	125	250	150	300
	650	**100**	**845**	**130**	**880**	**135.38**	**1,190**	**183.08**
Fixed Assets								
Land	400	100	500	125	500	125	500	125
Buildings	800	100	1,000	125	1,200	150	1,500	187.5
Plant	1000	100	1,000	100	1,200	120	1,500	150
	2,200	**100**	**2,500**	**113.64**	**2,900**	**131.82**	**3,500**	**159.00**
Total Assets	**2,850**	**100**	**3,345**	**117.36**	**3,780**	**132.63**	**4,690**	**164.56**

Interpretation:

1. The assets have exhibited a continuous increasing trend over the period.
2. The current assets increased much faster than the fixed assets.
3. Sundry debtors and other current assets and buildings have shown higher growth.

Illustration 9

From the following data relating to the liabilities side of balance sheet of X Ltd., for the period March 31, 2003 to 2006, calculate the trend percentages taking 2003 as the base year.

(Rs. in lakhs)

Liabilities	*2003*	*2004*	*2005*	*2006*
Equity Share Capital	1,000	1,000	1,200	1,500
General Reserve	800	1,000	1,200	1,500
12% Debentures	400	500	500	500
Bank Overdraft	300	400	550	500
Bills Payable	100	120	80	140
Sundry Creditors	300	400	500	600
Outstanding Liabilities	50	75	125	150

Solution

Trend Percentages

(Rs. in Lakhs)

Liabilities	*2003 %*	*Trend*	*2004 %*	*Trend*	*2005*	*Trend %*	*2006*	*Trend %*
Shareholder Funds								
Equity Share Capital	1,000	100	1,000	100	1200	120	1,500	150
General Reserve	800	100	1,000	125	1200	150	1,500	187.5
	1,800	**100**	**2,000**	**111.11**	**2400**	**133.33**	**3,000**	**166.67**
Long-term Debts								
Debentures	400	100	500	125	500	125	500	125
	400	**100**	**500**	**125**	**500**	**125**	**500**	**125**
Current Liabilities								
Bank Overdraft	300	100	400	133.33	550	183.33	500	166.67
Bills Payable	100	100	120	120	80	80	140	140
Sundry Creditors	300	100	400	133.33	500	166.67	600	200
Outstanding Expenses	50	100	75	150	125	250	150	300
	750	**100**	**995**	**132.67**	**1,255**	**167.33**	**1,390**	**185.33**
Total (Liabilities)	**2,950**	**100**	**3,495**	**118.47**	**4,155**	**140.85**	**4,890**	**165.76**

Interpretation:

1. Shareholders' funds have increased over the period because of retention of profits in the business in the form of reserves, and the share capital has also increased, may be due to issue of fresh shares or bonus shares.
2. The increase in current liabilities is more than that of long term debt. This may be due to expansion of business and/or availability of greater credit activities.

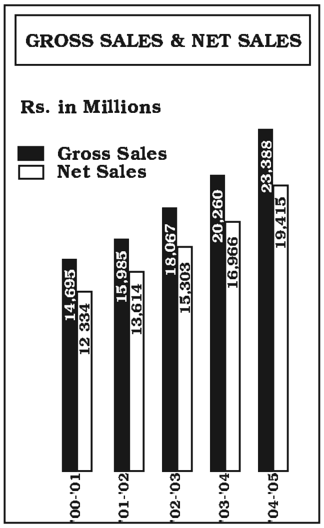
Exhibit – 3

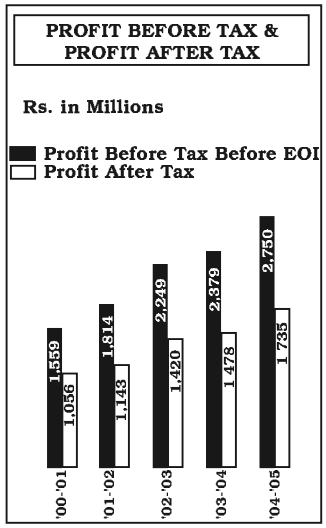
UNICHEM LABORATORIES LTD.
Five – year Financial Highlights
Profit and Loss Account

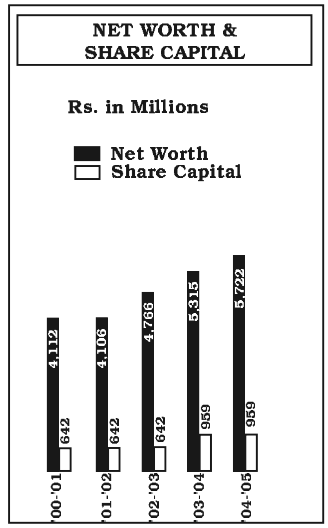
For the year ended March 31	**2002**	**2003**	**2004**	**2005**	**2006**
Sales and income from operations	3,010.60	3,250.10	3,817.96	4,245.61	4,777.06
Other Income	25.30	29.26	12.04	119.85	42.08
Total Income	**3,035.90**	**3,279.36**	**3,884.00**	**4,365.46**	**4,819.14**
Material consumption	815.78	858.27	1,037.06	1,045.53	1,183.14
Purchase of goods	401.26	512.26	610.20	741.75	796.29
Increase/(Decrease) in stocks of semi-finished and finished goods	(13.87)	(45.83)	(49.78)	(37.57)	(27.27)
Research & Development Expenses	53.30	66.60	68.23	85.13	100.63
Stores and spares	8.54	15.79	21.31	24.67	33.33
Power and fuel	63.58	70.55	88.08	90.66	119.63
Staff costs	233.88	259.97	320.99	378.93	439.86
Excise	309.22	308.03	337.47	310.95	219.52
Selling expenses	343.56	336.68	336.80	400.70	434.11
Other expenses	340.10	388.37	473.86	581.87	567.50
Total cost	2,555.45	2,770.69	3,244.22	3,622.63	3,866.74
Profit Before Depreciation Interest and Tax (PBIDT)	**480.45**	**508.67**	**639.78**	**742.83**	**952.40**
Interest	44.94	48.78	31.23	23.07	22.74
P B D T	**435.51**	**459.89**	**608.55**	**719.76**	**929.67**
Depreciation	65.54	69.85	83.78	93.13	114.20
Profit before tax	**369.97**	**390.04**	**524.77**	**626.63**	**815.47**
Extra ordinary & prior period items	0.55	(0.27)	1.85	0.12	(133.48)
Current tax	41.50	83.46	127.57	141.50	81.00
Fringe benefit tax	–	–	–	–	19.00
Profit after current tax	327.92	306.85	395.35	485.01	848.95
Deferred tax	**20.37**	**36.00**	**16.43**	**37.80**	**15.00**
Profit after tax	307.55	270.85	378.92	447.21	833.95
Export at FOB value	194.85	242.85	411.26	591.18	890.62
Equity dividend	68.24	68.24	102.36	119.42	180.02
Expenditure on					
R & D – capital	47.41	19.82	16.04	68.80	22.62
– Recurring	53.30	66.60	68.23	85.13	100.63
Total R & D expenditure	**100.71**	**86.42**	**84.27**	**153.93**	**123.25**

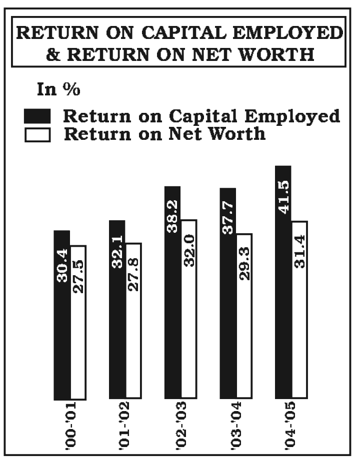
UNICHEM LABORATORIES LTD.
Balance Sheet

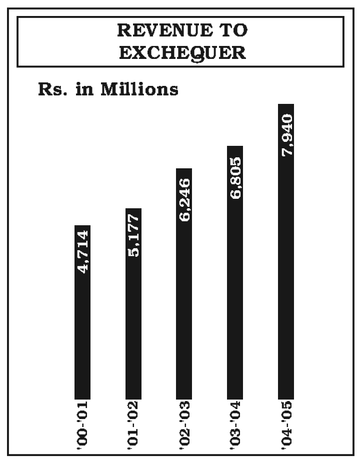
As on March 31	2002	2003	2004	2005	2006
Sources of funds					
Equity share capital	85.30	85.30	170.60	170.60	180.02
Reserves & surplus	901.69	1,096.55	1,340.12	1,655.62	2,826.09
Net worth	**986.99**	**1,181.85**	**1,510.72**	**1,826.22**	**3,006.11**
Secured Loans	186.76	211.80	228.83	258.31	104.67
Unsecured Loans	191.06	337.49	248.56	190.55	178.16
Total Loans	**377.82**	**549.29**	**477.39**	**448.86**	**282.83**
Total Liabilities	**1,364.80**	**1,731.14**	**1,988.11**	**2,275.08**	**3,288.94**
Application of funds					
Gross block	1,247.36	1,545.95	1,672.47	1,977.48	2,436.69
Depreciation	336.20	395.09	474.03	557.23	656.19
Net block	911.16	1,150.86	1,198.44	1,420.25	1,780.50
Capital WIP	85.62	23.84	72.33	365.82	100.48
NB + CWIP	**996.78**	**1,174.70**	**1,270.77**	**1,786.07**	**1,880.98**
Investment	6.17	147.33	142.58	31.18	274.93
Current Assets					
Inventories	286.89	379.62	472.57	540.80	597.46
Debtors	522.00	569.39	657.29	711.45	956.56
Cash and bank balance	19.79	14.45	26.78	18.95	436.15
Loans & advances	104.71	165.95	240.43	189.91	219.40
Total Current Assets	**933.39**	**1,129.41**	**1,397.06**	**1,461.11**	**2,209.57**
Current Liabilities					
Creditors	322.33	428.12	459.88	534.47	522.45
Other current liabilities	43.59	43.05	59.60	87.93	72.86
Provisions	70.72	78.22	115.48	155.74	241.09
Total Current Liabilities	**436.65**	**549.40**	**634.96**	**778.14**	**836.40**
Deferred tax liability	134.91	170.91	187.34	225.14	240.14
Net Current Assets	**361.85**	**409.11**	**574.77**	**457.83**	**1,133.03**
Total Assets	**1,364.80**	**1,731.14**	**1,988.11**	**2,275.08**	**3,288.94**

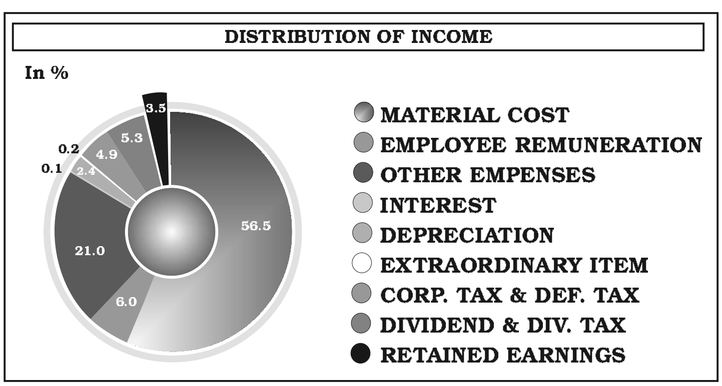

GROSS SALES & NET SALES
Rs. in Millions
Gross Sales
Net Sales
14,695
12 334
15,985
13,614
18,067
15,303
20,260
16,966
23,388
19,415
'00-'01
'01-'02
'02-'03
'03-'04
'04-'05

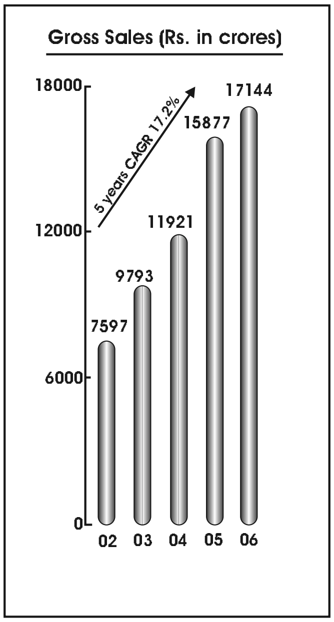

PROFIT BEFORE TAX & PROFIT AFTER TAX
Rs. in Millions
Profit Before Tax Before EOI
Profit After Tax
1,559
1,056
1,814
1,143
2,249
1,420
2,379
1 478
2,750
1 735
'00-'01
'01-'02
'02-'03
'03-'04
'04-'05

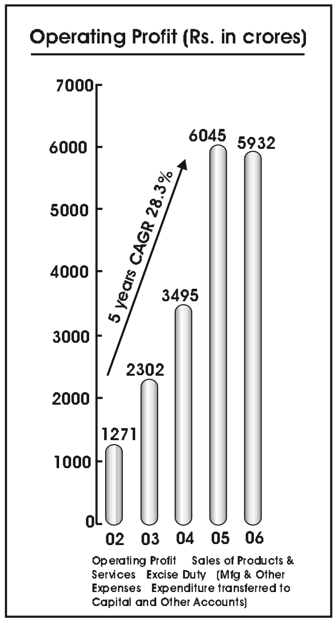

NET WORTH & SHARE CAPITAL
Rs. in Millions
Net Worth
Share Capital
4,112
642
4,106
642
4,766
642
5,315
959
5,722
959
'00-'01
'01-'02
'02-'03
'03-'04
'04-'05

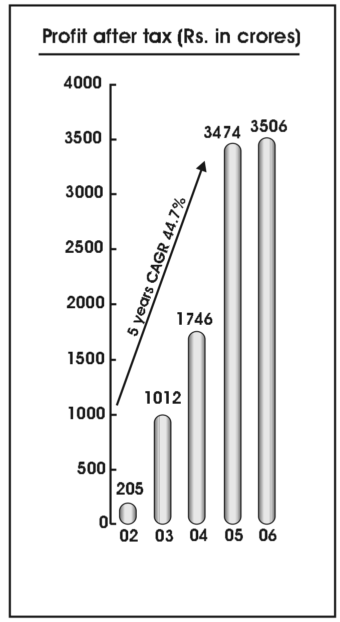

RETURN ON CAPITAL EMPLOYED & RETURN ON NET WORTH
In %
Return on Capital Employed
Return on Net Worth
30.4
27.5
32.1
27.8
38.2
32.0
37.7
29.3
41.5
31.4
'00-'01
'01-'02
'02-'03
'03-'04
'04-'05

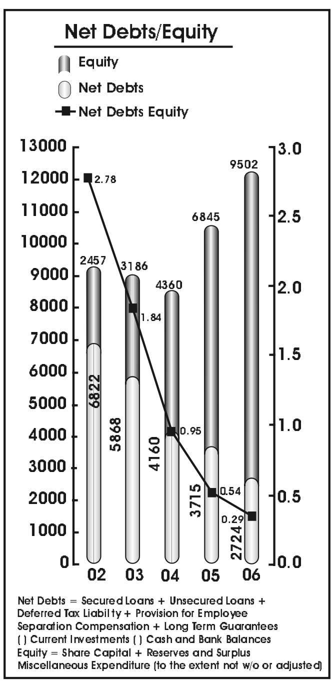

REVENUE TO EXCHEQUER
Rs. in Millions
4,714
5,177
6,246
6,805
7,940
'00-'01
'01-'02
'02-'03
'03-'04
'04-'05

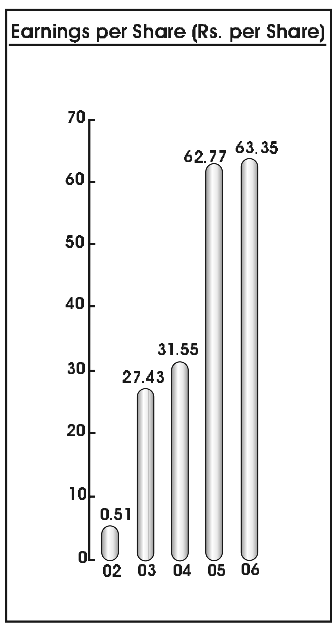

DISTRIBUTION OF INCOME
In %
3.5
5.3
4.9
0.2
0.1
2.4
56.5
21.0
6.0
MATERIAL COST
EMPLOYEE REMUNERATION
OTHER EMPENSES
INTEREST
DEPRECIATION
EXTRAORDINARY ITEM
CORP. TAX & DEF. TAX
DIVIDEND & DIV. TAX
RETAINED EARNINGS

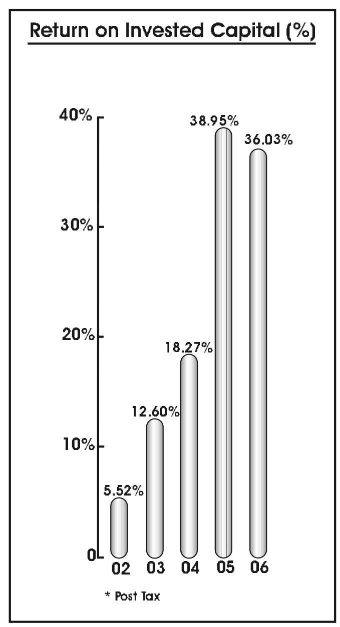

Gross Sales (Rs. in crores)
18000
12000
6000
0
5 years CAGR 17.2%
7597
9793
11921
15877
17144
02 03 04 05 06

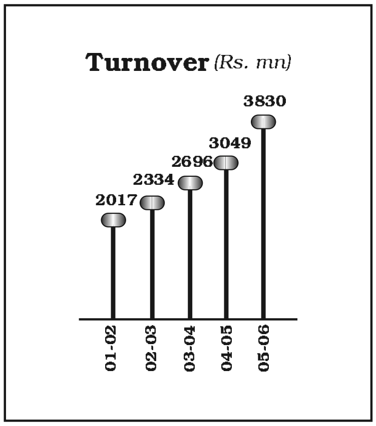

Operating Profit (Rs. in crores)
7000
6000
5000
4000
3000
2000
1000
0
5 years CAGR 28.3%
1271
2302
3495
6045
5932
02 03 04 05 06
Operating Profit Sales of Products & Services Excise Duty (Mfg & Other Expenses Expenditure transferred to Capital and Other Accounts)

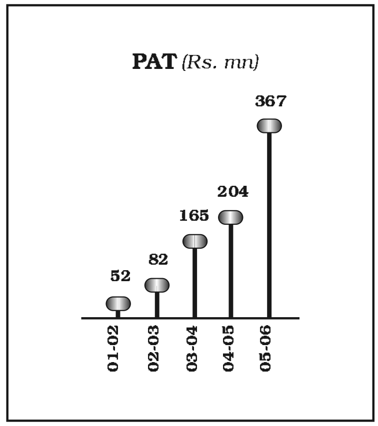

Profit after tax (Rs. in crores)
4000
3500
3000
2500
2000
1500
1000
500
0
5 years CAGR 44.7%
205
1012
1746
3474
3506
02 03 04 05 06

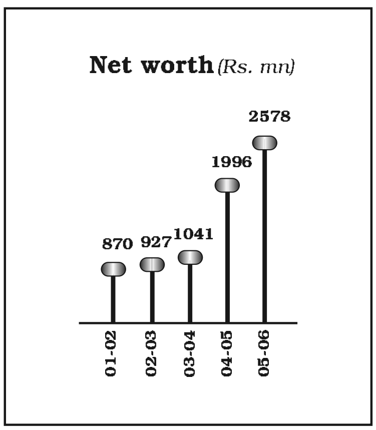

Net Debts/Equity
Equity
Net Debts
Net Debts Equity
13000
12000
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.78
1.84
0.95
0.54
0.29
2457
3186
4360
6845
9502
6822
5868
4160
3715
2724
02 03 04 05 06
Net Debts = Secured Loans + Unsecured Loans + Deferred Tax Liability + Provision for Employee Separation Compensation + Long Term Guarantees ( ) Current Investments ( ) Cash and Bank Balances
Equity = Share Capital + Reserves and Surplus Miscellaneous Expenditure (to the extent not w/o or adjusted)

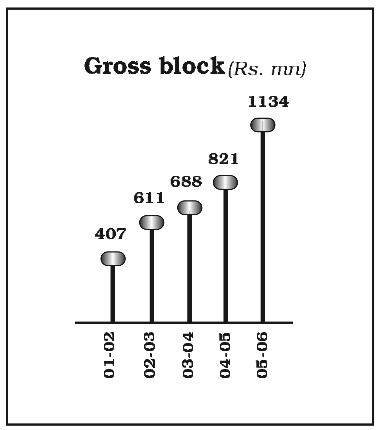

Earnings per Share (Rs. per Share)
70
60
50
40
30
20
10
0
0.51
27.43
31.55
62.77
63.35
02 03 04 05 06

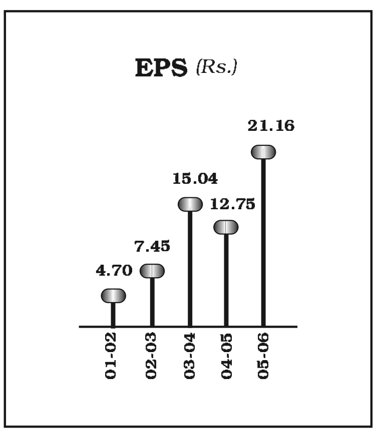

Return on Invested Capital (%)
40%
30%
20%
10%
0
5.52%
12.60%
18.27%
38.95%
36.03%
02 03 04 05 06
* Post Tax

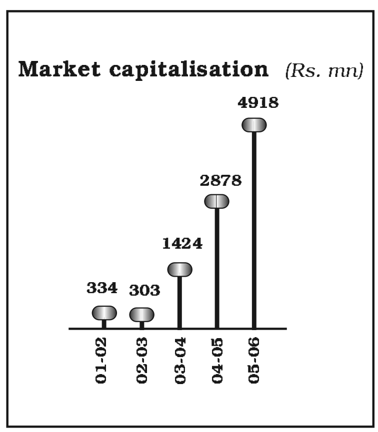

Turnover (Rs. mn)
2017
2334
2696
3049
3830
01-02
02-03
03-04
04-05
05-06


PAT (Rs. mn)
52
82
165
204
367
01-02
02-03
03-04
04-05
05-06


Net worth (Rs. mn)
870
927
1041
1996
2578
01-02
02-03
03-04
04-05
05-06


Gross block (Rs. mn)
407
611
688
821
1134
01-02
02-03
03-04
04-05
05-06


EPS (Rs.)
4.70
7.45
15.04
12.75
21.16
01-02
02-03
03-04
04-05
05-06


Market capitalisation (Rs. mn)
334
303
1424
2878
4918
01-02
02-03
03-04
04-05
05-06

Test your Understanding – III

State whether each of the following is True or False :

(a) The financial statements of a business enterprise include funds flow statement.

(b) Comparative statements are the form of horizontal analysis.

(c) Common size statements and financial ratios are the two tools employed in vertical analysis.

(d) Ratio analysis establishes relationship between two financial statements.

(e) Ratio analysis is a tool for analysing the financial statements of any enterprise.

(f) Financial analysis is used only by the creditors.

(g) Profit and loss account shows the operating performance of an enterprise for a period of time.

(h) Financial analysis helps an analyst to arrive at a decision.

(i) Cash Flow Statement is a tool of financial statement analysis.

(j) In a Common size statement each item is expressed as a percentage of some common base.

