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 discount including oversubsription;*
- *outline the accounting for forfeiture of shares and reissue of forfeited shares under varying situations;*
- *workout the amounts to be transferred to capital reserve when forfeited 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, 2013. A company means a company incorporated or registered under the Companies Act, 2013 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 inventory and use it for a common purpose. It is an artificial person having 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:

- *Body Corporate:* A company is formed according to the provisions of Law enforced from time to time. Generally, in India, the companies are formed and registered under Companies Law except in the case of Banking and Insurance companies for which a separate Law is provided for.
- *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.
- *Limited Liability:* The liability of the members of the company is limited to the extent of 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 itself. Therefore, every company is required to have its own seal which acts as 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 Companies

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:

(i) *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.

On the basis of the number of members, companies can be divided into three categories as follows:

(i) *Public Company*: A public company means a company which (a) is not a private company; (b) is a company which is not a subsidiary of a private company.

(ii) *Private Company*: A private company is one which by its articles:
  - (a) Restricts the right to transfer its shares;
  - (b) A private company must have at least 2 persons, except in case of one person company;
  - (c) Limits the number of its members to 200 (excluding its employees);

(iii) *One Person Company (OPC)*: Sec. 2 (62) of the companies Act, 2013, defines OPC as a "company which has only one person as a member". Rule 3 of the Companies (Incorporation) Rules, 2014 provides that:
  - (a) Only a natural person being an Indian citizen and resident in India can form one person company,
  - (b) It cannot carry out non-banking financial investment activities.
  - (c) Its paid up share capital is not more than Rs. 50 Lakhs
  - (d) Its average annual turnover of three years does not exceed Rs. 2 Crores.

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 shareholders 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.

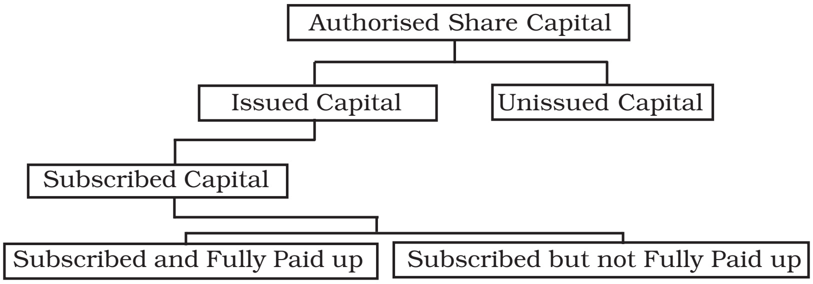


Exhibit. 1.1 : *Categories of Share Capital*

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 Notes to Accounts of the balance sheet of Sunrise Company Ltd. as follows:

Notes to Accounts

Share Capital		*(Rs.)*
<u>Authorised or Registered or Nominal Capital:</u>		
4,00,000 Shares of Rs. 10 each		40,00,000
<u>Issued Capital</u>		
2,00,000 Shares of Rs. 10 each		20,00,000
<u>Subscribed Capital</u>		
Subscribed but not fully paid up		
2,00,000 Shares of Rs. 10 each, Rs. 8 called up	16,00,000	
Less : Calls in Arrears	(6,000)	15,94,000

1.4 Nature and Classes of Shares

Shares, 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, along with their respective rights and obligations, are prescribed by the Articles of Association of the company. As per 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 43 of The Companies Act, 2013, 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 43 of The Companies Act, 2013, 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/ordinary 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 an artificial person.
(b) Shareholders of a company are liable for the acts of the company.
(c) Every member of a company is entitled to take part in its management.
(d) Company's shares are generally transferable.
(e) Share application account is a personal account.
(f) The director of a company must be a shareholder.
(g) Paid up capital can exceed called up capital.
(h) Capital reserves are created from capital profits.
(i) At the time of issue of shares, the maximum rate of securities premium is 10%.
(j) The part of capital which is called up only on winding up is called reserve capital.
(k) 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 suffixed 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 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 made. When allotment is made, it results in a valid contract between the company and the applicants who now became the shareholders of the company.

Minimum Subscription

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 or at a premium. Shares are to be 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.

Irrespective of the fact that shares are issued at par or at a premium, the share capital of a company as stated earlier, may be collected in instalments payable 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 compiled 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 shareholders or members.