4.8 Limitations of Financial Analysis

Though financial analysis is quite helpful in determining financial strengths and weaknesses of a firm, it is based on the information available in financial statements. As such, the financial analysis also suffers from various limitations of financial statements. Hence, the analyst must be conscious of the impact of price level changes, window dressing of financial statements, changes in accounting policies of a firm, accounting concepts and conventions, personal judgement, etc. Some other limitations of financial analysis are:

1. Financial analysis does not consider price level changes.
2. Financial analysis may be misleading without the knowledge of the changes in accounting procedure followed by a firm.
3. Financial analysis is just a study of interim reports.
4. Monetary information alone is considered in financial analysis while non-monetary aspects are ignored.
5. The financial statements are prepared on the basis of on-going concept, as such, it does not reflect the current position.

Terms Introduced in the Chapter

1. Financial Analysis
2. Common Size Statements
3. Comparative Statements
4. Trend Analysis
5. Ratio Analysis
6. Cash Flow Analysis
7. Intra Firm Comparison
8. Inter Firm Comparison
9. Horizontal Analysis
10. Vertical Analysis

Summary

Major Parts of an Annual Report

An annual report contains basic financial statements, viz. Balance Sheet, Profit and Loss Account and Cash Flow Statement. It also carries management's discussion of corporate performance of the year under review and peeps into the future prospects.

Tools of Financial Analysis

Commonly used tools of financial analysis are: Comparative statements, Common size statement, trend analysis, ratio analysis, funds flow analysis and cash flow analysis.

Comparative Statement

Comparative statement captures changes in all items of financial statements in absolute and percentage terms over a period of time for a firm or between two firms.

Common Size Statement

Common size statements expresses all items of a financial statements as a percentage of some common base such as sales for profit and loss account and total assets for balance sheet.

Ratio Analysis

Ratio analysis is a tool of financial analysis which involves the methods of calculating and interpreting financial ratios in order to assess the strengths and weaknesses in the performance of a business enterprise.

Question for Practice

A. Short Answer Questions

1. List the techniques of Financial Statement Analysis.
2. Distinguish between Vertical and Horizontal Analysis of financial data.
3. Explain the meaning of Analysis and Interpretation.
4. Bring out the importance of Financial Analysis?
5. What are Comparative Financial Statements.
6. What do you mean by Common Size Statements?

B. Long Answer Questions

1. Describe the different techniques of financial analysis and explain the limitations of financial analysis.
2. Explain the usefulness of trend percentages in interpretation of financial performance of a company.
3. What is the importance of comparative statements? Illustrate your answer with particular reference to comparative income statement.
4. What do you understand by analysis and interpretation of financial statements? Discuss their importance.
5. Explain how common size statements are prepared giving an example.

Numerical Questions

1. From the following information of Narsimham Company Ltd., prepare a Comparative Income Statement for the years 2004–2005

Particulars	*2004* *(Rs.)*	*2005* *(Rs.)*
Gross Sales	7,25,000	8,15,000
Less : Returns	25,000	15,000
Net Sales	7,00,000	8,00,000
Cost of Goods Sold	5,95,000	6,15,000
Gross Profit	1,05,000	1,85,000
Other Expenses		
Selling & distribution Expenses	23,000	24,000
Administration Expenses	12,700	12,500
Total Expenses	35,700	36,500
Operating Income	69,300	1,48,500
Other Income	1,200	8,050
	70,500	1,56,550
Non Operating Expenses	1,750	1,940
Net Profit	**68,750**	**1,54,610**

2. The following are the Balance Sheets of Mohan Ltd., at the end of 2004 and 2005.

Rs.'000

Liabilities	*2004*	*2005*	*Assets*	*2004*	*2005*
Equity Share Capital	400	600	Land & buildings	270	170
Reserves & Surplus	312	354	Plant & Machinery	310	786
Debentures	50	100	Furniture & Fixtures	9	18
Long-term Loans	150	255	Other Fixed Assets	20	30
Accounts Payable	255	117	Loans and Advances	46	59
Other Current Liabilities	7	10	Cash and Bank	118	10
			Account Receivable	209	190
			Inventory	160	130
			Prepaid Expenses	3	3
			Other current Assets	29	40
	1,174	**1,436**		**1,174**	**1,436**

Prepare a Comparative Balance Sheet and study the financial position of the company.

3. The following are the balance sheets of Devi Co. Ltd at the end of 2002 and 2003. Prepare a Comparative Balance Sheet and study the financial position of the concern.

Liabilities	*2002 (Rs.)*	*2003 (Rs.)*	*Assets*	*2002 (Rs.)*	*2003 (Rs.)*
Equity Capital	1,20,000	1,85,000	Fixed Assets	1,40,000	1,95,000
Preference Capital	70,000	95,000	Stock	40,000	45,000
Reserves	30,000	35,000	Debtors	70,000	82,500
P & L	17,500	20,000	Bills Receivables	20,000	50,000
Bank overdraft	35,000	45,450	Prepaid Expenses	6,000	8,000
Creditors	25,000	35,000	Cash at bank	40,000	48,500
Provision for Taxation	15,000	22,500	Cash in hand	5,000	29,000
Proposed Dividend	8,500	20,050			
	3,21,000	**4,58,000**		**3,21,000**	**4,58,000**

4. Convert the following income statement into Common Size Statement and interpret the changes in 2005 in the light of the conditions in 2004.

	2004 (Rs.)	2005 (Rs.)
Gross Sales	30,600	36,720
Less : Returns	600	700
Net Sales	30,000	36,020
Less : Cost of Goods Sold	18,200	20,250
Gross Profit	11,800	15,770
Less : Operating Expenses		
Administration Expenses	3,000	3,400
Sales Expenses	6,000	6,600
Total Expenses	9,000	10,000
Income from Operations	2,800	5,770
Add : Non-operating Income	300	400
Total Income	3,100	6,170
Less : Non-operating Expenses	400	600
Net Profit	**2,700**	**5,570**

5. Following are the balance sheets of Reddy Ltd. as on 31 March 2003 and 2004.

Liabilities	*2004*	*2005*	*Assets*	*2004*	*2005*
Share Capital	2,400	3,600	Land & buildings	1,620	1,040
Reserves & Surplus	1,872	2,124	Plant & Machinery	1,860	4,716
Debentures	300	600	Furniture & Fixtures	54	108
Long-term Debt	900	1,530	Other Fixed Assets	120	180
Bills Payable	1,530	702	Long-terms Loans	276	354
Other Current Liabilities	42	60	Cash & Bank Balances	708	60
			Bill Receivable	1,254	1,120
			Stock	960	780
			Prepaid Expenses	18	18
			Other Current Assets	174	240
	7,044	8,616		7,044	8,616

Analyse the financial position of the company with the help of the Common Size Balance Sheet.

6. The accompanying balance sheet and profit and loss account related to SUMO Logistics Pvt. Ltd. convert these into Common Size Statements.

   Previous Year = 2005 Current Year= 2006

Rs.'000

	Previous Year	*Current Year*
Liabilities		
Equity Share Capital (of Rs. 10 each)	240	240
General Reserve	96	182
Long Term loans	182	169.5
Creditors	67	52
Outstanding expenses	6	–
Other Current liabilities	9	6.5
Total Liabilities	**600**	**650**
Assets		
Plant assets net of accumulated less depreciation	402	390
Cash	54	78
Debtors	60	65
Inventories	84	117
Total Assets	**600**	**650**

Income Statement for the year ended

Rs.'000

	Previous Year	*Current Year*
Gross Sales	370	480
Less : Returns	20	30
Net sales	350	450
Less : Cost of goods sold	190	215
Gross Profit	160	235
Less : Selling general and administration expenses	50	72
Operating profit	110	163
Less : Interest expenses	20	17
Earnings before tax	90	146
Less : Taxes	45	73
Earnings After Tax	45	73

7. From the following particulars extracted from P&L A/c of Prashanth Ltd., you are required to calculate trend percentages

Year	Sales (Rs.)	Wages (Rs.)	Bad debts (Rs.)	Profit after tax (Rs.)
2003	3,50,000	50,000	14,000	16,000
2004	4,15,000	60,000	26,000	24,500
2005	4,25,000	72,200	29,000	45,000
2006	4,60,000	85,000	33,000	60,000

8. Calculate trend percentages from the following figures of ABC Ltd., taking 2000 as base and interpret them.

Year	Sales	Stock	Profit before tax
2000	1,500	700	300
2001	2,140	780	450
2002	2,365	820	480
2003	3,020	930	530
2004	3,500	1160	660
2005	4000	1200	700

9. From the following data relating to the liabilities side of balance sheet of Madhuri Ltd., as on 31st March 2006, you are required to calculate trend percentages taking 2002 as the base year.

(Rs. in Lakhs)

Liabilities	2002	2003	2004	2005	2006
Share capital	100	125	130	150	160
Reserves & Surplus	50	60	65	75	80
12% Debentures	200	250	300	400	400
Bank overdraft	10	20	25	25	20
Profit & Loss A/c	20	22	28	26	30
Sundry Creditors	40	70	60	70	75

Answers to Test your Understanding

Test your Understanding – I

1. Simplification 2. explaining 3. the impact of horizontal
4. vertical 5. cash flow.

Test your Understanding – II

1 (d) 2 (d) 3 (c) 4 (a) 5 (b)

Test your Understanding – III

(a) True (b) True (c) True (d) True (e) True (f) False
(g) True (h) True (i) True (j) True

Accounting Ratios

5

Financial statements aim at providing financial information about a business enterprise to meet the information needs of the decision-makers. Financial statements prepared by a business enterprise in the corporate sector are published and are available to the decision-makers. These statements provide financial data which require analysis, comparison and interpretation for taking decision by the external as well as internal users of accounting information. The act is termed as financial statement analysis. It is regarded as an integral and important part of accounting. As indicated in the previous chapter, the most commonly used techniques of financial statement, analysis are comparative statements, common size statements, trend analysis, accounting ratios and cash flow analysis. The first three have been discussed in detail in the previous chapter. This chapter covers the technique of accounting ratios for analysing the information contained in financial statements for assessing the solvency, efficiency and profitability of the firms.

LEARNING OBJECTIVES

After studying this chapter, you will be able to :

- *Explain the meaning, objectives and limitations of analysis using accounting ratios;*
- *Identify the various types of ratios commonly used ;*
- *Calculate various ratios to assess solvency, liquidity, efficiency and profitability of the firm;*
- *Interpret the various ratios calculated for intra-firm and inter-firm comparisons.*

5.1 Meaning of Accounting Ratios

As stated earlier, accounting ratios are an important tool of financial statement analysis. A ratio is a mathematical number calculated as a reference to relationship of two or more numbers and can be expressed as a fraction, proportion, percentage, and a number of times. When the number is calculated by referring to two accounting numbers derived from the financial statements, it is termed as accounting ratio. For example if the gross profit of the business is Rs. 10,000 and the sales are Rs. 1,00,000, it can be said that the gross profit is 10% (10,000/1,00,000) of the sales. This ratio is termed as gross profit ratio. Similarly, inventory turnover ratio may be 6 which implies that inventory turns into sales six times in a year.

It needs to be observed that accounting ratios exhibit relationship, if any between accounting numbers extracted from financial statements, they are essentially derived numbers and their efficacy depends a great deal upon the basic numbers from which they are calculated. Hence, if the financial statements contain some errors, the derived numbers in terms of ratio analysis would also present an erroneous scenerio. Further, a ratio must be calculated using numbers which are meaningfully correlated. A ratio calculated by using two unrelated numbers would hardly serve any purpose. For example, the furniture of the business is Rs. 1,00,000 and Purchases are Rs. 3,00,000. The ratio of purchases to furniture is 3 (3,00,000/1,00,000) but it hardly has any relevance. The reason is that there is no relationship between these two aspects.

5.2 Objectives of Ratio Analysis

Ratio analysis is indispensable part of interpretation of results revealed by the financial statements. It provides users with crucial financial information and points out the areas which require investigation. Ratio analysis is a technique. Which involves regrouping of data by application of arithmetical relationships, though its interpretation is a complex matter. It requires a fine understanding of the way and the rules used for preparing financial statements. Once done effectively, it provides a wealth of information which helps the analyst:

1. To know the areas of the business which need more attention;
2. To know about the potential areas which can be improved with the effort in the desired direction;
3. To provide a deeper analysis of the profitability, liquidity, solvency and efficiency levels in the business;
4. To provide information for making cross sectional analysis by comparing the performance with the best industry standards;
5. To provide information derived from financial statements useful for making projections and estimates for the future.

5.3 Advantages of Ratio Analysis

The ratio analysis if properly done improves the user's understanding of the efficiency with which the business is being conducted. The numerical relationships throw light on many latent aspects of the business. If properly analysed, the ratios make us understand various problem areas as well as the bright spots of the business. The knowledge of problem areas help management take care of them in future. The knowledge of areas which are working better helps you improve the situation further. It must be emphasised that ratios are means to an end rather than the end in themselves. Their role is essentially indicative and that of a whistle blower. There are many advantages derived from the ratio analysis. These are summarised as follows:

1. *Helps understand efficacy of decisions:* The ratio analysis helps you understand whether the business firm has taken the right kind of operating, investing and financing decisions. It indicates how far they have helped in improving the performance.
2. *Simplify complex figures and establish relationships:* Ratios help in simplifying the complex accounting figures and bring out their relationships. They help summarise the financial information effectively and assess the managerial efficiency, firm's credit worthiness, earning capacity, etc.
3. *Helpful in comparative analysis:* The ratios are not be calculated for one year only. When many year figures are kept side by side, they help a great deal in exploring the trends visible in the business. The knowledge of trend helps in making projections about the business which is a very useful feature.
4. *Identification of problem areas:* Ratios help business in identifying the problem areas as well as the bright areas of the business. Problem areas would need more attention and bright areas will need polishing to have still better results.
5. *Enables SWOT analysis:* Ratios help a great deal in explaining the changes occurring in the business. The information of change helps the management a great deal in understanding the current threats and opportunities and allows business to do its own SWOT (Strength-Weakness-Opportunity-Threat) analysis.
6. *Various comparisons:* Ratios help comparisons with certain bench marks to assess as to whether firm, performance is better or otherwise. For this purpose, the profitability, liquidity, solvency, etc. of a business may be compared: (i) over a number of accounting periods with itself (Intra-firm Comparison/Time Series Analysis), (ii) with other business enterprises (Inter-firm Comparison/Cross-sectional Analysis), and (iii) with standards set for that firm/industry (comparison with standard (or industry) expectations).

5.4 Limitations of Ratio Analysis

Since the ratios are derived from the financial statements, any weakness in the original financial statements will also creep in the derived analysis in the form of ratio analysis. Thus, the limitations of financial statements also form the limitations of the ratio analysis. Hence, to interpret the ratios, the user should be aware of the rules followed in the preparation of financial statements and also their nature and limitations. The limitations of ratio analysis which arise primarily from the nature of financial statements are as under:

1. *Limitations of Accounting Data:* Accounting data give an unwar-ranted impression of precision and finality. In fact, accounting data "reflect a combination of recorded facts, accounting conventions and personal judgements and the judgements and conventions applied affect them materially. For example, profit of the business is not a precise and final figure. It is merely an opinion of the accountant based on application of accounting policies. The soundness of the judgement necessarily depends on the competence and integrity of those who make them and on their adherence to Generally Accepted Accounting Principles and Conventions". Thus, the financial statements may not reveal the true state of affairs and so the ratios will also not give the true picture.
2. *Ignores Price-level Changes:* The financial accounting is based on stable money measurement principle. It implicitly assumes that price level changes are either non-existent or minimal. But the truth is otherwise. We are normally living in inflationary economies where the power of money declines constantly. A change in the price level makes analysis of financial statement of different accounting years meaningless because accounting records ignore changes in value of money.
3. *Ignore Qualitative or Non-monetary Aspects:* Accounting provides information about quantitative (or monetary) aspects of business. Hence, the ratios also reflect only the monetary aspects, ignoring completely the non-monetary (qualitative) factors.
4. *Variations in Accounting Practices:* There are differing accounting policies for valuation of stock, calculation of depreciation, treatment of intangibles, definition of certain financial variables, etc. available for various aspects of business transactions. These variations leave a big question mark on the cross sectional analysis. As there are variations in accounting practices followed by different business enterprises, a valid comparison of their financial statements is not possible.
5. *Forecasting:* Forecasting of future trends based only on historical analysis is not feasible. Proper forecasting requires consideration of non-financial factors as well.

Now let us talk about the limitations of the ratios. The various limitations are:

1. *Means and not the End:* Ratios are means to an end rather than the end by itself.

2. *Lack of ability to resolve problems:* Their role is essentially indicative and of whistle blowing and not providing a solution to the problem.
3. *Lack of standardised definitions:* There is a lack of standardised definitions of various concepts used in ratio analysis. For example, there is no standard definition of liquid liabilities. Normally, it includes all current liabilities, but sometimes it refers to current liabilities less bank overdraft.
4. *Lack of universally accepted standard levels:* There is no universal yardstick which specifies the level of ideal ratios. There is no standard list of the levels universally acceptable, and, in India, the industry averages are also not available.
5. *Ratios based on unrelated figures:* A ratio calculated for unrelated figures would essentially be a meaningless exercise. For example, creditors of Rs. 1,00,000 and furniture of Rs. 1,00,000 represent a ratio of 1:1. But it has no relevance to assess efficiency or solvency.

Hence, ratios should be used with due consciousness of their limitations while evaluatory the performance of an organisation and planning the future strategies for its improvement.

Test your Understanding – I

1. **State which of the following statements are True or False.**
   (a) The only purpose of financial reporting is to keep the managers informed about the progress of operations.
   (b) Analyses of data provided in the financial statements as is termed as financial analysis
   (c) Long-term creditors are concerned about the ability of a firm to discharge its obligations to pay interest and repay the principal amount of term.
   (d) A ratio is always expressed as a quotient of one number divided by another.
   (e) Ratios help in comparisons of a firm's results over a number of accounting periods as well as with other business enterprises.
   (f) One ratios reflect both quantitative and qualitative aspects.

5.5 Types of Ratios

There is a two way classification of ratios: (1) traditional classification, and (2) functional classification. The traditional classification has been on the basis of financial statements to which the determinants of ratios belong. On this basis the ratios are classified as follows:

1. *Income Statement Ratios:* A ratio of two variables from the income statement is known as Income Statement Ratio. For example, ratio of gross profit to sales known as gross profit ratio is calculated using both figures from the income statement.

2. *Balance Sheet Ratios:* In case both variables are from balance sheet, it is classified as Balance Sheet Ratios. For example, ratio of current assets to current liabilities known as current ratio is calculated using both figures from balance sheet.
3. *Composite Ratios:* If a ratio is computed with one variable from income statement and another variable from balance sheet, it is called Composite Ratio. For example, ratio of credit sales to debtors and bills receivable known as debtor turnover ratio is calculated using one figure from income statement (credit sales) and another figure from balance sheet (debtors and bills receivable).

Although accounting ratios are calculated by taking data from financial statements but classification of ratios on the basis of financial statements is rarely used in practice. It must be recalled that basic purpose of accounting is to throw useful light on the financial performance (profitability) and financial position (its capacity to raise money and invest them wisely) as well as changes occurring in financial position (possible explanation of changes in the activity level). As such, the alternative classification (functional classification) based on the purpose for which a ratio is computed, is the most commonly used classification which reach as follows:

1. *Liquidity Ratios:* To meet its commitments, business needs liquid funds. The ability of the business to pay the amount due to stakeholders as and when it is due is known as liquidity, and the ratios calculated to measure it are known as 'Liquidity Ratios'. They are essentially short-term in nature.
2. *Solvency Ratios:* Solvency of business is determined by its ability to meet its contractual obligations towards stakeholders, particularly towards external stakeholders, and the ratios calculated to measure solvency position are known as 'Solvency Ratios'. They are essentially long-term in nature, and
3. *Activity (or Turnover) Ratios:* This refers to the ratios that are calculated for measuring the efficiency of operation of business based on effective utilisation of resources. Hence, these are also known as 'efficiency ratios'.
4. *Profitability Ratios:* It refers to the analysis of profits in relation to sales or funds (or assets) employed in the business and the ratios calculated to meet this objective are known as 'Profitability Ratios'.

Exhibit – 1

ELDER PHARMACEUTICALS LTD.

Profitability Ratios

	2003–04	2004–05	2005–06
PBDIT/total income	14.09	15.60	17.78
Net profit/total income	6.68	7.19	10.26
Cash flow/total income	7.97	8.64	12.13
Return on Net Worth (PAT/Net worth)	16.61	10.39	14.68
Return on Capital Employed (PBDIT/Average capital employed)	15.40	15.33	16.17

Activity Ratios

	2003–04	2004–05	2005–06
Debtors turnover (days)	104	87	80
Inventory turnover (days)	98	100	96
Working capital/total capital employed (%)	68.84	60.04	51.11
Interest/total income (%)	4.48	3.67	3.14

Leverage and Financial Ratios

	2003–04	2004–05	2005–06
Debt–equity ratio	1.45	0.66	0.77
Current ratio	3.50	3.72	3.58
Quick ratio	2.45	2.40	2.39
Cash and equivalents/total assets (%)	12.76	14.48	7.93
Interest cover	3.15	4.25	4.69

Valuation Ratios

	2003–04	2004–05	2005–06
Earnings per share	15.00	12.75	21.16
Cash earnings per share	18.78	15.58	24.85
Dividend per share	3.27	2.73	2.66
Book value per share	94.77	124.86	147.62
Price/Earning	8.64	15.03	13.40

5.6 Liquidity Ratios

Liquidity ratios are calculated to have indications about the short term solvency of the business, i.e. the firm's ability to meet its current obligations. These are analysed by looking at the amounts of current assets and current liabilities in the balance sheet. These include bank overdraft, creditors, outstanding capenses, bills payable, income received inadvance. The two ratios included in this category are Current Ratio and Liquid Ratio.

5.6.1 Current Ratio

Current ratio is the proportion of current assets to current liabilities. It is expressed as follows:

$$\text{Current Ratio} = \text{Current Assets} : \text{Current Liabilities or } \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current assets include cash in hand, bank balance, debtors, bills receivable, stock, prepaid expenses, accrued income, and short-term investments (marketable securities).

Current liabilities include creditors, bills payable, outstanding expenses, provision for taxation net of advance tax, bank overdraft, short-term loans, income received in advance, etc.

Illustration 1

Calculate current ratio from the following information:

	Rs.		Rs.
Stock	50,000	Cash	30,000
Debtors	40,000	Creditors	60,000
Bills Receivable	10,000	Bills Payable	40,000
Advance Tax	4,000	Bank Overdraft	4,000

Solution

Current Assets = Rs.50,000 + Rs.40,000 + Rs.10,000 + Rs.4,000 + Rs.30,000
= Rs.1,34,000

Current Liabilities = Rs.60,000 + Rs.40,000 + Rs.4,000 = Rs. 1,04,000

Current Ratio = Rs.1,34,000 : Rs.1,04,000 = 1.29 : 1.

Significance: It provides a measure of degree to which current assets cover current liabilities. The excess of current assets over current liabilities provides a measure of safety margin available against uncertainty in realisation of current assets and flow of funds. The ratio should be reasonable. It should neither be very high or very low. Both the situations have their inherent disadvantages. A very high current ratio implies heavy investment in current assets which is not a good sign as it reflects under utilisation or improper utilisation of resources. A low ratio endangers the business and puts it at risk of facing a situation where it will not be able to pay its short-term debt on time. If this problem persists, it may affect firms credit worthiness adversely. Normally, it is advocated to have this ratio as 2:1.

5.*6.2 Quick Ratio*

It is the ratio of quick (or liquid) asset to current liabilities. It is expressed as

$$\text{Quick ratio} = \text{Quick Assets : Current Liabilities} \quad \text{or} \quad \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

The quick assets are defined as those assets which are quickly convertible into cash. While calculating quick assets we exclude the closing stock and prepaid expenses from the current assets. Because of exclusion of non-liquid current asset, it is considered better than current ratio as a measure of liquidity position of the business. It is calculated to serve as a supplementary check on liquidity position of the business and is therefore, also known as 'Acid-Test Ratio'.

Illustration 2

Calculate quick ratio from the information given in illustration 1.

Solution

Quick Assets	= Current Assets – Stock – Advance Tax
Quick Assets	= Rs. 1,34,000 – (Rs. 50,000 + Rs. 4,000) = Rs. 80,000
Current Liabilities	= Rs. 1,04,000
Quick ratio	= Quick Assets : Current Liabilities
	= Rs. 80,000 : Rs. 1,04,000
	= 1:.77

Significance: The ratio provides a measure of the capacity of the business to meet its short-term obligations without any flaw. Normally it is advocated to be safe to have a ratio of 1:1 as unnecessarily low ratio will be very risky and a high ratio suggests unnecessarily deployment of resources in otherwise less profitable short-term investments.

Illustration 3

Calculate 'Liquid Ratio' from the following information:

Current Liabilities	Rs. 50,000
Current Assets	Rs. 80,000
Stock	Rs. 25,000
Prepaid Expenses	Rs. 5,000

Solution

Liquid Assets	=	Current Assets – Closing Stock – Prepaid Expenses
	=	Rs.80,000 – Rs.25,000 – Rs.5,000 = Rs. 50,000
Liquidity Ratio	=	Liquid Assets : Current Liabilities
	=	Rs.50,000 : Rs.50,000 = 1 : 1.

Illustration 4

X Ltd. has a current ratio of 3.5:1 and quick ratio of 2:1. If excess of current assets over quick assets represented by stock is Rs. 24,000, calculate current assets and current liabilities.

Solution

Current Ratio	=	3.5:1
Quick Ratio	=	2:1
Let Current Liabilities	=	x
Current Assets	=	3.5x
And Quick Assets	=	2x
Stock	=	Current Assets – Quick Assets
24,000	=	3.5x – 2x
24,000	=	1.5x
x	=	Rs.16,000
Current Assets	=	3.5x = 3.5 × Rs. 16,000 = Rs. 56,000.
Verification :		
Current Ratio	=	Current Assets : Current Liabilities
	=	Rs. 56,000 : Rs. 16,000
	=	3.5 : 1
Quick Ratio	=	Quick Assets – Current Liabilities
	=	Rs. 32,000 : Rs. 16,000
	=	2:1

Illustration 5

Calculate the current ratio from the following information :

Total Assets	Rs.3,00,000	Fixed Assets	Rs.1,60,000
Long-term Liabilities	Rs.80,000	Investments	Rs.1,00,000
Shareholders Fund	Rs.2,00,000	Fictitious Assets	Nil

Solution

Total Assets	=	Fixed Assets + Investments + Current Assets
Rs. 3,00,000	=	Rs. 1,60,000 + Rs. 1,00,000 + Current Assets
Current Assets	=	Rs. 3,00,000 – Rs. 2,60,000 = Rs. 40,000
Total Assets	=	Total Liabilities (including capital)
	=	Shareholders Funds + Long-term Liabilities + Current Liabilities
Rs. 3,00,000	=	Rs. 2,00,000 + Rs. 80,000 + Current Liabilities
Current Liabilities	=	Rs. 3,00,000 – Rs. 2,80,000 = Rs. 20,000
Current Ratio	=	Current Assets : Current Liabilities
	=	Rs. 40,000 : Rs. 20,000 = 2:1.

Do it Yourself

1. Current ratio = 4.5:1, quick ratio = 3:1.Inventory is Rs. 36,000. Calculate the current assets and current liabilities.
2. Current liabilities of a company are Rs. 5,60,000, current ratio is 5:2 and quick ratio is 2:1. Find the value of the stock.
3. Current assets of a company are Rs. 5,00,000. Current ratio is 2.5:1 and quick ratio is 1:1. Calculate the value of current liabilities, liquid assets and stock.

Illustration 6

The current ratio is 2:1. State giving reasons which of the following transactions would improve, reduce and not change the current ratio:

(a) Repayment of current liability;
(b) Purchased goods on credit;
(c) Sale of an office typewriter (Book value – Rs. 4,000) for Rs. 3,000 only;
(d) Sale of merchandise (goods) costing Rs. 10,000 for Rs. 11,000;
(e) Payment of dividend.

Solution

The change in the ratio depends upon the original ratio. Let us assume that current assets are Rs. 50,000 and current liabilities are Rs. 25,000; and so the current ratio is 2:1. Now we will analyse the effect of given transactions on current ratio.

(a) Assume that Rs. 10,000 of creditors is paid by cheque. This will reduce the current assets to Rs. 40,000 and current liabilities to Rs. 15,000. The new ratio will be 2.67(Rs. 40,000/Rs.15,000). Hence, it has *improved*.
(b) Assume that Rs. 10,000 goods are purchased on credit. This will increase the current assets to Rs. 60,000 and current liabilities to Rs. 35,000. The new ratio will be 1.71(Rs. 60,000/Rs. 35,000). Hence, it has *reduced*.
(c) Due to sale of a typewriter (a fixed asset) the current assets will increase upto Rs. 53,000 without any change in the current liability. The new ratio will be 2.12(Rs. 53,000/Rs. 25,000). Hence, it has *improved*.
(d) This transaction will decrease the stock by Rs. 10,000 and increase the cash by Rs. 11,000 thereby increasing the current assets by Rs. 1,000 without and change in the current liability. The new ratio will be 2.04 (Rs. 51,000/Rs. 25,000). Hence, it has *improved*.
(e) Assume that Rs. 5,000 is given by way of dividend. It will reduce the current assets to Rs. 45,000 without any change in the current liability. The new ratio will be 1.8 (Rs. 45,000/Rs. 25,000). Hence, it has *reduced*.

5.7 Solvency Ratios

The persons who have advanced money to the business on long-term basis are interested in safety of their payment of interest periodically as well as the repayment of principal amount at the end of the loan period. Solvency ratios are calculated to determine the ability of the business to service its debt in the long run. The following ratios are normally computed for evaluating solvency of the business.

1. Debt equity ratio;
2. Debt ratio;
3. Proprietary ratio;
4. Total Assets to Debt Ratio;
5. Interest Coverage Ratio.

5.7.1 Debt-Equity Ratio

Debt Equity Ratio measures the relationship between long-term debt and equity. If debt component of the total long-term funds employed is small, outsiders feel more secure. From security point of view, capital structure with less debt and more equity is considered favourable as it reduces the chances of bankruptcy. Normally, it is considered to be safe if debt equity ratio is 2:1. It is computed as follows:

Debt-Equity ratio = Long-term Debt's/ Shareholders Fund or $\frac{\text{Long-term Debt}}{\text{Share holders Fund}}$

Where Shareholders Funds (equity) = Equity Share Capital + Reserves and Surplus − Fictitious Assets + Preference Share Capital

Alternatively, it can be calculated as Non-fictitions Total Assets − Total External Liabilities.

Long-term Funds = Debentures + Long-term Loans

Significance: This ratio measures the degree of indebtedness of an enterprise and gives an idea to the long-term lender regarding extent of security of the debt. As indicated earlier, a low debt equity ratio reflects more security. A high ratio, on the other hand, is considered risky as it may put the firm into difficulty in meeting its obligations to outsiders. However, from the perspective of the owners, greater use of debt trading on equity may help in ensuring higher. returns for them if the rate of earnings on capital employed is higher than the rate of interest payable. But it is considered risky and so, with the exception of a few business, the prescribed ratio is limited to 2:1. This, ratio is also termed as 'Leverage Ratio'.

***Illustration* 7**

Calculate Debt Equity Ratio, from the following information :

Total external liabilities	Rs.5,00,000	Balance Sheet Total	Rs.10,10,000
Current liabilities	Rs.1,00,000	Fictitious Assets	Rs.10,000

Solution

Long-term Debt	= Total External Liabilities – Current Liabilities
	= Rs. 5,00,000 – Rs. 1,00,000 = Rs. 4,00,000
Total Non-fictitious Assets	= Total Assets – Fictitious Assets
	= Rs. 10,10,000 – Rs. 10,000 = Rs. 10,00,000
Shareholders Funds	= Non-fictitious Total Assets – Total liabilities
	= Rs. 10,00,000 – Rs. 5,00,000 = Rs. 5,00,000
Debt Equity Ratio	= Rs. 4,00,000/Rs. 5,00,000 = 4:5.

5.7.2 Debt Ratio

The Debt Ratio refers to the ratio of long-term debt to the total of external and internal funds (capital employed or net assets). It is computed as follows:

Long-term Debt/Capital Employed (or Net Assets)

Capital employed is equal to the long-term debt + shareholders' fund. Alternatively, it may be taken as net assets which are equal to the total non-fictitionies assets – current liabilities taking the data of Illustration 7, capital employed shall work out to Rs. 4,00,000 + Rs. 5,00,000 = Rs. 9,00,000. Similarly, Net Assets as Rs. 10,00,000 – Rs. 1,00,000 = Rs. 9,00,000 and he Debt Ratio as Rs. 4,00,000/Rs. 9,00,000 = 0.444.

Significance : Like debt equity ratio, it shows proportion of long-term debt in capital employed. Low ratio provides security to creditors and high ratio helps management in trading on equity. In the above case, the debt ratio is less than half which indicates reasonable funding by debt and adequate security of debt.

It may be noted that Debt Ratio can also be computed in relation to total assets. In that case, it usually refers to the ratio of total debt (long-term debt + current liabilities) to total assets, i.e. total of fixed and current assets (or shareholders funds + long-term debt + current liabilities), and is expressed as

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

5.7.3 Proprietary Ratio

Proprietary ratio expresses relationship of proprietor's (shareholders) funds to net assets and is calculated as follows :

Proprietary Ratio = Shareholders Funds/Capital employed (or net assets)

Based on data of Illustration 7, it shall be worked out as follows:

Rs. 5,00,000/Rs. 9,00,000 = 0.556

Significance: Higher proportion of shareholders funds in financing the assets is a positive feature as it provides security to creditors. This ratio can also be computed in relation to total assets in lead of net assets (capital employed) It may be noted that the total of Debt Ratio and Proprietory Ratio will be equal to 1. Take these ratio worked out on the basis of data of Illustration 7, the Debt Ratio is 0.444 and the Proprietory Ratio 0.556, the total is 0.444 + 0.556 = 1. In terms of percentage if can be stated that the 44% of the capital employed is funded by debt and 56% by owners funds.

Illustration 8

From the following balance sheet of a company, calculate debt equity ratio.

Balance Sheet

	Rs.		Rs.
Preference Share Capital	2,00,000	Plant and Machinery	5,00,000
Equity Share Capital	8,00,000	Land and Building	4,00,000
Reserves	1,10,000	Motor Car	1,50,000
Debentures	1,50,000	Furniture	50,000
Current liabilities	1,40,000	Stock	1,00,000
		Debtors	90,000
		Cash and Bank	1,00,000
		Discount on Issue of Shares	10,000
	14,00,000		**14,00,000**

Solution

For the proper understanding of these ratios, the balance sheet is reframed in vertical format below.

Balance Sheet

Sources of Funds:		
Shareholders' Funds:		
Preference Share Capital	Rs. 2,00,000	
Equity Share Capital	Rs. 8,00,000	
Reserves	Rs. 1,10,000	
Discount on Issue of Shares	Rs. (10,000)	Rs. 11,00,000
Long-term debt		
Debentures	Rs. 1,50,000	Rs. 1,50,000

Capital Employed		Rs. 12,50,000
Application of funds:		
Fixed Assets :		
Plant and Machinery	Rs. 5,00,000	
Land and Building	Rs. 4,00,000	
Motor Car	Rs. 1,50,000	
Furniture	Rs. 50,000	Rs. 11,00,000
Total Fixed Assets:		
Current Assets:		
Stock	Rs. 1,00,000	
Debtors	Rs. 90,000	
Cash and Bank	Rs. 1,00,000	
Total Current assets	Rs. 2,90,000	
Less *Current Liabilities:*	Rs. 1,40,000	
Net Current Assets		Rs. 1,50,000
Total Application of funds (Net Assets)		Rs. 12,50,000

Debt equity ratio = Long-term Debt/Equity

Debt ratio = Long-term Debt/Capital Employed

Proprietary Ratio = Shareholders Funds/Capital Employed

Debt equity ratio = Rs. 1,50,000/Rs. 11,00,000 = 0.136

Debt to total funds ratio = Rs. 1,50,000/Rs. 12,50,000 = 0.12

Proprietary Ratio = Rs. 11,00,000/Rs. 12,50,000 = 0.88

In case the debt ratio and proprietory ratio are based on total assets (Rs. 13,90,000), these shall work out as follows:

Debt Ratio = Total Debt/Total Assets

= Rs. 2,90,000/Rs. 13,90,000 = 0.209

Proprietary Ratio = Shareholders Funds/Total Assets

= Rs. 11,00,000/Rs. 13,90,000 = 0.791

5.7.4 Total Assets to Debt Ratio

This ratio measures the extent of the coverage of long-term debt by assets. It is calculated as

Total assets to Debt Ratio = Total assets/Long-term debt

Taking the data of Illustration on 8, this ratio will be worked out as follows:

Rs. 13,90,000/Rs. 1,50,000 = 9.27 times

The higher ratio indicates that asset have been mainly financed by owners funds, and the long-term debt is adequately covered by assets.

It is better to take the net assets (capital employed) instead of total assets for computing this ratio also. It will be observed that in that case, the ratio will be the reciprocal of the debt ratio.

Significance. This ratio primarily indicators the rate of external funds in financing the assets and the extent of coverage of their debt is covered by assets.

Illustration 9

From the following information, calculate Debt Equity Ratio, Debt Ratio Proprietary Ratio and Ratio of Total Assets to Debt.

Balance Sheet as on December 31, 2005

Preference Share Capital	Rs. 1,00,000	Fixed Assets	Rs. 4,00,000
Equity Share Capital	Rs. 3,00,000	Investments	Rs. 1,00,000
Reserves and Surplus	Rs. 1,10,000	Current Assets	Rs. 2,00,000
Secured Loans	Rs. 1,50,000	Preliminary Expenses	Rs. 10,000
Current liabilities	Rs. 50,000		
	Rs. 7,10,000		Rs. 7,10,000

Solution

Total Assets = Fixed Assets + Investment + Current Assets
= Rs.4,00,000 + Rs.1,00,000 + Rs.2,00,000
= Rs.7,00,000

Net Assets = Total Non-fictitious Assets – Current Liabilities
= Rs. 7,00,000 – Rs. 50,000 = Rs. 6,50,000

Shareholders Funds = Preference Shares + Equity Shares + Reserves and Surplus – Preliminary Expenses
= Rs. 1,00,000 + Rs. 3,00,000 + Rs. 1,10,000 – Rs. 10,000 = Rs. 5,00,000

Debt Equity Ratio = Rs. 1,50,000/Rs. 5,00,000 = 0.3
Debt Ratio = Rs. 1,50,000/Rs. 6,50,000 = 0.23
Long-term Debt = Rs. 1,50,000
Proprietary Ratio = Rs. 5,00,000/Rs. 6,50,000 = 0.77%
Total Assets to Debt Ratio = Rs. 7,00,000/Rs. 1,50,000 = 4.67%
= 1.25.

Illustration 10

The debt equity ratio of X Ltd. is 1:2. Which of the following would increase/ decrease or not change the debt equity ratio?

(i) Further issue of equity shares
(ii) Cash received from debtors
(iii) Sale of goods on cash basis
(iv) Redemption of debentures
(v) Purchase of goods on credit.

Solution

The change in the ratio depends upon the original ratio. Let us assume that external funds are Rs. 5,00,000 and internal funds are Rs. 10,00,000. It explains the debt equity ratio of 1:2. Now we will analyse the effect of given transactions on debt equity ratio.

(a) Assume that Rs. 1,00,000 worth of equity shares are issued. This will increase the internal funds to Rs. 11,00,000. The new ratio will be 5:11(5,00,000/11,00,000). Thus, it is clear that further issue of equity shares decreases the debt-equity ratio.
(b) Cash received from debtors will leave the internal and external funds unchanged as this will only affect the current assets. Hence the debt-equity ratio will remain.
(c) This will also leave the ratio *unchanged*.
(d) Assume that Rs. 1,00,000 debentures are redeemed. This will decrease the long-term debt to Rs. 4,00,000. The new ratio will be 4:10(4,00,000/10,00,000). Thus, any new issue of debenture will decrease the debt equity ratio.
(e) This will also leave the ratio *unchanged*.

5.7.5 Interest Coverage Ratio

It is a ratio which deals with the servicing of interest on loan. It is a measure of security of interest payable on long-term debt. It expresses the relationship between profits available for payment of interest and the amount of interest payable. It is calculated as follows:

Interest Coverage Ratio = Net Profit before Interest and Tax/ Interest on long term debt

Significance: It reveals the number of times interest on long-term debt is covered by the profits available for interest. A higher ratio ensures safety of interest payment debt and it also indicates availability of surplus for shareholders.

Illustration 11

From the following details, calculate interest coverage ratio:

Net Profit after tax Rs. 60,000; 15% Long-term Debt 10,00,000; and Tax Rate 40%.

Solution

Net Profit after Tax	= Rs. 60,000
Tax Rate	= 40%
Net Profit before tax	= Net profit after tax*100/(100 – Tax rate)
	= Rs. 60,000*100/(100 – 40)
	= Rs. 1,00,000
Interest on Long Term Debt	= 15% of Rs. 10,00,000 = Rs. 1,50,000
Net profit before interest and tax	= Net profit before tax + Interest
	= Rs. 1,00,000 + Rs. 1,50,000 = Rs. 2,50,000
Interest Coverage Ratio	= Net Profit before Interest and Tax/Interest on long term debt
	= Rs. 2,50,000/Rs. 1,50,000
	= 1.67 times.

5.8 Activity (or Turnover) Ratios

The turnover ratios basically exhibit the activity levels characterised by the capacity of the business to make more sales or turnover. The activity ratios express the number of times assets employed, or, for that matter, any constituent of assets, is turned into sales during an accounting period. Higher turnover ratio means better utilisation of assets and signifies improved efficiency and profitability, and as such are known as efficiency ratios. The important activity ratios calculated under this category are :

1. Stock Turn-over;
2. Debtors (Receivable) Turnover;
3. Creditors (Payable) Turnover;
4. Investment (Net Assets) Turnover
5. Fixed Assets Turnover;
6. Working Capital Turnover.

5.8.1 Stock (or Inventory) Turnover Ratio

It determines the number of times stock is turned in sales during the accounting period under consideration. It expresses the relationship between the cost of goods sold and stock of goods. The formula for its calculation is as follows:

Stock Turnover Ratio = Cost of Goods Sold/ Average Stock

Where average stock refers to arithmetic average of opening and closing stock, and the cost of goods sold means sales less gross profit.

Significance : It studies the frequency of conversion of stock of finished goods into sales. It is also a measure of liquidity. It determines how many times stock is purchased or replaced during a year. Low turnover of stock may be due to bad buying, obsolete stock, etc. and is a danger signal. High turnover is good but it must be carefully interpreted as it may be due to buying in small lots or selling quickly at low margin to realise cash. Thus, it throws light on utilisation of stock of goods.

Test your Understanding – II

(i) The following groups of ratios primarily measure risk

A. liquidity, activity, and profitability

B. liquidity, activity, and common stock

C. liquidity, activity, and debt

D. activity, debt and profitability

(ii) The __________ ratios are primarily measures of return.

A. liquidity

B. activity

C. debt

D. profitability

(iii) The __________ of a business firm is measured by its ability to satisfy its short-term obligations as they come due.

A. activity

B. liquidity

C. debt

D. profitability

(iv) __________ ratios are a measure of the speed with which various accounts are converted into sales or cash.

A. Activity

B. Liquidity

C. Debt

D. Profitability

(v) The two basic measures of liquidity are

A. inventory turnover and current ratio

B. current ratio and liquid ratio

C. gross profit margin and operating ratio

D. current ratio and average collection period

(vi) The __________ is a measure of liquidity which excludes ________, generally the least liquid asset.

A. current ratio, accounts debtors

B. liquid ratio, accounts debtors

C. current ratio, inventory

D. liquid ratio, inventory

Illustration 12

From the following information, calculate stock turnover ratio :

Opening Stock	Rs. 18,000	Wages	Rs. 14,000
Closing Stock	Rs. 22,000	Sales	Rs. 80,000
Purchases	Rs. 46,000	Carriage Inwards	Rs. 4,000

Solution

Stock Turnover Ratio	=	Cost of Goods Sold/ Average Stock
Cost of Goods Sold	=	Opening Stock + Purchases – Closing Stock + Direct Expenses
	=	Rs. 18,000 + Rs. 46,000 – Rs. 22,000 + (Rs. 14,000 + Rs. 4,000)
	=	Rs. 60,000
Average Stock	=	(Opening Stock + Closing Stock)/2
	=	(Rs. 18,000 + Rs. 22,000)/2 = Rs. 20,000
Stock Turnover Ratio	=	Rs. 60,000/Rs. 20,000
	=	3 Times.

Illustration 13

From the following information, calculate stock turnover ratio. Sales: Rs. 4,00,000, Average Stock : Rs. 55,000, Gross Loss Ratio : 10%

Solution

Sales	=	Rs. 4,00,000
Gross Loss	=	10% of Rs. 4,00,000 = Rs. 40,000
Cost of goods Sold	=	Sales + Gross Loss
	=	Rs. 4,00,000 + Rs. 40,000 = Rs. 4,40,000
Stock Turnover Ratio	=	Cost of Goods Sold/ Average Stock
	=	Rs. 4,40,000/Rs. 55,000 = 8 times.

Illustration 14

A trader carries an average stock of Rs. 40,000. His stock turnover is 8 times. If he sells goods at profit of 20% on sales. Find out the profit.

Solution

Stock Turnover Ratio	=	Cost of Goods Sold/ Average Stock
	=	Cost of Goods Sold/Rs. 40,000
Cost of Goods Sold	=	Rs. 40,000 × 8
	=	Rs. 3,20,000
Sales	=	Cost of Goods Sold × 100/80
	=	Rs. 3,20,000 × 100/80
	=	Rs. 4,00,000
Gross Profit	=	Sales – Cost of Goods Sold
	=	Rs. 4,00,000 – Rs. 3,20,000
	=	Rs. 80,000.

Do it Yourself

1. Calculate the amount of gross profit:

Average stock	=	Rs. 80,000
Stock turnover ratio	=	6 times
Selling price	=	25% above cost

2. Calculate Stock Turnover Ratio:

Annual sales	=	Rs. 2,00,000
Gross Profit	=	20% on cost of Goods Sold
Opening stock	=	Rs. 38,500
Closing stock	=	Rs. 41,500

5.8.2 Debtors (Receivables) Turnover Ratio

It expresses the relationship between credit sales and debtors. It is calculated as follows :

Debtors Turnover ratio	=	Net Credit sales/ Average Accounts Receivable
Where Average Account Receivable	=	(Opening Debtors and Bills Receivable + Closing Debtors and Bills Receivable)/2

It needs to be noted that debtors should be taken before making any provision for doubtful debts.