Allotment of Shares
(Implications from accounting point of view)

- It is customary to ask for some amount called "Allotment Money" 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 period prescribed by law/SEBI.
- 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 Money on __Shares @ Rs__per shares adjusted to the amount due on allotment).

5. *For Receipt of Allotment Money*

   Bank A/c Dr.

   To Share Allotment A/c

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

Note:- The journal entries (2) and (4) can also be combined as follows:

Share Application A/c

To Share Allotment A/c

To Bank A/c

(Excess application money adjusted to share allotment and balance refunded)

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'.

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.
4. 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 Limited 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 were 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 was 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 Limited

Solution

Books of Mona Earth Mover 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 Application A/c Dr. To Bank A/c (Application money on 1,000 shares returned]		30,000	30,000
	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
	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 Limited issued 40,000 shares of Rs. 10 each to the public for the subscription out of its share capital, payable as 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 First and Final Call A/c (First and final call money received)		1,20,000	 1,20,000

Do it Yourself

On April 01, 2015, 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 April 15, 2015. The directors made the allotment on May 1, 2015.

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 may happen that shareholders do not pay the call amount on due date. 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. Such amount shall appear as 'Note to Accounts (Refer Chapter 3). However, where a company maintains 'Calls in Arrears' Account, it needs to pass the following additional journal entry:

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

The Articles of Association of a company may empower the directors to charge interest at a stipulated rate on calls in arrears. If the articles are silent in this regard, the rule contained in Table F shall be applicable which states that the interest at a rate not exceeding 10% 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 thereof.

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
(Calls in arrears received with interest)

Note: 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 second and final call. All the shares were fully subscribed and paid except of a shareholder having 100 shares who could not pay for second and 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 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 F of the Companies Act provides for the payment of interest on calls in advance at a rate not exceeding 12% 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)

On the due date of the calls, the amount of 'Calls in Advance' is adjusted by the following entry :

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 under the title *Equity and Liabilities* in the company's balance sheet under the head *'current liabilities'*, as sub-head *'others current liabilities'.* It 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 F is applicable which provides for interest on calls in advance at a rate not exceeding 12% per annum.

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. *(a)* *For Interest due*
   Interest on Calls in Advance A/c Dr.
       To Sundry Shareholder's A/c
   (Interest paid on Calls in Advance)

2. *(b)* *For Interest Paid*
   Sundry Shareholder's A/c Dr.
       To Bank 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 Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr. To Equity Share Application A/c (Money received on application for 1,000 shares @ Rs. 25 per share)		25,000	 25,000
	Equity Share Application A/c Dr. To Equity Share Capital A/c (Transfer of application money on 1,000 shares to share capital)		25,000	 25,000
	Equity Share Allotment A/c Dr. To Equity Share Capital A/c (Amount due on the allotment of 1,000 shares @ Rs. 30 per share)		30,000	 30,000
	Bank A/c Dr. To Equity Share Allotment A/c (Allotment money received)		30,000	 30,000
	Equity Share First Call A/c Dr. To Equity Share Capital A/c (First call money due on 1,000 shares @ Rs. 20 per share)		20,000	 20,000
	Bank A/c Dr. Calls in Arrears A/c Dr. To Equity Share First Call A/c To Calls in Advance A/c (First call money received on 900 shares, calls in arrears for 100 shares @ Rs.20 per share and calls in advance for 50 shares @ Rs.25 per share.)		19,250 2,000	 20,000 1,250

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 Limited 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 the 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. 5% Preference Share Application A/c Dr. To Equity Share Capital A/c To 5% Preference Share Capital A/c (Transfer of application money)		30,000 20,000	 30,000 20,000
	Equity Share Allotment A/c Dr. 5% Preference Share Allotment A/c Dr. To Equity Share Capital A/c To 5% Preference Share Capital A/c (Amount due on allotment)		45,000 30,000	 45,000 30,000
	Equity Share First Call A/c Dr. 5% Preference Share First Call A/c Dr. To Equity Share Capital A/c To 5% Preference Share Capital A/c (First call money due)		37,500 25,000	 37,500 25,000
	Equity Share Second and Final Call A/c Dr. 5% Preference Share Second and final Call A/cDr. To Equity Share Capital A/c To 5% Preference Share Capital A/c (First call money due)		37,500 25,000	 37,500 25,000
	Call in Arrears A/c Dr. To Equity Share Second and Final Call A/c To 5% Preference Share Final Call A/c (For Calls in Arrears)		750	 250 500

Cash Book (Bank Column)

Dr. *Cr.*

Date	*Receipts*	*L.F.*	*Amount (Rs.)*	*Date*	*Payments*	*L.F.*	*Amount (Rs.)*
	Equity Share Application		30,000		Balance 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 Second and Final Call		37,250				
	5% Preference Share Second and Final Call		24,500				
			2,49,250				**2,49,250**

Balance Sheet of unique pictures as at . . . . .