Significance: The liquidity position of the firm depends upon the speed with which debtors are realised. This ratio indicates the number of times the receivables are turned over and coverted into cash in an accounting period. Higher turnover means speedy collection from debtors. This ratio also helps in working out the average collection period, ratio calculated by dividing the days/ months in a year by debtors turnover ratio.

Illustration 15

Calculate the Debtors Turnover Ratio from the following information:

Total sales	=	Rs. 4,00,000
Cash sales	=	20% of total sales
Debtors on 1.1.2004	=	Rs. 40,000
Debtors on 31.12.2004	=	Rs. 1,20,000

Solution

Average Debtors	=	(Rs. 40,000 + Rs. 1,20,000)/2 = Rs. 80,000
Net credit sales	=	Total sales – Cash sales
	=	Rs.4,00,000 – Rs.80,000 (20% of Rs.4,00,000)
	=	Rs. 3,20,000
Debtors Turnover Ratio	=	Net Credit sales/ Average Debtors
	=	Rs. 3,20,000/Rs. 80,000
	=	4 Times.

5.8.3 Creditors (Payable) Turnover Ratio

Creditors turnover ratio indicates the pattern of payment of accounts payable. As accounts payable arise on account of credit purchases, it expresses relationship between credit purchases and accounts payable. It is calculated as follows :

Creditors Turnover ratio	=	Net Credit purchases/ Average accounts payable
Where Average account payable	=	(Opening Creditors and Bills Payable + Closing Creditors and Bills Payable)/2

Significance : It reveals average payment period. Lower ratio means credit allowed by the supplier is for a long period or it may reflect delayed payment to suppliers which is not a very good policy as it may affect the reputation of the business. The average period of payment can be worked out by days/months in a year by the turnover rate.

Illustration 16

Calculate the Creditor's Turnover Ratio from the following figures.

Credit purchases during 2005	=	Rs. 12,00,000
Creditors + Bills Payables) on 1.1.2005	=	Rs. 4,00,000
Creditors + Bills Payables) on 31.12.2005	=	Rs. 2,00,000

Solution

Average Creditors	=	(Rs.4,00,000 + Rs.2,00,000)/2
	=	Rs. 3,00,000
Creditors Turnover Ratio	=	Net Credit purchases/ Average accounts payable
	=	Rs.12,00,000/Rs.3,00,000
	=	4 times.

Illustration 17

From the following information, calculate –

(i) Debtors Turnover Ratio
(ii) Average Collection Period
(iii) Payable Turnover Ratio
(iv) Average Payment Period

Given :

	(Rs.)
Sales	8,75,000
Creditors	90,000
Bills Receivable	48,000
Bills Payable	52,000
Purchases	4,20,000
Debtors	59,000

Solution

(i) Debtors Turnover Ratio $= \dfrac{\text{Rs. } 8,75,000}{\text{Rs. } 59,000 + \text{Rs. } 48,000}$

= 8.18 times

*This figure has not been divided by 2, in order to calculate an average, as the figures of debtors and bills receivables in the beginning of the year are not available. So when only year-end figures are available use the same as it is.

(ii) Average Collection Period $= \dfrac{365}{\text{Debtors Turnover Ratio}}$

$= \dfrac{365}{8.18}$

= 45 days

(iii) Payable Turnover Ratio $= \dfrac{\text{Purchases}}{\text{Average Creditors}}$

$= \dfrac{\text{Purchases}}{\text{Creditors + Bills payable}}$

$= \dfrac{4,20,000}{90,000 + 52,000}$

$= \dfrac{4,20,000}{1,42,000}$

= 3 times

(iv) Average Payment Period $= \dfrac{365}{\text{Payables Turnover Ratio}}$

$= \dfrac{365}{3}$

= 122 days

5.8.4 Investment (Net Assets) Turnover Ratio

It reflects relationship between employed in the business. Higher turnover means better liquidity and profitability. It is calculated as follows :

Investment (Net Assets) Turnover ratio = Net Sales/Capital Employed

Capital turnover which studies turnover of capital employed (Net Assets) is analysed further by following two turnover ratios :

(a) *Fixed Assets Turnover :* It is computed follows:

Fixed asset turnover = Net Sales/Net Fixed Assets

(b) *Working Capital Turnover* : It is calculated as follows :

Working Capital Turnover = Net Sales/Working Capital

Significance : High turnover, capital employed, working capital and fixed assets is a good sign and implies efficient utilisation of resources. Utilisation of capital employed or, for that matter, any of its components is revealed by the turnover ratios. Higher turnover reflects efficient utilisation resulting in higher liquidity and profitability in the business.

Illustration 18

From the following information, calculate (*i*) Net Assets Turnover (*ii*) Fixed Assets Turnover and (*iii*) Working Capital Turnover Ratios :

	(Rs.)		(Rs.)
Preference Shares Capital	4,00,000	Plant and Machinery	8,00,000
Equity Share Capital	6,00,000	Land and Building	5,00,000
General Reserve	1,00,000	Motor Car	2,00,000
Profit and Loss Account	3,00,000	Furniture	1,00,000
15% Debentures	2,00,000	Stock	1,80,000
14% Loan	2,00,000	Debtors	1,10,000
Creditors	1,40,000	Bank	80,000
Bills Payable	50,000	Cash	30,000
Outstanding Expenses	10,000		

Sales for the year 2005 were Rs. 30,00,000.

Solution

Sales = Rs. 30,00,000

Capital Employed = Share Capital + Reserves and Surplus + Long-term Debt (or Net Assets)
= (Rs.4,00,000 + Rs.6,00,000) + (Rs.1,00,000 + Rs.3,00,000) + (Rs.2,00,000 + Rs.2,00,000)
= Rs. 18,00,000

Fixed Assets = Rs.8,00,000 + Rs.5,00,000 + Rs.2,00,000 + Rs.1,00,000 = Rs. 16,00,000

Working Capital = Current Assets – Current Liabilities
= Rs.4,00,000 – Rs.2,00,000 = Rs. 2,00,000

Net Assets Turnover Ratio = Rs.30,00,000/Rs.18,00,000 = 1.67 times

Fixed Assets Turnover Ratio = Rs.30,00,000/Rs.16,00,000 = 1.88 times

Working Capital Turnover = Rs.30,00,000/Rs.2,00,000 = 15 times.

Test your Understanding – III

(i) The __________ is useful in evaluating credit and collection policies.

A. average payment period

B. current ratio

C. average collection period

D. current asset turnover

(ii) The ____________ measures the activity of a firm's inventory.

A. average collection period

B. inventory turnover

C. liquid ratio

D. current ratio

(iii) The ____________ ratio may indicate the firm is experiencing stock outs and lost sales.

A. average payment period

B. inventory turnover

C. average collection period

D. quick

(vi) ABC Co. extends credit terms of 45 days to its customers. Its credit collection would be considered poor if its average collection period was

A. 30 days

B. 36 days

C. 47 days

D. 57 days

(v) ____________ are especially interested in the average payment period, since it provides them with a sense of the bill-paying patterns of the firm.

A. Customers

B. Stockholders

C. Lenders and suppliers

D. Borrowers and buyers

(vi) The ___________ ratios provide the information critical to the long-run operation of the firm

A. liquidity

B. activity

C. solvency

D. profitability

5.9 Profitability Ratios

The profitability or financial performance is mainly summarised in Income statement. Profitability ratios are calculated to analyse the earning capacity of the business which is the outcome of utilisation of resources employed in the business. There is a close relationship between the profit and the efficiency with which the resources employed in the business are utilised. The various ratios which are commonly used to analyse the profitability of the business are:

1. Gross Profit Ratio
2. Operating Ratio
3. Operating Profit Ratio
4. Net profit Ratio
5. Return on Investment (ROI) or Return on Capital Employed (ROCE)
6. Return on Net Worth (RONW)
7. Earnings per Share
8. Book Value per Share
9. Dividend Payout Ratio
10. Price Earning Ratio.

5.9.1 Gross Profit Ratio

Gross profit ratio as a percentage of sales is computed to have an idea about gross margin. It is computed as follows:

Gross Profit Ratio = Gross Profit/Net Sales × 100

Significance: It indicates gross margin or mark-up on products sold. There is no standard norm for its comparison. It also indicates the margin available to cover operating expenses, non-operating expenses, etc. Change in gross profit ratio may result from change in selling price or cost of sales or a combination of both. A low ratio may indicate unfavourable purchase and sales policy. It must be interpreted carefully as valuation of stock also affects its computation. Higher gross profit ratio is always a good sign.

Illustration 19

Following information is available for the year 2005, calculate gross profit ratio:

	Rs.
Cash Sales	25,000
Credit	75,000
Purchases : Cash	15,000
Credit	60,000
Carriage Inwards	2,000
Salaries	25,000
Decrease in Stock	10,000
Return Outwards	2,000
Wages	5,000

Solution

Sales	=	Cash Sales + Credit Sales
	=	Rs.25,000 + Rs.75,000 = Rs. 1,00,000
Net Purchases	=	Cash Purchases + Credit Purchases – Return Outwards
	=	Rs.15,000 + Rs.60,000 – Rs.2,000 = Rs. 73,000
Cost of Sales	=	Purchases + (Opening Stock – Closing Stock) + Direct Expenses
	=	Purchases + Decrease in stock + Direct Expenses
	=	Rs.73,000 + Rs.10,000 + (Rs.2,000 + Rs.5,000)
	=	Rs.90,000
Gross Profit	=	Sales – Cost of Sales = Rs.1,00,000 – Rs.90,000
	=	Rs. 10,000
Gross Profit Ratio	=	Gross Profit/Net Sales × 100
	=	Rs.10,000/Rs.1,00,000 × 100
	=	10%.

5.9.2 Operating Ratio

It is computed to analyse cost of operation in relation to sales. It is calculated as follows:

Operating Ratio = (Cost of Sales + Operating Expenses)/ Net Sales × 100

Operating expenses include office expenses, administrative expenses, selling expenses and distribution expenses.

Cost of operation is determined by excluding non-operating incomes and expenses such as loss on sale of assets, interest paid, dividend received, loss by fire, speculation gain and so on.

5.9.3 Operating Profit Ratio

It is calculated to reveal operating margin. It may be computed directly or as a residual of operating ratio.

Operating Profit Ratio = 100 – Operating Ratio

Alternatively, it is calculated as under:

Operating Profit Ratio = Operating Profit/ Sales × 100

Where Operating Profit = Sales – Cost of Operation

Significance: Operating Ratio is computed to express cost of operations excluding financial charges in relation to sales. A corollary of it is 'Operating Profit Ratio'. It helps to analyse the performance of business and throws light on the operational efficiency of the business. It is very useful for inter-firm as well as intra-firm comparisons. Lower operating ratio is a very healthy sign.

Illustration 20

Given the following information:

	Rs.
Sales	3,40,000
Cost of Goods Sold	1,20,000
Selling expenses	80,000
Administrative Expenses	40,000

Calculate Gross Profit Ratio and Operation Ratio.

Solution

Gross Profit = Sales – Cost of goods sold
= Rs. 3,40,000 – Rs. 1,20,000
= Rs. 2,20,000

Gross Profit Ratio $= \dfrac{\text{Gross Profit}}{\text{Sales}} \quad 100$

$= \dfrac{\text{Rs. } 2{,}20{,}000}{\text{Rs. } 3{,}40{,}000} \quad 100$

= 64.71%

Operating Expenses = Cost of goods sold + Selling Expenses + Administrative Expenses
= Rs. 1,20,000 + 80,000 + 40,000
= Rs. 2,40,000

Operating Ratio $= \dfrac{\text{Operating Expenses}}{\text{Net Sales}} \quad 100$

$= \dfrac{\text{Rs. } 2{,}40{,}000}{\text{Rs. } 3{,}40{,}000} \quad 100$

= 70.58%

5.9.4 Net Profit Ratio

Net Profit Ratio is based on all inclusive concept of profit. It relates sales to net profit after operational as well as non-operational expenses and incomes. It is calculated as under:

Net Profit Ratio = Net profit / Sales × 100

Generally, net profit refers to Profit after Tax (PAT).

Significance: It is a measure of net profit margin in relation to sales. Besides revealing profitability, it is the main variable in computation of Return on Investment. It reflects the overall efficiency of the business, assumes great significance from the point of view of investors.

Illustration 21

Gross profit ratio of a company was 25%. Its credit sales was Rs. 20,00,000 and its cash sales was 10% of the total sales. If the indirect expenses of the company were Rs. 50,000, calculate its net profit ratio.

Solution

Cash sales	=	Rs.20,00,000 × 10/90
	=	Rs.2,22,222
Hence, total sales are	=	Rs.22,22,222.
Gross profit = .25 × 22,22,222	=	Rs. 5,55,555
Net profit	=	Rs.5,55,555 – 50,000
	=	Rs.5,05,555
Net profit ratio	=	Net profit/sales × 100
	=	Rs.5,05,555/Rs.22,22,222 × 100
	=	22.75%.

5.9.5 Return on Capital Employed or Investment (ROCE or ROI)

It explains the overall utilisation of funds by a business enterprise. Capital employed means the long-term funds employed in the business and includes shareholders fund, debentures and long-term loans. Alternatively, capital employed may be taken as the total of non-factious assets current liabilities. Profit refers to the Profit before Interest and Tax (PBIT) for computation of this ratio. Thus, it is computed as follows:

Return on Investment (or Capital Employed) = Profit before Interest and Tax/Capital Employed × 100

Significance: It measures return on capital employed in the business. It reveals the efficiency of the business in utilisation of funds entrusted to it by shareholders, debenture-holders and long-term liabilities. For inter-firm comparison, return on capital employed which reveals overall utilisation of fund is considered good measure of profitability. It also helps in assessing whether the firm is earning a higher return on capital employed as compared to the interest rate paid.

5.9.6 Return on Shareholders' Fund

This ratio is very important from shareholders' point of view in assessing whether their investment in the firm generates a reasonable return or not. It should be higher than the return on investment otherwise it would imply that company's funds have not been employed profitably.

A better measure of profitability from shareholders point of view is obtained by determining return on total shareholders fund, it is also termed as Return on Net Worth (RONW) and is calculated as under :

$$\text{Return on Shareholders' Fund} = \frac{\text{Profit after Tax}}{\text{Shareholders Fund}}$$

5.9.7 Earnings Per Share

The ratio is defined as –

EPS = Profit available for equity shareholders/ No. of Equity Shares

In this context, earnings refer to profit available for equity shareholders which is worked out as Profit after Tax – Dividend on Preference Shares.

This ratio is very important from equity shareholders point of view and so also for the share price in the stock market. This also helps comparison with other firm's to ascertain its reasonableness and capacity to pay dividend.

5.9.8 Book Value Per Share

This ratio is calculated as –

Book Value per share = Equity shareholders' funds/No. of Equity Shares

Equity shareholder funds refer to Shareholders Funds – Preference Share Capital. This ratio is again very important from equity shareholders point of view as it gives an idea about the value of their holding and affects market price of the shares.

5.9.9 Dividend Payout Ratio

This refers to the proportion of earning that are distributed against the shareholders. It is calculated as –

$$\text{Dividend Payout Ratio} = \frac{\text{Dividend Per Share}}{\text{Earnings Per Share}}$$

This reflects company's dividend policy and growth in owner's equity.

5.9.10 Price Earning Ratio

The ratio is defined as –

P/E Ratio = Market price of a Share/Earnings per Share

For example, if the EPS of company X is Rs. 10 and market price is Rs. 100, the price earning ratio will be 10 (100/10). It reflects investors expectation about the growth in the firm's earnings and reasonableness of the market price of its shares. P/E ratios vary from industy to industry and company to company in the same industry depending upon investors perception of their future.

Illustration 22

From the following details, calculate Return on Investment:

Share Capital : Equity(Rs.10)	Rs. 4,00,000	Current Liabilities	Rs. 1,00,000
12% Preference	Rs. 1,00,000	Discount on Shares	Rs. 5,000
General Reserve	Rs. 1,89,000	Fixed Assets	Rs. 9,50,000
10% Debentures	Rs. 4,00,000	Current Assets	Rs. 2,34,000

Also calculate Return on Shareholders' Funds, EPS, Book value per share and P/E ratio if the market price of the share is Rs. 34 and the net profit after tax was Rs. 1,50,000, and the tax had amounted to Rs. 50,000.

Solution

Profit before interest and tax = Rs. 1,50,000 + Debenture interest + Tax
= Rs. 1,50,000 + Rs. 40,000 + Rs. 50,000
= Rs.2,40,000

Capital Employed = Equity Share Capital + Preference Share Capital + Reserves + Debentures – Discount on Shares
= Rs. 4,00,000 + Rs. 1,00,000 + Rs. 1,89,000 + Rs. 4,00,000 – Rs. 5,000 = Rs. 10,84,000

Return on Investment = Profit before Interest and Tax/ Capital Employed × 100
= Rs. 2,40,000/Rs. 10,84,000 × 100
= 22.14%

Return on Shareholders Fund = Profit after Tax/ Shareholder's Fund × 100
= Rs. 1,50,000/Rs. 6,84,000 × 100
= 13.84%

E P S = Profit available for equity shareholders/ No. of Equity Shares
= Rs. 1,38,000/ 40,000 = Rs. 3.45

Profit available to equity shareholders = Profit after Tax – Preference Dividend
= Rs. 1,50,000 – Rs. 12,000 = Rs. 1,38,000

P/E Ratio = Market price of a share/ Earnings per share
= 34/3.45
= 9.86 Times

Book Value per share = Equity Shareholders' funds / No. of Equity Shares

Hence, Book value per share = Rs. 5,84,000/40,000 shares = Rs. 14.6

It may be noted that various ratios are intimately correlated with each other. Sometimes, the combined information regarding two or more ratios is given and some missing figure is to be calculated. In such a situation, the formula of the ratios will help in working out the missing figures (See Illsuatration 23 and 24).

Exhibit – 2

UNICHEM LABORATORIES LTD.					
Key Ratios					
As on March 31	**2002**	**2003**	**2004**	**2005**	**2006**
R O C E %	29.40	25.80	27.20	27.90	27.80
R O N W %	31.20	22.80	25.10	24.50	23.70
EVA (Rs. in millions) Economic Value Added	230.10	167.60	250.00	257.80	449.30
Per share Data					
EPS (Rs.)	36.30*	31.75*	12.98	13.22	23.84
Dividend	80%	80%	60%	70%	100%
Book Value per share (Rs.)	115.70	138.50	44.30	53.55	83.50

Exhibit – 3

GRASIM INDUSTRIES LTD.											
Ratios & Statistics											
PBIDT Margin	(%)	24.0	28.7	28.9	24.7	20.8	20.2	17.3	17.9	20.0	22.9
Interest Cover (PBIDT–Tax/Interest)	(x)	12.55	9.61	7.88	5.60	4.48	3.56	2.84	2.28	2.56	2.57
ROACE (PBIT/Avg.CE)	(%)	18.5	23.1	20.9	16.2	12.9	13.5	10.5	10.1	13.1	15.0
RONE (PAT/Avg. NW)	(%)	18.6	22.3	23.7	12.9	11.7	14.4	8.6	6.6	10.4	13.5
Debt Equity Ratio	(x)	0.40	0.46	0.57	0.70	0.76	0.76	0.82	0.93	0.92	0.98
Dividend per Share	Rs./Sh.	20.00	16.00	14.00	10.00	9.00	8.00	7.00	6.75	6.75	6.50
Earning per Share	Rs./Sh.	94	97	85	40	33	41	25	18	32	38
Cash Earning per Share	Rs./Sh.	123	130	116	85	72	67	51	41	55	56
Book Value per Share	Rs./Sh.	543	472	393	324	295	271	303	285	320	296

Exhibit – 4

ASIAN PAINTS (INDIA) LTD.

	APIL		**AP Group (Consolidated)**	
	2004-05	*2003-04*	*2004-05*	*2003-04*
PBDIT/Sales	16.8%	17.2%	14.4%	14.8%
PBT before EOI/Sales	14.2%	14.0%	11.2%	10.9%
PAT/Sales	8.9%	8.7%	6.8%	6.5%
Return on Average Capital Employed (ROCE)	41.5%	37.7%	34.6%	31.4%
Return on Average Net Worth (RONW)	31.4%	29.3%	31.7%	28.8%
EPS (Rs.)	18.53	16.12	18.15	15.11
Debt: Equity	0.15:1	0.13:1	0.38:1	0.28:1
Interest Cover (PBIT/Interest)	101	46	28	17

*Capital Employed and Networth as at 31.03.2005 are after providing for implicit loss.

Illustration 23

Calculate current assets of a company from the following information:

Stock turnover ratio	=	4 times

Stock at the end is Rs. 20,000 more than the stock in the beginning.
Sales Rs. 3,00,000 and gross profit ratio is 20% of sales.

Current liabilities	=	Rs. 40,000
Quick ratio	=	.75

Solution

Cost of Goods Sold	=	Sales – gross profit
	=	Rs. 3,00,000 – (Rs. 3,00,000 × 20%)
	=	Rs. 3,00,000 – Rs. 60,000
	=	Rs. 2,40,000
Stock Turnover Ratio	=	Cost of Goods Sold / Average stock
	=	Cost of Goods Sold/Average stock
Average Stock	=	Cost of Goods Sold /4
	=	Rs. 2,40,000/4 = Rs. 60,000
Average Stock	=	(Opening stock + Closing stock)/2
Rs. 60,000	=	(Opening stock+Opening stock+Rs.20,000)/2
Rs. 60,000	=	Opening stock + Rs. 10,000
Opening Stock	=	Rs. 50,000
Closing Stock	=	Rs. 70,000
Liquid Ratio	=	Liquid assets/current liabilities
.75	=	Liquid assets/Rs. 40,000
Liquid Assets	=	Rs. 40,000 × .75 = Rs. 30,000
Current Assets	=	Liquid assets + Closing stock
	=	Rs. 30,000 + Rs. 70,000 = Rs. 1,00,000.

Illustration 24

The current ratio is 2.5:1. Current assets are Rs. 50,000 and current liabilities are Rs. 20,000. How much must be the decline in the current assets to bring the ratio to 2:1.

Solution

Current liabilities	= Rs. 20,000
For a ratio of 2:1, the current assets must be 2 × 20,000	= Rs. 40,000
Present level of current assets	= Rs. 50,000
Necessary decline	= Rs. 50,000 – Rs. 40,000
	= Rs. 10,000.