Particulars	Note No.	Amount (Rs.)
I. Equity and Liabilities		
1. Shareholders' Funds		
a) Share capital	1	2,49,250
		2,49,250
II. Assets		
1. Current assets		
a) Cash and Cash Equivalents	2	2,49,250
		2,49,250

Notes to Accounts

1. Share Capital		
Authorised Capital		
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
<u>*Issued Capital*</u>		
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

<u>Subscribed Capital</u>		
<u>Subscribed and fully paid-up</u>		
14,900 Equity Shares of Rs. 10 each	1,49,000	
9,800, 5% Preference Shares of Rs. 10 each	98,000	
		2,47,000
<u>Subscribed but not fully paid-up</u>		
100 Equity Shares of Rs. 10 each	1,000	
Less: Calls in Arreras	-250	750
200, 5% Preference Shares of Rs. 10 each	2,000	
Less : Calls in Arrers	-500	1,500
		2,49,250

Illustration 6

Rohit & 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 (Calls in arrears for 400 shares @Rs.2 per share and calls in advance on 300 shares @Rs.2 per share)		59,800 800	 60,000 600

Do it Your self

1. A company issued 20,000 equity shares of Rs.10 each payable 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, 2015; first call money on or before August Ist, 2015; and the second and final call on or before October Ist, 2015; 'X', whom 1,000 shares were allotted, did not pay the allotment and call money; 'Y', an allottee of 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.
2. Alfa Company Ltd. issued 10,000 shares of Rs.10 each for cash payable Rs.3 on application, Rs.2 on allotment and the balance in two equal instalments. The allotment money was payable on or before March 31, 2015; the first call money on or before 30 June, 2015; and the final call money on or before August, 31. 2015. Mr. 'A', to 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 exhibit the share capital in the 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 shares issue 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 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 on 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 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 application for money 20,000 for shares allotted and money refunded on applications for 5,000 shares rejected)	
3	Share Allotment A/c	Dr.
	To Share Capital A/c	
	(Amount due on the allotment of 20,000 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 applicants (called 'pro-rata' allotment), the excess application money received is normally adjusted towards the amount due on allotment. In case, 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 To Share Application A/c (Application money received on 25,000 shares @ Rs. _ per Share)	Dr.		
2	Share Application A/c To Share Capital A/c To Share Allotment A/c (Transfer of application money to share capital and the excess application money on 5,000 shares credited to share allotment account)	Dr.		
3	Share Allotment A/c To Share Capital A/c (Amount due on allotment of 25,000 share @ 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.		

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 refunded and the excess application money received from applicants to whom pro-rata allotment has been made is adjusted towards 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	Dr.
	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)	
3	Share Allotment A/c	Dr.
	To Share Capital A/c	
	(Amount due on the Allotment of 10,000 shares @ Rs. _ per share)	
4	Bank A/c	Dr.
	To Share Allotment A/c	
	(Allotment money received after adjusting the amount already received as excess application money)	

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, 2017 and allotment was made on February 01, 2017.