Terms Introduced in the Chapter

1. Ratio Analysis
2. Liquidity Ratios
3. Solvency Ratios
4. Activity Ratios
5. Profitability Ratios
6. Return on Investment (ROI)
7. Quick Assets
8. Equity (Shareholders Funds)
9. Return on Net Worth
10. Average Collection Period
11. Receivables
12. Turnover Ratios
13. Efficiency Ratios
14. Dividend Payout

Summary

1. *Financial Statement Analysis:* It is an integral part of the basic accounting to provide the necessary value addition to the users.
2. *Ratio Analysis:* An important tool of financial statement analysis is ratio analysis. Accounting ratios represent relationship between two accounting numbers.
3. *Objective of Ratio Analysis:*The objective of ratio analysis is to provide a deeper analysis of the profitability, liquidity, solvency and activity levels in the business. It is also to identify the problem areas as well as the strong areas of the business.
4. *Advantages of Ratio Analysis:* Ratio analysis offers many advantages including enabling financial statement analysis, helping understand efficacy of decisions, simplifying complex figures and establish relationships, being helpful in comparative analysis, identification of problem areas, enables SWOT analysis, and allows various comparisons.
5. *Limitations of Ratio Analysis:* There are many limitations of ratio analysis. Few are based because of the basic limitations of the accounting data on which it is based. The other set includes the limitation of the ratio analysis per set. In the first set are included factors like Historical Analysis, Ignores Price-Level Changes, Ignore Qualitative or Non-Monetary Aspects, Limitations of Accounting Data, Variations in Accounting Practices, and Forecasting. In the second set are included factor like means and not the end, lack of ability to resolve problems, lack of standardised definitions, lack of universally accepted standard levels, and ratios based on unrelated figures.
6. *Types of Ratios*: There are many types of ratios, viz. liquidity, solvency, activity and profitability ratios. The liquidity ratios include current ratio and acid test ratio. Solvency ratios are calculated to determine the ability of the business to service its debt in the long run instead of in the short run. They include debt equity ratio, total assets to debt ratio, proprietary ratio and times interest coverage ratio. The turnover ratios basically exhibit

the activity levels characterised by the capacity of the business to make more sales or turnover and include Stock Turnover, Debtors (Receivable) Turnover, Creditors (Payable) Turnover, Working Capital Turnover, Fixed Assets Turnover, and Current asset Turnover. Profitability ratios are calculated to analyse the earning capacity of the business which is the outcome of utilisation of resources employed in the business. The ratios include Gross Profit ratio, Operating ratio, Net-profit-ratio, Return on investment (Capital employed), Earnings per Share, Book Value per Share, Dividend per Share, and Price Earning ratio.

Question for Practice

A. Short Answer Questions

1. What do you mean by Ratio Analysis?
2. What are various types of ratios?
3. What relationships will be established to study:
   a. Inventory Turnover
   b. Debtor Turnover
   c. Payables Turnover
   d. Working Capital Turnover.
4. Why would the inventory turnover ratio be more important when analysing a grocery store than an insurance company?
5. The liquidity of a business firm is measured by its ability to satisfy its long-term obligations as they become due ? Comment.
6. The average age of inventory is viewed as the average length of time inventory is held by the firm or as the average number of day's sales in inventory. Explain.

B. Long Answer Questions

1. Who are the users of financial ratio analysis? Explain the significance of ratio analysis to them?
2. What are liquidity ratios? Discuss the importance of current and liquid ratio.
3. How would you study the Solvency position of the firm?
4. What are important profitability ratios? How are they worked out?
5. Financial ratio analysis are conduced by four groups of analysts: managers, equity investors, long-term creditors, and short-term creditors. What is the primary emphasis of each of these groups in evaluating ratios?
6. The current ratio provides a better measure of overall liquidity only when a firm's inventory cannot easily be converted into cash. If inventory is liquid, the quick ratio is a preferred measure of overall liquidity. Explain.

Numerical Questions

1. Following is the Balance Sheet of Rohit and Co. as on March 31, 2006

Liabilities	*Amount Rs.*	*Assets*	*Amount Rs.*
Share Capital	1,90,000	Fixed Assets	1,53,000
Reserves	12,500	Stock	55,800
Profit and Loss	22,500	Debtors	28,800
Bills Payables	18,000	Cash at Bank	59,400
Creditors	54,000		
	2,97,000		**2,97,000**

Calculate Current Ratio
(**Ans:** Current Ratio 2:1)

2. Following is the Balance Sheet of Title Machine Ltd. as on March 31, 2006.

Liabilities	*Amount Rs.*	*Assets*	*Amount Rs.*
Equity Share Capital	24,000	Buildings	45,000
8% Debentures	9,000	Stock	12,000
Profit and Loss	6,000	Debtors	9,000
Bank Overdraft	6,000	Cash in Hand	2,280
Creditor	23,400	Prepaid Expenses	720
Provision for Taxation	600		
	69,000		**69,000**

Calculate Current Ratio and Liquid Ratio.
(**Ans:** Current Ratio 8:1, Liquid Ratio .37:1)

3. Current Ratio is 3:5. Working Capital is Rs. 9,00,000. Calculate the amount of Current Assets and Current Liabilities.
(**Ans:** Current Assets Rs. 1,26,000 and Current Liabilities Rs. 36,000)

4. Shine Limited has a current ratio 4.5:1 and quick ratio 3:1; if the stock is 36,000, calculate current liabilities and current assets.
(**Ans:** Current Liabilities Rs. 1,08,000, current liabilities Rs. 24,000)

5. Current liabilities of a company are Rs. 75,000. If current ratio is 4:1 and liquid ratio is 1:1, calculate value of current assets, liquid assets and stock.
(**Ans:** Current Assts Rs. 3,00,000, Liquid Assets Rs. 75,000 and Stock Rs. 2,25,000)

6. Handa Ltd.has stock of Rs. 20,000. Total liquid assets are Rs. 1,00,000 and quick ratio is 2:1. Calculate current ratio.
(**Ans:** Current Ratio 2.4:1)

7. Calculate debt equity ratio from the following information:

Total Assets	Rs. 15,00,000
Current Liabilities	Rs. 6,00,000
Total Debts	Rs. 12,00,000

(**Ans:** Debt Equity Ratio 2:1.)

8. Calculate Current Ratio if:

   Stock is Rs. 6,00,000; Liquid Assets Rs. 24,00,000; Quick Ratio 2:1.

   (**Ans**: Current Ratio 2.5:1)

9. Compute Stock Turnover Ratio from the following information:

Net Sales	Rs.	2,00,000
Gross Profit	Rs.	50,000
Closing Stock	Rs.	60,000
Excess of Closing Stock over Opening Stock	Rs.	20,000

   (**Ans**: Stock Turnover Ratio 3 times)

10. Calculate following ratios from the following information:

   (i) Current ratio (ii) Acid test ratio (iii) Operating Ratio (iv) Gross Profit Ratio

Current Assets	Rs. 35,000
Current Liabilities	Rs. 17,500
Stock	Rs. 15,000
Operating Expenses	Rs. 20,000
Sales	Rs. 60,000
Cost of Goods Sold	Rs. 30,000

   (**Ans**: Current Ratio 2:1; Liquid Ratio 1.14:1; Operating Ratio 83.3%; Gross Profit Ratio 50%)

11. From the following information calculate:

   (i) Gross Profit Ratio (ii) Inventory Turnover Ratio (iii) Current Ratio (iv) Liquid Ratio (v) Net Profit Ratio (vi) Working capital Ratio:

Sales	Rs.	25,20,000
Net Profit	Rs.	3,60,000
Cast of Sales	Rs.	19,20,000
Long-term Debt	Rs.	9,00,000
Creditors	Rs.	2,00,000
Average Inventory	Rs.	8,00,000
Current Assets	Rs.	7,60,000
Fixed Assets	Rs.	14,40,000
Current Liabilities	Rs.	6,00,000
Net Profit before Interest and Tax	Rs.	8,00,000

   (**Ans**: Gross Profit Ratio 23.81; Inventory Turnover Ratio 2.4 times; Current Ratio 2.6:1; Liquid Ratio 1.27:1; Net Profit Ratio 14.21%; Working Capital Ratio 2.625 times)

12. Compute Gross Profit Ratio, Working Capital Turnover Ratio, Debt Equity Ratio and Proprietary Ratio from the following information:

Paid-up Capital	Rs. 5,00,000
Current Assets	Rs. 4,00,000
Net Sales	Rs. 10,00,000
13% Debentures	Rs. 2,00,000
Current Liability	Rs. 2,80,000
Cost of Goods Sold	Rs. 6,00,000

(**Ans**: Gross Profit Ratio 40%; Working Capital Ratio 8.33 times; Debt Equity Ratio 2:5; Proprietary Ratio 25:49)

13. Calculate Stock Turnover Ratio if:

Opening Stock is Rs. 76,250, Closing Stock is 98,500, Sales is Rs. 5,20,000, Sales Return is Rs. 20,000, Purchases is Rs. 3,22,250.

(**Ans**: Stock Turnover Ratio 3.43 times)

14. Calculate Stock Turnover Ratio from the data given below:

Stock at the beginning of the year	Rs. 10,000
Stock at the end of the year	Rs. 5,000
Carriage	Rs. 2,500
Sales	Rs. 50,000
Purchases	Rs. 25,000

(**Ans**: Stock Turnover Ratio 4.33 times)

15. A trading firm's average stock is Rs. 20,000 (cost). If the stock turnover ratio is 8 times and the firm sells goods at a profit of 20% on sale, ascertain the profit of the firm.

(**Ans**: Profit Rs. 40,000)

16. You are able to collect the following information about a company for two years:

	2004	*2005*
Book Debts on Apr. 01	Rs. 4,00,000	Rs. 5,00,000
Book Debts on Mar. 30		Rs. 5,60,000
Stock in trade on Mar. 31	Rs. 6,00,000	Rs. 9,00,000
Sales (at gross profit of 25%)	Rs. 3,00,000	Rs. 24,00,000

Calculate Stock Turnover Ratio and Debtor Turnover Ratio if in the year 2004 stock in trade increased by Rs. 2,00,000.

(**Ans**: Stock Turnover Ratio 2.4 times, Debtors Turnover Ratio 4.53 times)

17. The following Balance Sheet and other information, calculate following ratios:

(i) Debt Equity Ratio (ii) Working Capital Turnover Ratio (iii) Debtors Turnover Ratio

Liabilities	*Amount Rs.*	*Assets*	*Amount Rs.*
General Reserve	80,000	Preliminary Expenses	20,000
Profit and Loss	1,20,000	Cash	1,00,000
Loan @15%	2,40,000	Stock	80,000
Bills Payable	20,000	Bills Receivables	40,000
Creditors	80,000	Debtors	1,40,000
Share Capital	2,00,000	Fixed Assets	3,60,000
	7,40,000		**7,40,000**

(**Ans:** Debt Equity 12:19; Working Capital Turnover 1.4 times; Debtors Turnover 2 times)

18. The following is the summerised Profit and Loss account and the Balance Sheet of Nigam Limited for the year ended March 31, 2007 :

Expenses/Losses	*Amount Rs.*	*Revenue/Gains*	*Amount Rs.*
Opening Stock	50,000	Sales	4,00,000
Purchases	2,00,000	Closing Stock	60,000
Direct Expenses	16,000		
Gross Profit	1,94,000		
	4,60,000		**4,60,000**
Salary	48,000	Gross Profit	1,94,000
Loss on Sale of Furniture	6,000		
Net Profit	1,40,000		
	1,94,000		**1,94,000**

Balance Sheet of Nigam Limited as on March 31, 2007

Liabilities	*Amount Rs.*	*Assets*	*Amount Rs.*
Profit and Loss	1,40,000	Stock	60,000
Creditors	1,90,000	Land	4,00,000
Equity Share Capital	2,00,000	Cash	40,000
Outstanding Expenses	70,000	Debtors	1,00,000
	6,00,000		**6,00,000**

Calculate (i) Quick Ratio

(ii) Stock Turnover Ratio

(iii) Return on Investment

(**Ans:** Quick Ratio 7:13; Stock Turnover Ratio 3.74 times; Return on Investment 41.17%)

19. From the following, calculate (a) Debt Equity Ratio (b) Total Assets to Debt Ratio (c) Proprietary Ratio.

Equity Share Capital	Rs. 75,000
Preference Share Capital	Rs. 25,000
General Reserve	Rs. 50,000
Accumulated Profits	Rs. 30,000
Debentures	Rs. 75,000
Sundry Creditors	Rs. 40,000
Outstanding Expenses	Rs. 10,000
Preliminary Expenses to be written-off	Rs. 5,000

(**Ans:** Debt Equity Ratio 3:7; Total Assets to Debt Ratio 4:1; Proprietary Ratio 7:12)

20. Cost of Goods Sold is Rs. 1,50,000. Operating expenses are Rs. 60,000. Sales is Rs. 2,60,000 and Sales Return is Rs. 10,000. Calculate Operating Ratio.

(**Ans:** Operating Ratio 84%)

21. The following is the summerised transactions and Profit and Loss Account for the year ending March 31, 2007 and the Balance Sheet as on that date.

Expenses/Losses	*Amount Rs.*	*Revenue/Gains*	*Amount Rs.*
Opening Stock	5,000	Sales	50,000
Purchases	25,000	Closing Stock	7,500
Direct Expenses	2,500		
Gross Profit	25,000		
	57,500		**57,500**
Administrative Expenses	7,500	Gross Profit	25,000
Interest	1,500		
Selling Expenses	6,000		
Net Profit	10,000		
	25,000		**25,000**

Liabilities	*Amount Rs.*	*Assets*	*Amount Rs.*
Share Capital	50,000	Land and Building	25,000
Current Liabilities	20,000	Plant and Machinery	15,000
Profit and Loss	10,000	Stock	7,500
		Sundry Debtors	7,500
		Bills Receivables	6,250
		Cash in Hand and at Bank	8,750
		Furniture	10,000
	80,000		**80,000**

Calculate (i) Gross Profit Ratio (ii) Current Ratio (iii) Acid Test Ratio (iv) Stock Turnover Ratio (v) Fixed Assets Turnover Ratio.

(**Ans**: (i) Gross Profit Ratio 50%; (ii) Current Ratio 3:2; (iii) Acid Test Ratio 1.125:1; (iv) Stock Turnover Ratio 4 times; (v) Fixed Assets Turnover 1:1)

22. From the following information calculate Gross Profit Ratio, Stock Turnover Ratio and Debtors Turnover Ratio.

Sales	Rs. 3,00,000
Cost of Gods Sold	Rs. 2,40,000
Closing Stock	Rs. 62,000
Gross Profit	Rs. 60,000
Opening Stock	Rs. 58,000
Debtors	Rs. 32,000

(**Ans**: Gross Profit Ratio 20%; Stock Turnover Ratio 4 times; Debtors Turnover Ratio 9.4 times)

Project Work

Project 1

Make a comparative study of the ratios discussed in the chapter by going to the web site of two manufacturing companies of your choice. Your analysis must cover at least three latest years.

Project 2

Down load the latest financial statements of Reliance Industries Limited from their web site and make the profitability ratio analysis for last five years.

Answers to Test your Understanding

Test your Understanding – I

(a) F, (b) T, (c) T, (d) F, (e) T, (F) F

Test your Understanding – II

(i) D, (ii) B, (iii) B, (iv) A, (v) B, (vi) D

Test your Understanding – III

(i) C, (ii) B, (iii) A, (iv) C, (v) C, (vi) C

Cash Flow Statement

6

Till now you have learnt about the financial statements being primarily inclusive of Position Statement (showing the financial position of an enterprise as on a particular date) and Income Statement (showing the result of the operational activities of an enterprise over a particular period). There is also a third important financial statement known as *Cash flow statement,* which shows inflows and outflows of the cash and cash equivalents. This statement is usually prepared by companies which comes as a tool in the hands of users of financial information to know about the sources and uses of cash and cash equivalents of an enterprise over a period of time from various activities o*f an enterprise.* It has gained substantial importance in the last decade because of its practical utility to the users of financial information.

Accounting Standard-3 (AS-3), issued by The Institute of Chartered Accountants of India (ICAI) in june 1981, which dealt with a statement showing 'Changes in Financial Position', (Fund Flow Statement), has been revised and now deals with the preparation and presentation of Cash flow statement. The revised AS-3 has made it mandatory for all listed companies to prepare and present a cash flow statement along with other financial statements on annual basis. Hence, it may be noted, that Fund Flow statement is no more considered relevant in accounting and so not discussed here.

A cash flow statement provides information about the historical changes in cash and cash

Learning Objectives

After studying this chapter, you will be able to :

- *State the purpose and preparation of statement of cash flow statement;*
- *Distinguish between operating activities, investing activities and financing activities;*
- *Prepare the statement of cash flows using direct method;*
- *Prepare the cash flow statement using indirect method.*

equivalents of an enterprise by classifying cash flows into operating, investing and financing activities. It requires that an enterprise should prepare a cash flow statement and should present it for each accounting period for which financial statements are presented. You will recall that cash flow analysis has also been mentioned in Chapter 4 as a technique of financial analysis. This chapter discusses this technique and explains the method of preparing a cash from statement for an accounting period.

6.1 Nature of Cash Flow Statement

A Cash flow statement shows inflow and outflow of cash and cash equivalents from various activities of a company during a specific period. The primary objective of cash flow statement is to provide useful information about cash flows (inflows and outflows) of an enterprise during a particular period under various heads, i.e. operating activities, investing activities and financing activities.

This information is useful in providing users of financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilise those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an enterprise to generate cash and cash equivalents and the timing and certainty of their generation.

6.2 Benefits of Cash Flow Statement

Cash flow statement provides the following benefits :

- A cash flow statement when used along with other financial statements provides information that enables users to evaluate changes in net assets of an enterprise, its financial structure (including its liquidity and solvency) and its ability to affect the amounts and timings of cash flows in order to adapt to changing circumstances and opportunities.
- Cash flow information is useful in assessing the ability of the enterprise to generate cash and cash equivalents and enables users to develop models to assess and compare the present value of the future cash flows of different enterprises.
- It also enhances the comparability of the reporting of operating performance by different enterprises because it eliminates the effects of using different accounting treatments for the same transactions and events.
- Historical cash flow information is often used as an indicator of the amount, timing and certainty of future cash flows. It is also helpful in checking the accuracy of past assessments of future cash flows and in

examining the relationship between profitability and net cash flow and impact of changing prices.

6.3 Cash and Cash Equivalents

As stated earlier, cash flow statement shows inflows and outflows of cash and cash equivalents from various activities of an enterprise during a particular period. As per AS–3, 'Cash' comprises cash in hand and demand deposits with banks, and 'Cash equivalents' means short-term highly liquid investments that are readily convertible into known amounts *of cash and which are subj*ect to an insignificant risk of changes in value. Thus, cash equivalents refer to such investments that are held for the purpose of meeting short-term cash commitments rather than for investments or other purposes. An investment normally qualifies as cash equivalent only when it has a short maturity, of say, three months or less from the date of acquisition. Investments in shares are excluded from cash equivalents unless they are in substantial cash equivalents. For example, preference shares of a company acquired shortly before their specific redemption date, provided there is only insignificant risk of failure of the company to repay the amount at maturity. Similarly, short-term marketable securities which can be readily converted into cash are treated as cash equivalents.

6.4 Cash Flows

'Cash Flows' implies movement of cash in and out of non-cash items. Receipt of cash from a non-cash item is termed as cash inflow while cash payment in respect of such items as cash outflow. For example, purchase of machinery by paying cash is cash outflow while sale proceeds received from sale of machinery is cash inflow. Other examples of cash flows include collection of cash from debtors, payment to creditors, payment to employees, receipt of dividend, interest payments, etc.

As per AS 3, cash flows exclude movements between items that constitute cash or cash equivalents because these components are part of the cash management of an enterprise rather than part of its operating, investing of financing activities. Cash management includes the investment of excess cash in cash equivalents. Hence, purchase of marketable securities or short-term investment which constitutes cash equivalents is not considered while preparing cash flow statement.

6.5 Classification of Activities for the Preparation of Cash Flow Statement

You know that various activities of an enterprise result into cash flows (inflows or receipts and outflows or payments) which is the subject matter of a cash flow statement. As per AS–3, these activities are to be classified into three categories: (1) operating, (2) investing, and (3) financing activities so as to show separately the cash flows generated (or used) by (in) these activities. This helps the users of cash flow statement to assess the impact of these activities on the financial position of an enterprise and so also on its cash and cash equivalents.

6.5.1 Cash from Operating Activities

As per AS–3, operating activities are the activities that constitute the primary or main activities of an enterprise, for example, for a company manufacturing garments, procurement of raw material, incurrence of manufacturing expenses, sale of garments, etc. These are the principal revenue producing activities (or the main activities) of the enterprise and other activities that are not investing or financing activities. The amount of cash from operations' indicate the internal solvency level of the company, and is regarded as the key indicator of the extent to which the operations of the enterprise have generated sufficient cash flows to maintain the operating capability of the enterprise, paying dividends, making of new investments and repaying of loans without recourse to external source of financing. Information about the specific components of historical operating cash flows is useful in conjunction with other information, in forecasting future operating cash flows.

Cash flows from operating activities are primarily derived from the main activities of the enterprise. Therefore, they generally result from the transactions and other events that enter into the determination of net profit or loss. Examples of cash flows from operating activities are:

Cash Inflows from operating activities

- cash receipts from sale of goods and the rendering of services.
- cash receipts from royalties, fees, commissions and other revenues.

Cash Outflows from operating activities

- Cash payments to suppliers for goods and services.
- Cash payments to and on behalf of the employees.
- Cash payments to an insurance enterprise for premiums and claims, annuities, and other policy benefits.
- Cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities.

The net position is shown in case of operating cash flows.

Some transactions such as sale of an item of plant may give rise to a gain or loss which is included in the determination of net profit or loss. However, the cash flows relating to such transactions are cash flows from investing activities which are discussed in detail later.

An enterprise may hold securities and loans for dealing or trading purposes in which case they are similar to inventory acquired specifically for resale. Therefore, cash flows arising from the purchase and sale of dealing or trading securities are classified as operating activities. Similarly, cash advances and loans made by financial enterprises are usually classified as operating activities since they relate to main activity of that enterprise.

6.5.2 Cash from Investing Activities

Investing activities relate to purchase and sale of long-term assets or fixed assets such as machinery, furniture, land and building, etc. Transactions related to long-term investment are also investing activities. As per AS-3, investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.

Separate disclosure of cash flows from investing activities is important because they represent the extent to which expenditures have been made for resources intended to generate future income and cash flows. Examples of cash flows arising from investing activities are:

Cash Outflows from investing activities

- Cash payments to acquire fixed assets including intangibles and capitalised research and development.
- Cash payments to acquire shares warrants or debt instruments of other enterprises other than the instruments considered to be cash equivalents or held for trading purposes.
- Cash advances and loans made to third party (other than advances and loans made by a financial enterprise wherein it is operating activities).

Cash Inflows from Investing Activities

- Cash receipt from disposal of fixed assets including intangibles.
- Cash receipt from the repayment of advances or loans made to third parties (except in case of financial enterprise).
- Cash receipt from disposal of shares, warrants or debt instruments of other enterprises other than receipts from those instruments considered to be cash or cash equivalents or held for trading purposes.
- Interest received in cash from loans and advances.
- Dividend received from investments in other enterprises.

6.5.3 Cash from Financing Activities

As the name suggests, financing activities relate to long-term funds or capital of an enterprise, e.g. cash proceeds from issue of equity shares, debentures, raising long-term bank loans, redemption of bank loan, etc. As per AS-3, financing activities are activities that result in changes in the size and composition of the owners' capital (including preference share capital in case of a company) and borrowings of the enterprise. Separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of funds (both capital and borrowings) to the enterprise. Examples of financing activities are:

Cash Inflows from financing activities

- Cash proceeds from issuing shares or other similar instruments.
- Cash proceeds from issuing debentures, loans, bonds and other short or long-term borrowings.

Cash Outflows from financing activities

- Cash repayments of amounts borrowed.
- Interest paid on loans, debentures and advances.
- Dividends paid on equity and preference capital.

It is important to mention here that a transaction may include cash flows that are classified differently. For example, when the instalment paid in respect of a fixed asset acquired on deferred payment basis includes both interest and loan, the interest element is classified under financing activities and the loan element is classified under investing activities. Moreover, same activity may be classified differently for different enterprises. For example, purchase of shares is an operating activity for a share brokerage firm while it is investing activity in case of other enterprises.

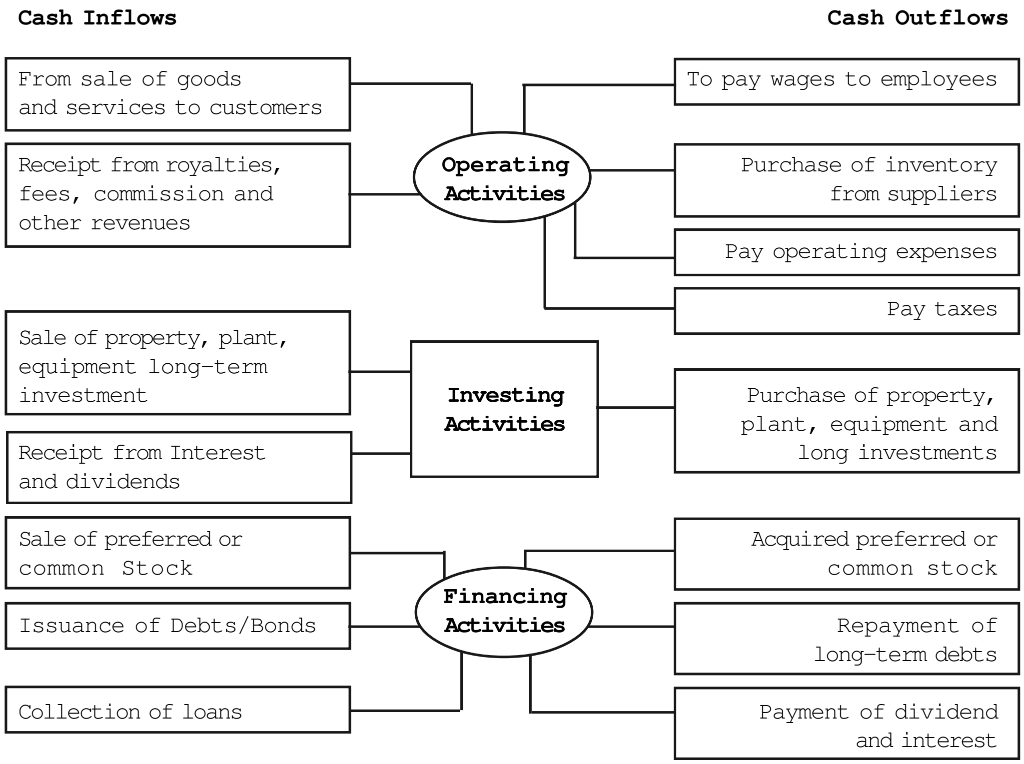


Fig. 6.1: *Classification of Cash inflows and Cash Outflows Activities*

6.5.4 Treatment of Some Peculiar Items

Extraordinary items

Extraordinary items are not the regular phenomenon, e.g. loss due to theft or earthquake or flood. Extraordinary items are non-recurring in nature and hence cash flows associated with extraordinary items should be classified and disclosed separately as arising from operating, investing or financing activities. This is done to enable users to understand their nature and effect on the present and future cash flows of an enterprise.

Interest and Dividend

In case of a financial enterprise (whose main business is lending and borrowing), interest paid, interest received and dividend received are classified as operating activities while dividend paid is the financing activity.
In case of a non-financial enterprise, as per AS-3, it is considered more

appropriate that payment of interest and dividend paid are classified as financing activities whereas receipt of interest and dividends are classified as investing activities.

Taxes on Income and Gains

Taxes may be income tax (tax in normal profit), capital gains tax (tax on capital profits), dividend tax (tax on the amount distributed as dividend to share holders). AS 3 requires that cash flows arising from taxes on income should be separately disclosed and should be classified as cash flows from operating activities unless they can be specifically identified with financing and investing activities. This clearly implies that:

- tax on operating profit should be classified as operating cash flows.
- dividend tax, i.e. tax paid on dividend should be classified as financing activity along with dividend paid.
- Capital gains tax paid on sale of fixed assets should be classified under investing activities.

Non-cash Transactions

As per AS-3, investing and financing transactions that do not require the use of cash or cash equivalents should be excluded from a cash flow statement. Examples of such transactions are – acquisition of machinery by issue of equity shares, or redemption of debentures by issue of equity shares. Such transactions should be disclosed elsewhere in the financial statements in a way that provide all the relevant information about these investing and financing activities. Hence, stocks acquired by issue of shares are not disclosed in cash flow statement.

With these three classifications, Cash Flow Statement is shown in Figure 6.1.

Cash Flow Statement
(Main heads only)

(A) Cash flows from operating activities	xxx
(B) Cash flows from investing activities	xxx
(C) Cash flows from financing activities	xxx
Net increase (decrease) in cash and cash equivalents (A + B + C)	xxx
+ Cash and cash equivalents at the beginning	xxx
= Cash and cash equivalents at the end	xxxx

Fig. 6.1 : *Sharing Specimen Cash Flow Statement*

Test your Understanding – I

Classify the following activities into operating activities, investing activities, financing activities, cash activities.

1.	Purchase of machinery.	2.	Proceeds from issuance of equity share capital.
3.	Cash Sales.	4.	Proceeds from long-term borrowings.
5.	Proceeds from sales of old machinery.	6.	Cash receipt from debtors.
7.	Trading commission received.	8.	Purchase of investment.
9.	Redemption of preference shares.	10.	Cash purchase.
11.	Proceeds from sale of investment.	12.	Purchase of goodwill.
13.	Cash paid to supplier.	14.	Interim dividend paid on equity shares.
15.	Wages and salaries paid.	16.	Proceeds from sale of patents.
17.	Interest received on debentrues held as investments.	18.	Interest paid on long-term borrowings.
19.	Office and administrative expenses paid.	20.	Manufacturing overhead paid.
21.	Dividend received on shares held as investment.	22.	Rent received on property held as investment.
23.	Selling and distribution expenses paid.	24.	Income tax paid.
25.	Dividend paid on preferences shares.	26.	Underwriting commission paid.
27.	Rent paid.	28.	Brokerage paid on purchase of investment.
29.	Bank overdraft.		
30.	Cash credit.	31.	Short-term deposit.
32.	Marketable securities.	33.	Refund of income-tax received.

6.6 Ascertaining Cash Flow from Operating Activities

Operating activities are the main source of revenue and expenditure in an enterprise. Not only that, this aspect is most complex and regarded as the major problem area faced while preparing the cash flow statement. Therefore, the ascertainment of cash flows from operating activities need special attention.

As per AS-3, an enterprise should report cash flows from operating activities using either by using :

- Direct method whereby major classes of gross cash receipts and gross cash payments are disclosed;

or

- Indirect method whereby net profit or loss is duly adjusted for the effects of (1) transactions of a non-cash nature, (2) any deferrals or accruals of past/future operating cash receipts, and (3) items of income or expenses associated with investing or financing cash flows. It is important to mention here that under indirect method, the starting point is net profit/ loss before taxation and extra ordinary items as per Income Statement of the enterprise. Then this amount is for non-cash items, etc. adjusted for ascertaining cash flows from operating activities.

Accordingly, cash flow from operating activities can be determined using either the Direct method or the Indirect method. These methods are discussed in detail as follows.

6.6.1 Direct Method

As the name suggests, under direct method, major heads of cash inflows and outflows (such as cash received from debtors, salary payments, etc) are considered.

It is important to note here that items are recorded on accrual basis in Profit and Loss Account. Hence, certain adjustments are made to convert them into cash basis such as the following :

1. Cash receipts from customers = Sales+ Debtors and Bills Receivable in the beginning – Debtors and Bills Receivable in the end.
2. Cash payments to suppliers = Purchases + Creditors and Bills Payable in the beginning – Creditors and Bills Payable in the end.
3. Purchases = Cost of Goods Sold – Opening Stock + Closing Stock
4. Cash Expenses = Expenses on Accrual basis – Prepaid Expenses in the beginning and Outstanding Expenses in the end + Prepaid Expenses in the end and Outstanding Expenses in the beginning.

However, the following items are not to be considered:

1. Non-cash items such as depreciation , discount on shares, etc. be written-off.
2. Items which are classified as investing or financing activities such as interest received, dividend paid, etc.

As per AS-3, under the direct method, information about major classes of gross cash receipts and cash payments may be obtained either-

- from the accounting records of the enterprise, or
- by adjusting sales cost of sales and other items in the statement of profit or loss for the following:
    - changes during the period in inventories and operating receivables and payables;
    - other non cash items; and
    - other items for which cash effects are investing or financing cash flows.

Figure 6.2 shows the Proforma of cash flows from operating activities using direct method.

Cash Flows from Operating Activities (Direct Method)

Cash flows from operating activities:	
Cash receipts from customers	xxx
(-) Cash paid to suppliers and employees	xxx
= Cash generated from operations	**xxx**
(-) Income tax paid	xxx
= Cash flow before extraordinary items	**xxx**
+/- Extraordinary items	xxx
= *Net cash from operating activities*	**xxxx**

Fig. 6.2 : *Proforma of Cash Flows from Operating Activities*

Illustration 1

From the following information, calculate cash flow from operating activities using direct method.

Profit and Loss Account
for the year ended on March 31, 2006

Dr. *Cr.*

Expenses/Losses	*Amount (Rs.)*	*Revenues/Gains*	*Amount (Rs.)*
Cost of Goods Sold	1,20,000	Sales	2,20,000
Gross Profit	1,00,000		
	2,20,000		**2,20,000**
Salary	30,000	Gross Profit	1,00,000
Insurance Premium	8,000		
Depreciation	20,000		
Income Tax	10,000		
Net Profit	32,000		
	1,00,000		**1,00,000**

Additional Information:

	April 01, 2005 (Rs.)	*March 31, 2006 (Rs.)*
Debtors	25,000	30,000
Bills Receivables	8,000	6,000
Creditors	17,000	15,000
Stock	22,000	27,000
Salaries Outstanding	2,000	3,000
Prepaid Insurance	5,000	5,500
Income Tax Outstanding	3,000	2,000

Solution

Cash Flows from Operating Activities	**(Rs.)**
Cash Receipts from Customers	2,17,000
Cash Paid to Suppliers	(1,27,000)
Cash Paid to Employees	(29,000)
Cash Paid for Insurance Premium	(8,500)
Cash generated from Operations	52,500
Income Tax Paid	(11,000)
Net Cash Inflow from Operations	**41,500**

Working Notes:

1. Cash Receipts from Customers is calculated as under :
   Cash Receipts from Customers = Sales+ Debtors and Bills Receivables in the beginning – Debtors and Bills Receivables in the end
   = Rs.2,20,000 + Rs.25,000 + Rs.8,000 – Rs.30,000 – Rs.6,000
   = Rs. 2,17,000
2. Purchases = Cost of Goods Sold – Opening Stock + Closing Stock
   = Rs. 1,20,000 – Rs. 22,000 + Rs. 27,000
   = Rs. 1,25,000
3. Cash Payments to Suppliers = Purchases+ Creditors and Bills Payables in the beginning – Creditors and Bills Payable in the end
   = Rs. 1,25,000 + Rs.17,000 – Rs.15,000
   = Rs. 1,27,000
4. Cash Expenses = Expenses on Accrual basis – Prepaid Expenses in the beginning and Outstanding Expenses in the end + Prepaid Expenses in the end and Outstanding Expenses in the beginning
5. Cash Paid to Employees = Rs. 30,000+Rs.2,000 – Rs.3,000
   = Rs. 29,000
6. Cash Paid for Insurance Premium = Rs. 8,000 – Rs.5,000+Rs.5,500
   = Rs. 8,500
7. Income Tax Paid = Rs. 10,000+Rs.3,000 – Rs.2,000
   = Rs. 11,000
8. It is important to note here that there are no extraordinary items.

6.6.2 Indirect Method

As mentioned earlier, indirect method of ascertaining cash flow from operating activities begins with the amount of net profit/loss. This is not so because income statement incorporates the effects of all operating activities of an enterprise. However, income statement is prepared on accrual basis (and not on cash basis). Moreover, it also includes certain non-operating items such as interest paid, profit/loss on sale of fixed assets, etc) and non-cash items (such as depreciation, goodwill to be written-off, etc. Therefore, it becomes necessary to adjust the amount of net profit/loss as shown by Profit and Loss Account for arriving at cash flows from operating activities. Let us look at the example :

Profit and Loss Account
for the year ended March 31, 2007

Dr. *Cr.*

Expenses/Losses	*Amount (Rs.)*	*Revenues/Gains*	*Amount (Rs.)*
Salaries	35,000	Gross Profit	1,00,000
Rent	15,000	Profit on Sale of Land	2,000
Depreciation	10,000		
Interest Paid	12,000		
Net Profit	30,000		
	1,02,000		1,02,000

The above Profit and Loss Account shows the amount of net profit of Rs.32,000. This has to be adjusted for arriving cash flows from operating activities. Let us take various items one by one.

1. *Depreciation* is a non-cash item and hence, Rs.10,000 charged as depreciation does not result in any cash flow. Therefore, this amount must be added back to the net profit.
2. *Interest paid* of Rs.12,000 is a cash outflow on account of financing activity. Therefore, this amount must also be added back to net profit while calculating cash flows from operating activities. This amount of interest will be shown as an outflow under the head of financing activities.
3. *Profit on sale of land* is cash inflow from investing activity. Hence, this amount must be deducted from the amount of net profit while calculating cash flows from operating activities.

The above example gives you an idea as to how various adjustments are made in the amount of net profit/loss. Other important adjustments relate to changes in working capital which are necessary (i.e. items of current assets and current liabilities) to convert net profit/loss which is based on accrual basis into cash flows from operating activities. Therefore, the increase in current assets and decrease in current liabilities are added to the net profit, and the decrease in current assets and increase in current liabilities are deducted from the net profit so as to arrive at the exact amount of net cash flow from operating activities. As per AS-3, under indirect method, net cash flow from operating activities is determined by adjusting net profit or loss for the effect of :

- Non-cash items such as depreciation, goodwill be written-off, provisions, deferred taxes, etc. which are to be added back.
- All other items for which the cash effects are investing or financing cash flows. The treatment of such items depend upon their nature. All investing and financing incomes are to be deducted from the amount of net profits while all such expenses are to be added back. For example, interest expense

which is a financing cash outflow is to be added back while interest income which is investing cash inflow is to be deducted from the amount of net profit.

- Changes in current assets and liabilities during the period. Increase in current assets and decrease in current liabilities are to be deducted while increase in current liabilities and decrease in current assets are to be added up.

Figure 6.3 shows the proforma of calculating cash flows from operating activities as per indirect method.

The direct method provides information which is useful in estimating future cash flows. But such information is not available under the indirect method. However, in practice, indirect method is mostly used by the companies for arriving at the net cash flow from operating activities.

Cash Flows from Operating Activities
(Indirect Method)

Net Profit/Loss before Tax and Extraordinary Items	
+ Deductions already made in Profit and Loss on account of Non-Cash items such as Depreciation, Goodwill to be Written-off.	xxx
+ Deductions already made in Profit and Loss on Account of Non-operating items such as Interest.	xxx
– Additions (incomes) made in Profit and Loss on Account of Non-operating Items such as Dividend Received, Profit on sale of Fixed Assets.	xxx
Operating Profit before Working Capital changes	
+ Increase in Current Liabilities	xxx
+ Decrease in Current Assets	xxx
– Increase in Current Assets	xxx
– Decrease in Current Liabilities	xxx
Cash Flows from Operating Activities before Tax and Extraordinary Items.	
– Income Tax Paid	xxx
+/– Effects of Extraordinary Items	xxx
Net Cash from Operating Activities	**xxx**

Fig. 6.2: *Proforma of Cash Flows from Operating Activities (Indirect Method)*

As stated earlier, it may be noted that while working out the cash flow from operating activities, the starting point is the 'Net profit before tax and extraordinary items' and not the 'Net profit as per Profit and Loss Account', and that the income tax paid is deducted there from as the last item to arrive at the net cash flow from operating activities.

Illustration 2

Using the data given in Illustration 1, calculate cash flows from operating activities using indirect method.

Solution

Cash Flows from Operating Activities *(Rs.)*

	Net Profit before Taxation and Extraordinary Items (1)	42,000
	Adjustments for–	
+	Depreciation	20,000
=	Operating Profit before working capital changes	62,000
–	Increase in Sundry Debtors	(5,000)
+	decrease in Bills Receivables	+2,000
–	Increase in Inventories	(5,000)
–	Increase in Prepaid Insurance	(500)
–	Decrease in Sundry Creditors	(2,000)
+	Increase in Outstanding Salaries	+1,000
=	Cash generated from Operations	52,500
–	Income tax paid	(11,000)
=	*Net cash from Operating Activities*	**41,500**

You will notice that the amount of cash flows from operating activities are the same whether we use direct method or indirect method for its calculation.

Working Notes:

The net profit before taxation and extraordinary items has been worked out as under:

(1) Net Profit	=	Rs. 32,000
+ Income Tax provided for Profit and Loss	=	Rs.10,000
= Net Profit before Tax and Extraordinary Items	=	Rs.42,000

Illustration 3

Calculate cash flows from operating activities from the following information.

Profit and Loss Account for the year ended March 31, 2006

Expenses/Losses	*Amount (Rs.)*	*Revenues/Gains*	*Amount (Rs.)*
Rent	10,000	Gross Profit	50,000
Salary	25,000	Profit on Sale of Machinery	2,000
Depreciation	5,000	Income Tax Refund	3,000
Loss on Sale of Equipment	3,000		
Goodwill written-off	2,000		
Provision for Taxation	8,000		
Net Profit	2,000		
	55,000		**55,000**

Additional Information:

	April 01, 2005 Rs.	March 31, 2006 Rs.
Provision for Taxation	10,000	13,000
Outstanding Rent	2,000	2,500
Creditors	21,000	25,000
Debtors	15,000	21,000
Inventories	25,000	22,000

Solution

Cash Flows From Operating Activities

Net profit before taxation, and extraordinary items	10,000
Adjustments for:	
+ Depreciation	5,000
+ Loss on Sale of Equipment	3,000
+ Goodwill Written-off	2,000
– Profit on Sale of Machinery	(2,000)
– Income Tax Refund	(3,000)
Operating Profit before Working Capital charges	15,000
– Increase in Sundry Debtors	(6,000)
+ Decrease in Inventories	3,000
+ Increase in Sundry Creditors	4,000
+ Increase in Outstanding Rent	500
Cash generated from Operations	16,500
Income Tax Paid	(5,000)
Income Tax refund	3,000
Net Cash from Operating Activities	**14,500**

Working Notes:

1. Net profit before taxation & extraordinary item = Rs. 2,000+Rs.8,000 = Rs. 10,000
2. Income tax paid during the year has been ascertained by preparing provision for tax account as follows:

Provision for Taxation Account

Dr. *Cr.*

Particulars	*J.F.*	*Amount* (*Rs.*)	*Particulars*	*J.F.*	*Amount* (*Rs.*)
Cash (Income tax paid during the year – Balancing Figure)		5,000	Balance b/d		10,000
			Profit and Loss		8,000
Balance c/d		13,000			
		18,000			**18,000**

Illustration 4

Charles Ltd. made a profit of Rs.1,00,000 after charging depreciation of Rs.20,000 on assets and a transfer to general reserve of Rs.30,000. The goodwill written-off was Rs.7,000 and gain on sale of machinery was Rs.3,000. Other information available to you (charges in the value of current assets and current liabilities) are debtors showed an increase of Rs,6,000; creditors an increase of Rs.10,000; prepaid expenses an increase of Rs.200; bills receivables a decrease of Rs.3,000; bills payables a decrease of Rs.4,000 and outstanding expenses a decrease of Rs. 2,000. Ascertain cash flow from operating activities.

Solution

	(*Rs.*)
Net Profit before Taxation	1,00,000
Adjustment for Non-cash and Non-operating Items :	
+ Depreciation	20,000
+ Transfer to general reserve	30,000
+ Goodwill written-off	7,000
– Gain on sale of machinery	(3,000)
Operating profit before working capital	1,54,000
Adjustment for working capital charges :	
– Increase in Debtors	(6,000)
+ Increase in Creditors	10,000
– Increase in Prepaid Expenses	(200)
+ Decrease in Bills Receivables	3,000
– Decrease in Bills Payables	(4,000)
– Decrease in Outstanding Expenses	(2,000)
= Net Cash from Operating Activities	1,54,800

Do it Yourself

1. The Profit and Loss Account of Raj Limited is given here under:

Profit and Loss Account
for the year ended March 31, 2007

Dr. *Cr.*

Expenses/Losses		*Amount (Rs.)*	*Revenues/Gains*		*Amount (Rs.)*
Opening Stock		2,00,000		Sales:	
Purchases:			Cash Sales	8,00,000	
Cash Purchases	4,00,000		Credit Sales	34,00,000	
Credit Purchases	17,00,000		*Less* Returns	(2,00,000)	
Less Returns	(1,00,000)		Net Sales		40,00,000
Net Purchases		20,00,000			
Administrative Expenses		10,20,000	Trading Commission		20,40,000
Discount Allowed to Customers		1,20,000	Discount Recd. from Suppliers		60,000
Bad Debts		1,00,000	Closing Stock		1,00,000
Depreciation		3,80,000			
Provision for Tax		8,00,000			
Net Profit		15,80,000			
		62,00,000			**62,00,000**

Additional Information:

	(Rs.)	(Rs.)
Bills Receivable	20,00,000	40,00,000
Bills Payable	20,00,000	10,00,000
Outstanding Administrative Expenses	10,000	20,000
Prepaid Administrative Expenses	20,000	10,000
Accrued Trading Expenses	20,000	40,000
Advance Trading Expenses	40,000	20,000
Provision for Taxation	10,00,000	12,00,000

Ascertain Cash from Operations. Show your workings clearly.

2. From the following information calculate net cash from operations:

Particulars	(Rs.)
Operating Profit after Provision for Tax of Rs. 1,53,000.	6,28,000
Insurance proceeds from the famine settlement	1,00,000

Proposed Dividend for the current year	72,000
Depreciation	1,40,000
Loss on Sale of Machinery	30,000
Profit on Sale of Investment	20,000
Dividend Received on Investments	6,000
Decrease in Current Assets (other than cash and cash equivalents)	10,000
Increase in Current Liabilities	1,51,000
Increase in Current Assets other than Cash and Cash Equivalents	6,00,000
Decrease in Current Liabilities	64,000
Income Tax Paid	1,18,000
Refund of Income Tax Received	3,000

Test your Understanding – II

1. Choose one of the two alternatives given below and fill in the blanks in the following statements:

(a) If the net profits earned during the year is Rs. 50,000 and the amount of debtors in the beginning and the end of the year is Rs. 10,000 and Rs. 20,000 respectively, then the cash from operating activities will be equal to Rs. _________________ (Rs. 40,000/Rs. 60,000)

(b) If the net profits made during the year are Rs. 50,000 and the bills receivables have decreased by Rs. 10,000 during the year then the cash flow from operating activities will be equal to Rs. _______________ (40,000/ Rs. 60,000)

(c) Expenses paid in advance at the end of the year are ________________ the profit made during the year (added to/deducted from).

(d) An increase in accrued income during the particular year is _______________ the net profit (added to/deducted from).

(e) Goodwill written-off is ________________ the profit made during the year for calculating the cash flow from operating activities (added to/ deducted from)

(f) For calculating cash flow from operating activities, provision for doubtful debts is _________________ the profit made during the year (added to/ deducted from).

2. While computing cash from operating activities, indicated whether the following items will be added or subtracted from the net profit- if not to be considered write NC

	Items	Result
(a)	Increase in the value of creditors	
(b)	Increase in the value of patents	
(c)	Decrease in prepaid expenses	
(d)	Decrease in income received in advance	
(e)	Decrease in value of stock	
(f)	Increase in share capital	
(g)	Increase in the value of bills receivables	
(h)	Increase in the amount of outstanding expenses	
(i)	Conversion of debentures into shares	
(j)	Decrease in the value of bills payables	
(k)	Increase in the value of debtors	
(l)	Decrease in the amount of accrued income.	

Sometimes, neither the amount of net profit is specified nor the Profit and Loss Account is given. In such a situation, the amount of net profit can be worked out by comparing the Profit, and Loss Account balance given in the comparative Balance Sheets for two years. The difference is treated as the net profit for the year; and, then, by adjusting it with the amount of provision for tax made during the year (as worked out by comparing the provision for tax balances of two years given in balance sheets), the amount of 'Net Profit before tax' can be ascertained (see Illustration (see Illustration 7 and 8)

6.7 Ascertainment of Cash Flow from Investing and Financing Activities

The details of item leading inflows and outflows from investing and financing activities have already been outlined. While preparing the cash flow statement, all major items of gross cash receipts, gross cash payments, and net cash flows from investing and financing activities must be shown separately under the headings 'Cash Flow from Investing Activities' and 'Cash Flow from Financing Activities' respectively.'

The ascertainment of net cash flows from investing and financing activities have been briefly dealt with in Illustrations 5 and 6.

Illustration 5

Welprint Ltd. has given you the following information:

	(Rs.)
Machinery as on April 01, 2004	50,000
Machinery as on March 31, 2005	60,000
Accumulated Depreciation on April 01, 2004	15,000
Accumulated Depreciation on March 31, 2005	25,000

During the year, a Machine costing Rs. 25,000 with Accumulated Depreciation of Rs. 15,000 was sold for Rs. 13,000.

Calculate cash flow from Investing Activities on the basis of the above information.

Solution

Cash Flows from Investing Activities	(Rs.)
Sale of Machinery	13,000
Purchase of Machinery	(35,000)
Net cash used in Investing Activities	(22,000)

Working Notes:

Machinery Account

Dr. Cr.

Particulars	*J.F.*	*Amount (Rs.)*	*Particulars*	*J.F.*	*Amount (Rs.)*
Balance b/d		50,000	Cash (proceeds from sale of machine)		13,000
Profit and Loss (profit on sale of machine		3,000	Accumulated Depreciation		15,000
Cash (balancing figure–new machinery purchased)		35,000	Balance c/d		60,000
		88,000			**88,000**

Accumulated Depreciation Account

Dr. Cr.

Particulars	*J.F.*	*Amount (Rs.)*	*Particulars*	*J.F.*	*Amount (Rs.)*
Machinery		15,000	Balance b/d		25,000
Balance c/d		15,000	Profit and Loss (Depreciation provided during the year)		5,000
		30,000			**30,000**

Illustration 6

From the following information, calculate cash flows from financing activities:

	(Rs.)	(Rs.)
Long-term Loans	2,00,000	2,50,000

During the year, the company repaid a loan of Rs. 1,00,000.

Solution

Cash flows from Financing Activities

Proceeds from long-term borrowings	1,50,000
Repayment of long-term borrowings	(1,00,000)
Net cash inflow from Financing Activities	*50,000*

Working Notes:

Long-term Loan Account

Dr. Cr.

Particulars	*J.F.*	*Amount (Rs.)*	*Particulars*	*J.F.*	*Amount (Rs.)*
Cash (loan repaid)		1,00,000	Balance b/d		2,00,000
Balance c/d		2,50,000	Cash (new loan raised)		1,50,000
		3,50,000			**3,50,000**

Do it Yourself

1. From the following particulars, calculate cash flows from investing activities:

	Purchased (Rs.)	*Sold (Rs.)*
Plant	4,40,000	50,000
Investments	1,80,000	1,00,000
Goodwill	2,00,000	
Patents		1,00,000

Interest received on debentures held as investment Rs. 60,000

Dividend received on shares held as investment Rs. 10,000

A plot of land had been purchased for investment purposes and was let out for commercial use and rent received Rs. 30,000.

2. From the following Information, calculate cash flows from investing and financing activities:–

	2005	*2006*
Machine at cost	5,00,000	9,00,000
Accumulated Deprciation	3,00,000	4,50,000
Equity Shares Capital	28,00,000	35,00,000
Bank Loan	12,50,000	7,50,000

In year 2006, machine costing Rs.2,00,000 was sold at a profit of Rs.1,50,000, Depreciation charged on machine during the year 2006 amounted to Rs.2,50,000.

6.8 Preparation of Cash Flow Statement

As stated earlier cash flow statement provides information about change in the position of Cash and Cash Equivalents of an enterprise, over an accounting period. The activities contributing this change are classified into operating, investing and financial. The methology of working out the net cash flow (or use) from all the three activities for an accounting period has been explained in details and a brief format of Cash Flow Statement has also been given in Fig. 6.1. However, while preparing a cash flow statement, full details of inflows and outflows are given under head including the net cash flow (or use) arise there from. The aggregate of the net cash flows (or use) is worked out and is shown as, Net Increase Decrease in cash and Cash Equivalents' to which the amount of 'cash and cash equivalent at the beginning' is added and thus the amount of 'cash and cash equivalents at the end' is arrived at as shown in Fig. 6.1. This figure will be the same as the total amount of cash in hand, cash at bank (or overdraft) and cash equivalants (if any) given in the balance sheet (see Illustrations 7 to 10). Another point that needs to be noted is that when cash flows from operating activities are worked out by an indirect method and shown as such in the cash flow statement, the statement itself is termed as 'Indirect method cash flow statement'. Thus, the cash flow statements prepared in Illustrations 7, 8 and 9 fall under this category as the cash flows from operating activities have been worked out by indirect method. Similarly, if the cash flows from operating activities are worked by direct method while preparing the cash flow statement, it will be termed as 'direct method Cash Flow Statement'. Illustration 10 shows both types of Cash Flow Statement. However, unless it is specified clearly as to which method is to be used, the cash flow statement may preferably be prepared by an indirect method as is done by most companies in practive. Look at these flow statements of Grase in Industries, Ucal Fuel Systems and Sterlite optical Technologies given at the end of the Chapter.

***Illustration* 7**

From the following information, prepare Cash Flow Statement for Pioneer Ltd.

Balance Sheet of Pioneer Ltd. as on March 31, 2005

Liabilities	*March 31, 2004*	*March 31, 2005*	*Assets*	*March 31, 2004*	*March 31, 2005*
Equity Shares	5,00,000	7,00,000	Patents	1,00,000	95,000
Profit and Loss	2,00,000	3,50,000	Equipments	2,00,000	2,30,000
Bank Loan	1,00,000	50,000	Furniture	3,00,000	2,70,000
Proposed Dividend	50,000	70,000	Investments	——	1,00,000
Provison of Taxation	30,000	50,000	Debtors	80,000	1,20,000
Creditors	50,000	45,000	Store	50,000	1,30,000
Oustanding Rent	5,000	7,000	Cash	5,000	27,000
			Bank	2,00,000	3,00,000
	9,35,000	**12,72,000**		**9,35,000**	**12,72,000**

During the year, equipment costing Rs.80,000 was purchased. Loss on sale of equipment amounted to Rs.5,000. Depreciation of Rs.15,000 and Rs. 3,000 were provided for equipments and furniture.

Solution

Cash Flow Statement

		(Rs.)
I	Cash flows from Operating Activities :	
	Net profit before taxation & extraordinary items	2,00,000
	Provision for :	
	Depreciation on Equipment	15,000
	Depreciation on Furniture	30,000
	Patents Written-off	5,000
	Proposed Dividend	70,000
	Loss on Sale of Equipment	5,000
	Operating Profit before Working Capital Charges	3,25,000
	– Decrease in Creditors	(5,000)
	+ Increase in Outstanding Rent	2,000
	– Increase in Debtors	(40,000)
	– Increase in Goods	(80,000)
	as generated from Operating Activities	
		2,02,000
	(–) Tax Paid	(30,000)
A.	Cash Inflows from Operating Activities	1,72,000

II.	Cash flows from Investing Activities:	
	Proceeds from Sale of Equipments	30,000
	Purchase of new Equipment	(80,000)
	Purchase of Investments	(1,00,000)
B.	Cash used in Investing Activities	(1,50,000)
III.	Cash flows from Financing Activities:	
	Issues of Equity share capital	2,00,000
	Repayment of bank loan	(50,000)
	Payment of Dividend	(50,000)
C.	Cash Inflows from Financing Activities	1,00,000
	Net increase in Cash & Cash Equivalents (A+B+C)	1,22,000
	+ Cash and Cash Equivalents in the beginning	2,05,000
	Cash and Cash Equivalents in the end	3,27,000

Working Notes:

(1)

Equipment Account

Dr. *Cr.*

Particulars	*J.F.*	*Amount (Rs.)*	*Particulars*	*J.F.*	*Amount (Rs.)*
Balance b/d		2,00,000	Depreciation (balancing figure)		15,000
Cash		80,000	Bank		30,000
			Profit & Loss (Loss on sale)		5,000
			Balance c/d		2,30,000
		2,80,000			**2,80,000**

(2) Patents of Rs. 5,000 (i.e. Rs.1,00,000 – Rs. 95,000) were written-off during the year, and depreciation on furniture Rs. 30,000. (Rs. 3,00,000 – Rs. 2,70,000)

(3) It is assumed that dividend of Rs.50,000 and tax of Rs.30,000 provided in 2003-2004 has been paid during the year 2004-05. Hence, proposed dividend and provision for tax during the year amounts to Rs.70,000 and Rs. 50,000 respectively.

		(Rs.)
(4)	Profit and Loss at the end	3,50,000
	(–) Profit and Loss in the beginning	2,00,000
(5)	Net Profit during the year	1,50,000
	+ Provision for Tax during the year	50,000
	Net Profit before Taxation & Extraordinary Items	2,00,000

Illustration 8

From the following information, prepare a Cash Flow Statement for Xerox Limited.

Balance Sheet of Xerox Ltd. as on March 31, 2007

Liabilities	March 31,2006	March 31,2007	Assets	March 31,2006	March 31,2007
Equity Share	10,00,000	15,00,000	Goodwill	2,00,000	1,80,000
Profit and Loss	6,00,000	7,50,000	Land & Building	8,00,000	6,50,000
Debentures	2,00,000	–	Plant & Machinery	4,00,000	3,60,000
Bank Loan	–	1,00,000	Investments	–	6,00,000
Profit for Taxation	80,000	95,000	Debtors	1,50,000	2,00,000
Creditors	60,000	70,000	Stock	1,00,000	1,80,000
	50,000	30,000	Cash	50,000	70,000
			Bank	2,90,000	3,05,000
	19,90,000	**25,45,000**		**19,90,000**	**25,45,000**

Dividend of Rs.1,50,000 was proposed and paid during the year. Income tax paid during the year includes Rs.15,000 on account of Dividend Tax. Moreover, during the year, Land and Building worth Rs.1,50,000 was sold at a profit of 10%. The rate of Depreciation on Plant and Machinery is 10%.

Solution

Cash Flow Statement

		(Rs.)
I	Cash flows from Operating Activities	
	Net Profit before Taxation and Extraordinary Items	2,45,000
	Adjustment for –	
	+ Depreciation	40,000
	+ Goodwill written-off	20,000
	+ Proposed Dividend	1,50,000
	– Profit on Sale of Land	(15,000)
	= Operating Profit before working capital charges	4,40,000
	+ Increase in Creditors	10,000
	– Decrease in Bills Paybles	(20,000)
	– Increase in Debtors	(50,000)
	– Increase in Stock	(80,000)
	= Cash generated from Operations	3,00,000
	– Income Tax Paid (1)	(65,000)
	A. Cash Inflows from Operations	2,35,000

II.	Cash flows from Investing Activities	
	Proceeds from Sale of Land and Building	1,65,000
	Purchase of Investment	6,00,000
B.	Cash used in Investing Activities	(4,35,000)
III.	Cash flows from Financing Activities	
	Proceeds from issue of Equity Share Capital	5,00,000
	Redemption of Debentures	(2,00,000)
	Proceeds from raising Bank Loan	1,00,000
	Dividend Paid	(1,50,000)
	Dividend Tax Paid	(15,000)
C.	Cash flows from Financing Activities	2,35,000
	Net Increase in cash and cash equivalents (A+B+C)	35,000
	+ Cash and Cash Equivalents in the beginning	3,40,000
	Cash and Cash Equivalent at the end	3,75,000

Working Notes:

(1)	Total income tax paid during the year	Rs. 80,0000
	(-) Dividend tax paid (given)	Rs. (15,000)
	Income tax paid for operating activities	Rs. 65,000

(2) Net profit earned during the year after tax and dividend
= Rs. 7,50,000 – 6,00,000 = Rs.1,50,000

(3) Net profit before tax
= Rs. 1,50,000 + Provision for tax made
= Rs. 1,50,000 + 95,000 (See provision for taxation account)
= Rs. 2,45,000

Equity Share Capital Account

Dr. *Cr.*

Particulars	*J.F.*	*Amount (Rs.)*	*Particulars*	*J.F.*	*Amount (Rs.)*
Balance c/d		15,00,000	Balance b/d		10,00,000
			Cash (New capital raised)		5,00,000
		15,00,000			**15,00,000**

Debenture Account

Dr. *Cr.*

Particulars	*J.F.*	*Amount (Rs.)*	*Particulars*	*J.F.*	*Amount (Rs.)*
Cash (Redemption)		20,000	Balance b/d		20,000
		20,000			**20,000**

Bank Account

Dr. *Cr.*

Particulars	J.F.	Amount (Rs.)	Particulars	J.F.	Amount (Rs.)
Balance c/d		1,00,000	Cash		1,00,000
		1,00,000			**1,00,000**

Provision for Taxation Account

Dr. *Cr.*

Particulars	J.F.	Amount (Rs.)	Particulars	J.F.	Amount (Rs.)
Cash (Tax paid- which includes Rs. 15,000 as dividend		80,000	Balance b/d		80,000
Balance c/d		95,000	Profit and Loss (Provision made during the year)		95,000
		1,75,000			**1,75,000**

Land and Building Account

Dr. *Cr.*

Particulars	J.F.	Amount (Rs.)	Particulars	J.F.	Amount (Rs.)
Balance b/d		8,00,000	Cash		1,65,000
Profit and Loss (Profit on sale)		15,000	Balance c/d		6,50,000
		8,15,000			**8,15,000**

Proposed Dividend Account

Dr. *Cr.*

Particulars	J.F.	Amount (Rs.)	Particulars	J.F.	Amount (Rs.)
Cash		1,50,000	Profit and Loss		1,50,000
		1,50,000			**1,50,000**

Plant and Machinery Account

Dr. *Cr.*

Particulars	J.F.	Amount (Rs.)	Particulars	J.F.	Amount (Rs.)
Balance b/d		4,00,000	Depreciation		40,000
					3,60,000
		4,00,000			**4,00,000**

Illustration 9

From the following particulars related to Oswal Agro Mills Ltd., prepare cash Flow Statement for the year ended on March 31, 2006

Particulars	**31.3.06**	**31.03.05**
Source of funds	(Rs. lakh)	(Rs. Lakh)
Shareholders funds		
Capital	1,300	1,400
Reserve and Surplus	4,700	4,000
Grand Total	**6,000**	**5,400**
Application of funds		
Fixed Assets		
Gross Block	**3,600**	**3,400**
(–) Depreciation	(1,200)	(1,000)
Net Block	**2,400**	**2,400**
Investments	300	200
Current Assets		
– Inventories	1,200	1,300
– Sundry Debtors	800	900
– Cash and Bank Balance	1,200	800
– Loans and Advances	800	800
Total		
Less : Current Liabilities		
– Trade Creditors	500	400
– Short term loans	200	600
Total	(700)	(1,000)
Net Current Assets	3,300	2,800
Gross Total	6,000	5,400

Income Statement for the year ended on March 31, 2006
(Rs. in lakh)

Sales	2,800
Other income (Dividend income)	1,000
(–) Expenditure	3,800
Labour cost	(600)
Interest paid	(200)
Depreciation	(200)
Profit before Tax	2,800
(–) Tax Paid	(1,000)
(–) Loss due to earthquake	(1,100)
Net Profit	700

You are given that no dividends were paid by the company during the year 2006. Out of fixed assets, lands worth Rs.1,000 having no accumulated depreciation were sold at no profit or no loss.

Solution

Cash Flow Statement

Cash Flows from Operating Activities	
Net Profit before Tax and Extraordinary Items (1)	2,800
Adjustment for :	
+ Interest paid	200
+ Depreciation	200
Operating profit before working capital charges	3,200
Adjustment for :	
+ Decrease in Inventories	100
+ Decrease in Sundry Debtors	100
+ Increase in Sundry Creditors	100
– Decrease in Short Term Loans	(400)
Cash generated from Operations	3,100
(-) Income Tax Paid	(1,000)
(-) Loss due to earthquake	(1,100)
A. Net cash from Operating Activities	1,000
Cash flows from Investing Activities	
Sale of Land (2)	1,000
Purchase of Fixed Assets (2)	(1,200)
Purchase of Investments	(100)
B. Net cash	(300)
Cash flows from Financing Activities	
Interest Paid	(200)
Redemption of Capital	(100)
	(300)
C. Net Cash used in Financing Activities	
Net increase in Cash and Cash Equivalents during the year (A+B+C)	400
+ Cash and Cash Equivalents in the beginning of the year	800
= Cash and Cash Equivalents in the end	**1,200**

Working Notes:

(Rs. in lakh)

(1) Net Profit before Tax and Extraordinary Items = Rs. 700 + Rs.1,100 + Rs.1,000
= Rs. 2,800

(2) **Fixed Assets Account**

Dr. *Cr.*

Particulars	*J.F.*	*Amount (Rs.)*	*Particulars*	*J.F.*	*Amount (Rs.)*
Balance b/d		3,400	Cash (Sale of land)		1,000
Cash (Purchase of fixed assets)		1,200	Balance c/d		3,600
		4,600			**4,600**

Accumulated Depreciation Account

Dr. *Cr.*

Particulars	*J.F.*	*Amount (Rs.)*	*Particulars*	*J.F.*	*Amount (Rs.)*
Balance c/d		1,200	Balance b/d		1,000
			Profit and Loss		200
		1,200			**1,200**

Illustration 10

From the following information, prepare a Cash Flow Statement as per AS–3 for Banjara Ltd, using both direct and indirect methods.

Balance Sheet as on March 31, 2006

(Rs.'000)

	2006	2005
Assets		
Cash on Hand and balances with Bank	200	25
Marketable Securities (having one month maturity)	670	135
Sundry Debtors	1,700	1,200
Interest Receivable	100	–
Inventories	900	1,950
Investments	2,500	2,500
Fixed Assets at cost	2,180	1,910

Accumulated Depreciation	(1,450)	(1,060)
Fixed Assets (net)	730	850
Total Assets	**6,800**	**6,660**
Liabilities		
Sundry Creditors	150	1,890
Interest Payable	230	100
Income Tax Payable	400	1,000
Long-term Debt	1,110	1,040
Total liabilities	**1,890**	**4,030**
Shareholders' Fund		
Share Capital	1,500	1,250
Reserves	3,410	1,380
Total shareholders' Fund	**4,910**	**2,630**
Total Liabilities and Shareholders' Fund	**6,800**	**6,660**

Statement of Profit or Loss for the year ended March 31, 2006

	(Rs.'000)
Sales	30,650
Cost of sales	(26,000)
Gross profit	4,650
Depreciation	(450)
Administrative and selling expenses	(910)
Interest expense	(400)
Interest income	300
Dividend income	200
Net profit before taxation and extraordinary items	3,390
Extraordinary items:	
Insurance proceeds from earthquake disaster settlement	140
Net profit after Extraordinary Items	3,530
Income tax	(300)
Net Profit	3,230

Additional Information: (Rs.'000)

a. An amount of Rs. 250 was raised from the issue of share capital and a further Rs. 250 was raised from long-term borrowings.

b. Interest expense was Rs. 400 of which Rs. 170 was paid during the period. Rs. 100 relating to interest expense of the prior period was also paid during the period.

c. Dividends paid were Rs. 1,200.

d. Tax deducted at source on dividends received (included in the tax expense of Rs. 300 for the year) amounted to Rs. 40.

e. During the period, the enterprise acquired Fixed Assets for Rs. 350. The payment was made in cash.

f. Plant with original cost of Rs. 80 and accumulated depreciation of Rs. 60 was sold for Rs. 20.

g. Sundry Debtors and Sundry Creditors include amounts relating to credit sales and credit purchases only.

Solution

Cash Flow Statement (Direct Method)

(Rs. '000)

Cash Flows from Operating Activities		
Cash Receipts from Customers	30,150	
Cash Paid to Suppliers and Employees	(27,600)	
Cash generated from Operations	2,550	
Income Tax paid	(860)	
Cash Flow before Extraordinary Item	1,690	
Proceeds from earthquake disaster settlement	140	
Net Cash from Operating Activities		1,830
Cash Flows from Investing Activities		
Purchase of Fixed Assets	(350)	
Proceeds from Sale of Equipment	20	
Interest Received	200	
Dividends Received	160	
Net cash from Investing Activities		30
Cash Flows from Financing Activities		
Proceeds from issuance of Share Capital	250	
Proceeds from Long-term Borrowings	250	

Repayment of Long-term Borrowings	(180)	
Interest paid	(270)	
Dividends paid	(1,200)	
Net cash used in Financing Activities		(1,150)
Net increase in Cash and Cash Equivalents		710
Cash and cash equivalents at beginning of period		160
Cash and cash equivalents at end of period		870

Cash Flow Statement
(Indirect Method)

	(Rs. '000)
Cash Flows from Operating Activities	
Net Profit before Taxation and Extraordinary Item	3,390
Adjustments for:	
+ Depreciation	450
– Interest Income	(300)
– Dividend Income	(200)
+ Interest Expense	400
Operating Profit before working capital charges	3,740
Increase in Sundry Debtors	(500)
Decrease in Inventories	1,050
Decrease in Sundry Creditors	(1,740)
Cash generated from Operations	2,550
Income Tax paid	(860)
Cash flow before Extraordinary Items	1,690
Proceeds from earthquake disaster settlement	140
Net cash from Operating Activities	1,830
Cash Flows from Investing Activities	
Purchase of Fixed Assets	(350)
Proceeds from Sale of Equipment	20
Interest Received	200
Dividends Received (net of TDS)	160
Net cash from Investing Activities	30
Cash flows from Financing Activities	
Proceeds from issuance of Share Capital	250
Proceeds from Long-term Borrowings	250

Repayment of Long-term Borrowings	(180)
Interest Paid	(270)
Dividends Paid	(1,200)
Net Cash used in Financing Activities	(1,150)
Net Increase in Cash and Cash Equivalents	710
Cash and Cash Equivalents at the beginning of the period	160
Cash and Cash Equivalents at the end of the period	870

Working Notes:

(1) *Cash and Cash Equivalents*

Cash and Cash Equivalents consist of cash on hand and balances with banks, and investments in money-market instruments. Cash and Cash Equivalents included in the Cash Flow Statement comprise the following balance sheet amounts.

(Rs. '000)

		2006 (Rs.)	*2005* (Rs.)
	Cash in Hand and balances with Bank	200	25
	Short-term Investments	670	135
	Cash and Cash Equivalents	870	160
(2)	*Cash Receipts from Customers*		
	Sales	30,650	
	Add: Sundry Debtors at the beginning of the year	1,200	
		31,850	
	Less : Sundry Debtors at the end of the year	1,700	
		30,150	
(3)	*Cash paid to Suppliers and Employees*		
	Cost of Sales		26,000
	Administrative and Selling Expenses		910
			26,910
	Add: Sundry Creditors at the beginning of the year	1,890	
	Inventories at the end of the year	900	2,790
			29,700
	Less : Sundry Creditors at the end of the year	150	
	Inventories at the beginning of the year	1,950	2,100
			27,600
(4)	*Income Tax paid (including TDS from dividends received)*		300
	Income Tax expense for the year (including tax deducted at source from dividends received)		

Add : Income Tax liability at the beginning of the year	1,000
	1,300
Less : Income Tax liability at the end of the year	400
	900

Out of Rs. 900, tax deducted at source on dividends received (amounting to Rs. 40) is included in cash flows from investing activities and the balance of Rs. 860 is included in cash flows from operating activities.

(5) *Repayment of Long-term Borrowings*

Long-term Debts at the beginning of the year	1,040
Add : Long-term Borrowings made during the year	250
	1,290
Less : Long-term Borrowings at the end of the year	1,110
	180

(6) *Interest paid*

Interest expense for the year	400
Add: Interest Payable at the beginning of the year	100
	500
Less: Interest Payable at the end of the year	230
	270

Terms Introduced in the Chapter

1. Cash
2. Cash Equivalent
3. Cash Inflows
4. Cash Outflows
5. Non-cash item
6. Cash Flow Statement
7. Operating Activities
8. Investing Activities
9. Financing Activities
10. Accounting Standard 3
11. Extraordinary Items

Summary

Cash Flow Statement: The Cash Flow Statement is considered to be superior to Statement of Changes in Financial Position to ascertain the liquidity of an enterprise. Cash Flow Statement is to be prepared and reported by Indian enterprises according to AS-3 issued by The Institute of Chartered Accountants of India. The cash flows are categorised into flows from operating, investing and financing activities. This statement helps the users to ascertain the amount and certainty of cash flows to be generated by an enterprise.

Question for Practice

A. Short Answer Questions

1. What is a Cash flow statement?
2. How the varions activities are classified (as per AS-3 revised) while preparing cash flow statement?
3. State the uses of cash flow statement?
4. What are the objectives of preparing cash flow statement.
5. Explain the terms: Cash Equivalents, Cash flows.
6. Prepare a format of cash flow from operating activities under direct method and indirect method.
7. Now that you know the meaning of operating activities, state clearly what would constitute the operating activities for the following types of enterprises:
   (i) Hotel
   (ii) Film production house
   (iii) Financial enterprise
   (iv) Media enterprise
   (v) Steel manufacturing unit
   (vi) Software business unit.
8. "The nature/type of enterprise can change altogether the category into which a particular activity may be classified." Do you agree? Illustrate your answer.

B. Long Answer Questions

1. Describe the procedure to prepare Cash Flow Statement.
2. Describe "Direct" and "Indirect" method of ascertaining Cash Flow from operating activities.
3. Explain the major Cash Inflow and outflows from investing activities.
4. Explain the major Cash Inflows and outflows from financing activities.

Numerical Questions

1. Anand Ltd. arrived at a net income of Rs. 5,00,000 for the year ended March 31, 2007. Depreciation for the year was Rs. 2,00,000. There was again of Rs. 50,000 on assets sold which was credited to profit and loss account. Bills Receivables increased during the year Rs. 40,000 and Bills Payables also increased by Rs. 60,000. Compute the cash flow operating activities by the indirect approach.

2. From the information given below you are required to prepare the cash paid for the inventory:

	(Rs.)
Inventory in the beginning	40,000
Purchases	1,60,000
Inventory in the end	38,000
Inventory creditors in the beginning	14,000
Inventory creditors in the end	14,500

[**Ans**.: Rs. 1,59,500]

3. For each of the following transactions, calculate the resulting cash flow and state the nature of cash flow viz., operating, investing and financing.

   (a) Acquired machinery for Rs. 2,50,000 paying 20% drawn and executing a bond for the balance payable.

   (b) Paid Rs. 2,50,000 to acquire shares in Informa Tech. and received a dividend of Rs. 50,000 after acquisition.

   (c) Sold machinery of original cost Rs. 2,00,000 with an accumulated depreciation of Rs. 1,60,000 for Rs. 60,000.

   [**Ans**.: Rs. 50,000 investing flow (outflow); Rs. 2,00,000 investing flow (outflow); Rs. 60,000 investing flow (inflow).].

4. The following is the Profit and Loss Account of Yamuna Limited:

Yamuna Limited
Profit and Loss Account for the Year ended March 31, 2007

	(Rs.)	(Rs.)
Sales		10,00,000
Cost of Goods Sold:		
Opening Stock	2,50,000	
Purchases	5,00,000	
	7,50,000	
Less Closing Stock	2,00,000	5,50,000
Gross Profit		4,50,000
Operating Expenses		3,00,000
Net Profit		1,50,000

Additional information:

(i) Trade debtors decrease by Rs. 30,000 during the year.
(ii) Prepaid expenses increase by Rs. 5,000 during the year.
(iii) Trade creditors decrease by Rs. 15,000 during the year.
(iv) Outstanding expenses increased by Rs. 3,000 during the year.
(v) Operating expenses included depreciation of Rs. 25,000.

Compute net cash provided by operations for the year ended March 31, 2007 by the indirect method.

[**Ans.**: Cash provided from operations Rs. 2,18,000].

5. Compute cash from operations from the following figures:

(i) Profit for the year 2005-06 is a sum of Rs. 10,000 after providing for depreciation of Rs. 2,000.
(ii) The current assets of the business for the year ended March 31, 2006 and 2007 are as follows:

	March 31, 2006 (Rs.)	*March 31, 2007* (Rs.)
Debtors	10,000	12,000
Provision for Doubtful Debts	1,000	1,200
Bills Receivables	4,000	3,000
Bills Payables	5,000	6,000
Creditors	8,000	9,000
Inventories	5,000	8,000
Short-term Investments	10,000	12,000
Outstanding Expenses	1,000	1,500
Prepaid Expenses	2,000	1,000
Accrued Income	3,000	4,000
Income received in advance	2,000	1,000

[**Ans.**: Cash from operations: Rs. 7,700].

Preparation of Cash Flow Statement from Summary Cash Account

6. From the following particulars of Bharat Gas Limited, calculate Cash Flows from Investing Activities. Also show the workings clearly preparing the ledger accounts:

Balance Sheet of Bharat Gas Limited as on ....

Liabilities	2006 Amount (Rs.)	2007 Amount (Rs.)		2006 Amount (Rs.)	2007 Amount (Rs.)
			Goodwill	1,00,000	3,00,000
			Patents	2,80,000	1,60,000
			Machinery	10,20,000	12,40,000
			10% Long-term investment	60,000	1,60,000
			Investment in land	1,00,000	1,00,000
			Shares of Amartax Ltd.	1,00,000	1,00,000

Additional Information:

(a) Patents were written off to the extent of Rs. 40,000 and some Patents were sold at a profit of Rs. 20,000.

(b) A Machine costing Rs. 1,40,000 (Depreciation provided thereon Rs. 60,000) was sold for Rs. 50,000. Depreciation charged during the year was Rs. 1,40,000.

(c) On March 31, 2007, 10% Investments were purchased for Rs. 1,80,000 and some Investments were sold at a profit of Rs. 20,000. Interest on Investment was received on March 31, 2007.

(d) Amartax Ltd. paid Dividend @ 10% on its shares.

(e) A plot of Land had been purchased for investment purposes and let out for commercial use and rent received Rs. 30,000.

[**Ans.**: Rs. 5,24,200].

7. From the following Balance Sheet of Mohan Ltd. Prepare cash flow Statement:

Balance Sheet of Rajeshwar Limited as on ....

Liabilities	2005 (Rs.)	2006 (Rs.)	*Assets*	2005 (Rs.)	2006 (Rs.)
Equity Share Capital	2,00,000	3,00,000	Fixed Assets	4,00,000	6,00,000
Profit & Loss	1,60,000	2,00,000	Stock	1,30,000	1,50,000
Bank Loan	1,00,000	80,000	Debtor’s	1,00,000	60,000
Accumulated Dep.	80,000	1,00,000	Bills Receivable	20,000	30,000
Creditor	1,40,000	1,20,000	Bank	90,000	30,000
Proposed Dividend	60,000	70,000			
	7,40,000	**8,70,000**		**7,40,000**	**8,70,000**

Additional Information:

Machine Costing Rs. 80,000 on which accumulated depreciation was Rs, 50,000 was sold for Rs. 20,000.

[**Ans.**: Cash flow from Operating Activity Rs. 1,80,000
Cash flow from Invisiting Activity Rs. (2,60,000)
Cash flow from Financing Activity Rs. 20,000].

8. From the following Balance Sheets of Tiger Super Steel Ltd., prepare Cash Flow Statement:

Balance Sheet

Liabilities	*2005* (Rs.)	*2006* (Rs.)	*Assets*	*2005* (Rs.)	*2006* (Rs.)
Equity Share Capital	80,000	1,20,000	Goodwill	24,000	18,800
10%Preference Sh. Capital	40,000	20,000	Land & Building	40,000	20,000
General Reserve	8,000	12,000	Plant	36,000	76,400
Profit and Loss Account	7,200	10,800	Investment	4,000	14,000
Proposed Dividend	11,200	15,600	Debtor's	30,000	43,200
Bills Payable	14,000	21,200	Stock	34,000	31,200
Outstanding Expenses	3,200	2,400	Cash	6,800	11,200
Provision for Taxation	11,200	12,800			
	1,74,800	**2,14,800**		**1,74,800**	**2,14,800**

Additional Information:

Depreciation Charge on Land & Building Rs. 20,000, and Plant Rs. 10,000 during the year.

[**Ans.**: Cash flow from Operating Activities Rs. 34,800
Cash flow from Invisiting Activities Rs. (50,400)
Cash flow from Financing Activities Rs. 20,000].

9. Prepare Cash Flow Statement from the following Information:

Balance Sheet

Liabilities	*2004* (Rs.)	*2005* (Rs.)	*Assets*	*2004* (Rs.)	*2005* (Rs.)
Equity Share Capital	5,00,000	7,00,000	Cash/Bank	3,00,000	4,00,000
8% Debentures	6,00,000	4,00,000	Sundry Debtor	4,00,000	6,00,000
Profit and Loss Account	3,00,000	5,00,000	Stock	5,00,000	6,00,000
Creditor	6,00,000	9,00,000	Goodwill	2,50,000	1,70,000
			Discount on Debenture	50,000	30,000
			Plant	5,00,000	7,00,000
	20,00,000	**25,00,000**		**20,00,000**	**25,00,000**

Additional Information:

Depreciation Charge on Plant amount to Rs. 80,000.

[**Ans**.: Cash inflow from Operating Activities Rs. 3,80,000
Cash inflow from Invisiting Activities Rs. (2,80,000)
Cash inflow from Financing Activities Rs. – NIL].

10. From the following Information Prepare Cash flow Statements for Yogeta Ltd.

Balance Sheet

Liabilities	2005 (Rs.)	2006 (Rs.)	*Assets*	2005 (Rs.)	2006 (Rs.)
Equity Share Capital	2,00,000	3,00,000	Bank	45,000	-
Preference Share Capital	–	1,00,000	Cash	5,000	-
Profit and Loss Account	1,00,000	2,00,000	Stock	1,00,000	1,70,000
Loan	2,00,000	–	Bills Receivable	50,000	1,00,000
Provision for Taxation	30,000	50,000	Fixed Assets	4,00,000	7,00,000
Bills Payable	50,000	70,000			
Bank overdraft	–	1,00,000			
Loan from Rahul	20,000	1,50,000			
	6,00,000	**9,70,000**		**6,00,000**	**9,70,000**

Additional Information:

Net Profit for the year After Charging Rs. 50,000 as Depreciation was Rs. 1,50,000. Dividend paid on Share was Rs. 50,000, Tax Provision created during the year year amounted to Rs. 60,000.

[**Ans**.: Cash from Operating Activities Rs. 2,20,000
Cash from Invisiting Activities Rs. (3,50,000)
Cash from Financing Activities Rs. (80,000)].

11. Following is the Financial Statement of Garima Ltd. Prepare Cash flow Statements.

Balance Sheet as on 31st Dec. 2006

Liabilities	2005 (Rs.)	2006 (Rs.)	*Assets*	2005 (Rs.)	2006 (Rs.)
Equity Share Capital	2,00,000	3,00,000	Plant & Machinery	2,00,000	3,64,000
Preference Share Capital	80,000	1,40,000	Stock	60,000	1,60,000
Creditor	56,000	1,56,000	Debtor	20,000	80,000
Provision for Taxation	4,000	12,000	Bank	80,000	28,000
Profit & Loss Account	28,000	40,000	Prepaid Expenses	8,000	16,000
	3,68,000	**6,48,000**		**3,68,000**	**6,48,000**

Profit and Loss Account for the Year ended Dec. 31, 2006

Receipts	*Amount (Rs.)*	*Payments*	*Amount (Rs.)*
Opening Stock	60,000	Sales	5,00,000
Purchase	4,92,000	Closing Stock	1,60,000
Gross Profit c/d	1,08,000		
	6,60,000		**6,60,000**
Salary	44,000	Gross Profit b/d	1,08,000
Depreciation	32,000		
Provision for Tax	16,000		
Net profit c/d	16,000		
	1,08,000		**1,08,000**
Dividend	4,000	Balance b/d	28,000
Balance c/d	40,000	Net Profit b/d	16,000
	44,000		**44,000**

[**Ans.**: Cash Outflow (use) from Operating Activities Rs. (12,000)
Cash flow from Investing Activities Rs. (1,96,000)
Cash flow from Financing Activities Rs. (1,56,000)].

12. Following as the Balance Sheets of Computer India Ltd.:

(In Lakhs)

Liabilities	*2004 (Rs.)*	*2005 (Rs.)*	*Assets*	*2004 (Rs.)*	*2005 (Rs.)*
Equity Share Capital	40,000	50,000	Fixed Assets	41,000	40,000
Profit and Loss Account	1,000	1,200	*Less :* Provision for Depreciation	11,000	15,000
General Reserve	2,000	2,500		**30,000**	**25,000**
10% Debentures	6,000	6,500	Debtors	20,000	24,000
Sundry Creditor	12,000	11,000	Stock	30,000	35,000
Provision for Taxation	3,000	4,200	Prepaid Expenses	300	500
Proposed Dividend	5,000	5,800	Cash	1,200	3,500
Bank overdraft	12,500	6,800			
	81,500	**88,000**		**81,500**	**88,000**

Additional Information:

Interest paid on Debenture Rs. 600

[**Ans.**: Net Cash from Operating Activities Rs. 2,100
Net Cash from Invisiting Activities Rs. 1,000
Net Cash from Financing Activities Rs. 4,900].

Project Work

1. Read and analyse the cash flow statements as given in the Annual Report of any three listed companies (say Arvind Mills, Infosys, Tisco, etc.) and ascertain:
   (i) which method (direct or indirect) is used for the purpose of calculating cash flows from operating activities;
   (ii) the treatment of special items such as dividend tax, profit/loss on sale of fixed assets, depreciation of extraordinary items, etc.
   (iii) Whether all companies follow the same proforma of cash flow statement or different ones.
   (iv) As to whether you think that companies properly highlight cash flow statement in their Annual Reports.

2. "Every enterprise must necessarily prepare and present a statement of cash flows". Discuss it in the classroom.

3. You analyse the cash flow statement for the past 3 years for Madrid Ltd. and find that–
   (i) there has been net increase in cash and cash equivalents over the years.
   (ii) However, net cash flow from operating activities have been negative throughout. What may be the possible reasons for the above mentioned situation. What would be your perception about the functioning of the company.

Answers to Test your Understanding

Test your Understanding – I

Answer : a) Operating activities – 3, 6, 7, 10, 13, 15, 19, 20, 23, 24, 27;
b) Investing activities – 1, 5, 8, 11, 12, 16, 17, 21, 22, 29;
c) Financing activities – 2, 4, 9, 14, 18, 25, 26, 28;
d) Cash equivalents – 30, 31, 32, 33.

Test your Understanding – II

Answers: 1. 40,000, 2. 60,000, 3. deducted from,

4. deducted from, 5. added to, 7. added to

Answers: 1. +, 2. NC, 3. +, 4. –, 5. +, 6. NC, 7. –, 8 +, 9. NC, 10 –, 11 –, 12 +

APPENDIX – 1

GRASIM INDUSTRIES LIMITED

Cash flow statement for the year ended 31st March, 2000

Rs. in Crores

	Current Year		Previous Year	
A. Cash Flow from Operating Activities				
a. Net profit before tax and exception item	1201.90		1361.36	
Adjustment for :				
Depreciation	291.64		284.57	
Interest expenses	97.32		138.76	
Interest Income	(29.48)		(75.38)	
Dividend Income	(38.04)		(39.37)	
Write down in value of Assets held for disposal	–		7.00	
Profit/Loss on sale of Fixed Assets (Net)	3.99		(2.25)	
Profit on sale of Long Term Investment (Net)	(62.57)		(24.90)	
Profit on sale of Current Investments (Net)	(7.27)		(3.37)	
b. Operating profit before working capital changes	1457.49		1646.42	
Adjustments for:				
Trade and other receivables	116.66		(78.33)	
Inventories	(72.14)		(219.13)	
Assets Held for Disposal	0.97		1.84	
Trade Payables	159.70		90.96	
c. Cash generated from Operations	1662.68		1441.76	
Direct Taxes Paid (Net)	(380.42)		(391.30)	
Cash from operating activities before exceptional item	1282.26		1050.46	
Net Cash from Operating Activities		1282.26		1050.46
B. Cash Flow from Investing Activities				
Purchase of fixed assets	(408.80)		(301.75)	
Sale of fixed assets	9.29		19.71	
Purchase of Investments	(502.03)		(75.41)	
Sale of Investments	72.19		669.49	
Investments/Advances in Joint Ventures, Subsidiaries & Others	(119.31)		(1294.14)	
Interest received	29.11		74.29	
Dividend received	38.04		39.37	
Net Cash from/(used in) investing activities		(881.51)		(868.44)
C. Cash Flow from Financing Activities				
Proceeds from borrowings	128.25		326.40	
Repayments of borrowings	(181.58)		(354.13)	
Interest paid	(112.71)		(150.11)	
Dividends paid	(145.25)		(128.19)	
Corporate dividend tax	(20.58)		(16.77)	
Net Cash from/(used in) financing activities		(331.87)		(322.80)
D. Net increase/(Decrease) in Cash and Cash equivalent		68.88		(140.78)
Cash and Cash equivalent at the beginning of the year		86.70		227.48
Cash and Cash equivalent at the end of the year		155.58		86.70
(Cash and cash equivalent represent Cash and Bank balances)				

Note:

1. Previous years' figures have been regrouped/recast wherever necessary

APPENDIX – 2

UCAL FUEL SYSTEMS LIMITED
Cash Flow Statement for the year ended 31st March, 2000

	For the year ended 31.3.2006	*Rs. in '000*	*For the year ended 31.3.2005*
A. Cash Flow from Operating Activities			
Net Profit before tax and extraordinary items	241,438		359,488
Adjustment for :			
Miscellaneous Expenditure written-off	12,826		3,330
Depreciation/Assets Discarded	129,948		134,530
Interest Income	(2,285)		(3,185)
Dividend Income	(12,910)		(12,590)
Interest Expense	59,968		4,634
Operating Profit before Working Capital changes	428,985		486,207
Adjustments for :			
Debtors	30,912		44,225
Inventories	10,620		(53,446)
Loans and Advances	30,051		(44,039)
Trade Payables	26,337		(76,138)
Prior Period Adjustments	671		323
Cash generated from Operations	527,576		357,132
Income – Tax paid	(90,594)		(92,962)
Net cash from Operating Activities – "A"	436,982		264,170
B. Cash flow from Investing Activities			
Purchase of Fixed Assets	(85,586)		(221,417)
Product Development & Research Expenses	(71,238)		(71,133)
Capital Work-In-Progress	(46,346)		146,329
Sale of Fixed Assets	3,154		4,091
Sale of Investments	281,120		4,750
Purchase of Investments	(1,068,690)		(35,000)
Interest Received	3,355		2,837
Dividend Received	12,909		12,590
Net cash from Operating Activities – "B"	(971,322)		(156,953)
C. Cash flow from Financing Activities			
Proceeds from Borrowings/Repayment of Loans	686,633		(44,251)
Dividend paid including Tax on Dividend	(79,225)		(62,777)
Interest Paid	(61,456)		(4,294)
Net cash used in Financing Activities – "C"	545,952		(111,322)
Net increase in Cash and Cash Equivalents – "A+B+C"	11,612		(4,105)
Cash and Cash Equivalents as at the beginning	62,950		67,055
Cash and Cash Equivalents as at the end	74,562		62,950

APPENDIX – 3

STERLITE OPTICAL TECHNOLOGIES LIMITED
Cash Flow Statement for the year ended March 31, 2006

		2006 (Rs. in Million)	2005 (Rs. in Million)
A. Cash Flow from Operating Activities			
Net Profit after tax as per Profit & Loss Account	407.66		102.20
Adjustment for Taxation	(26.10)		0.32
		381.56	102.52
Adjustments for :			
– Depreciation	289.92		266.76
– Investment Written-off & Loss On Sale of Investment	–		0.41
– Interest Expenses (net)	161.36		104.12
– (Profit)/Loss on Sale of Assets	(1.49)		2.52
– Gain on prepayment of Deferred Sales Tax Liability	(146.60)		–
– Provisions and Write-off	–		16,80
		303.19	
Operating profit before working capital changes		684.75	493.13
Adjustments for :			
– (Increase)/Decrease in Trade and Other receivables	(661.23)		(777.17)
– (Increase)/Decrease in Inventories	(85.14)		(83.02)
– Increase/(Decrease) in Trade Payables	(161.14)	(907.51)	941.55
Cash generated from operations		(222.76)	574.49
Direct taxes (paid/TDS deducted)/Refund received		(35.25)	13.68
Net Cash flow from Operating Activities		(258.01)	588.17
B. Cash flow from Investing Activities			
Purchases of Fixed Assets (Including Capital Work in Progress)		(48.95)	(67.81)
Proceeds from Sale of Fixed Assets		3.21	14.48
(Purchase)/Sale of Investments		(0.05)	–
Investments in Bank Fixed Deposits		(491.64)	–
Application Money Paid Pending Allotment		(24.95)	–
Interest received from Subsidiary Companies		15.99	19.65
Loan to Subsidiary Companies		(100.83)	(95.58)
Net cash flow from Investing Activities		(647.22)	(129.26)
C. Cash flow from Financing Activities			
Proceeds/(Repayment) of Secured Loans (net)		1,175.73	(89.92)
Proceeds/(Repayment) of Preferential Equity Issue & Share Warrants		336.00	–
Proceeds/(Repayment) of Unsecured Loans (net)		(117.62)	(120.71)
Interest paid		(163.43)	(123.77)
Payment of Unclaimed Dividend		(0.03)	(0.09)
Net Cash flow from Financing Activities		1,230.65	(334.49)
Net Increase in cash and cash equivalent		325.42	124.42
Cash and cash equivalent as at beginning of the year		137.66	13.24
Cash and cash equivalent as at the year end		463.08	137.66

Notes