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 and the excess 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.)*
2017 January 01	Bank A/c	Dr.		20,00,000	
	To Equity Share Application A/c				20,00,000
	(Money received on applications for 4,00,000 shares @ Rs. 5 per share)				
February 01	Equity Share Application A/c	Dr.		20,00,000	
	To Equity Share Capital A/c				5,00,000
	To Bank A/c				15,00,000
	(Transfer of application money on 1,00,000 shares to share capital and money refunded on rejected applications)				
February 01	Equity Share Allotment A/c	Dr.		7,50,000	
	To Equity Share Capital A/c				7,50,000
	(Amount due on the allotment of 1,00,000 shares @ Rs 7.50 per share)				
	Bank A/c	Dr.		7,50,000	
	To Equity Share Allotment A/c				7,50,000
	(Allotment money received)				
April 01	Equity Share First Call A/c	Dr.		7,50,000	
	To Equity Share Capital A/c				7,50,000
	(First call money due on 1,00,000 shares @ Rs. 7.50 per share)				
April 01	Bank A/c	Dr.		7,50,000	
	To Equity Share First Call A/c				7,50,000
	(First call money received)				
June 01	Equity Share Second and Final Call A/c	Dr.		5,00,000	
	To Equity Share Capital A/c				5,00,000
	(Final Call money due on 1,00,000 shares @ Rs. 5 per share)				
June 01	Bank A/c	Dr.		5,00,000	
	To Equity Share Second and Final Call A/c				5,00,000
	(Final call money received)				

Second Alternative

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
2017				
January 01	Bank A/c Dr.		20,00,000	
	To Equity Share Application A/c			20,00,000
	(Money received on applications for 4,00,000 shares @ Rs. 5 per share)			
February 01	Equity Share Application A/c Dr.		20,00,000	
	To Equity Share Capital A/c			5,00,000
	To Equity Share Allotment A/c			7,50,000
	To Bank A/c			7,50,000
	(Transfer of application money on Shares allotted to share capital, excess application amount credited to allotment account and money refunded on rejected applications)			
February 01	Equity Share Allotment A/c Dr.		7,50,000	
	To Equity Share Capital A/c			7,50,000
	(Amount due on the allotment of Rs. 1,00,000 shares @ Rs 7.50 per share)			

Note : The entries regarding the two calls would be the same as given in preceding method.

Third Alternative

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
2017				
January 01	Bank A/c Dr.		20,00,000	
	To Equity Share Application A/c			20,00,000
	(Money received on applications for 4,00,000 shares @ Rs. 5 per share)			

February 01	Equity Share Application A/c Dr.		20,00,000	
	To Equity Share Capital A/c			5,00,000
	To Equity Share Allotment A/c			1,50,000
	To Calls-in-Advance A/c			2,50,000
	To Bank A/c			11,00,000
	(Amount on share application adjusted to share capital, share allotment and calls in advance and the balance refunded including the money on rejected applications)			
February 01	Equity Share Allotment A/c Dr.		7,50,000	
	To Equity Share Capital A/c			7,50,000
	(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)			
	Bank A/c Dr.		6,00,000	
	To Equity Share Allotment A/c			6,00,000
	(Allotment money received)			
April 01	Equity Share First Call A/c Dr.		7,50,000	
	To Equity Share Capital A/c			7,50,000
	(First Call money due on 1,00,000 shares @ Rs. 7.50 per share)			
April 01	Bank A/c Dr.		6,00,000	
	Calls in Advance A/c Dr.		1,50,000	
	To Equity Share First Call A/c			7,50,000
	(Calls-in-advance adjusted against first call and the balance money on call received)			
June 01	Equity Share Second and Final Call A/c Dr.		5,00,000	
	To Equity Share Capital A/c			5,00,000
	(Final Call money due on 1,00,000 shares @ Rs. 5 per share)			
June 01	Bank A/c Dr.		4,00,000	
	Calls in Advance A/c Dr.		1,00,000	
	To Equity Share Second and Final Call A/c			5,00,000
	(Calls-in-advance adjusted against final call and the balance money on call received)			

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 Under Subscription

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 shares, only. In such a situation, the allotment will be confirmed to 1,90,000 shares and entries shall be made accordingly. However, as stated earlier, it must be ensured that the company has received the minimum subscriptions 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 under the title *'Equity and Liabilities'* of the company's balance sheet under the head *'Reserves and Surpluses'*. It can be used only for the following five purposes:

(a) to issue fully paid bonus shares to the 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 securities of the company; and
(d) to pay premium on the redemption of preference shares or debentures of the company.

(e) Purchase of its own shares (i.e., buy back of shares).
The journal entries for shares 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)

(b) Share Application A/c Dr.
To Share Capital A/c
To Securities Premium Reserve A/c
(Transfer of application money to share capital and securities premium account)

2. *Premium Amount called with Allotment Money*

(a) Share Allotment A/c Dr.
To Share Capital A/c
To Securities Premium Reserve 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)

3. *Premium Amount called with Call Money*

(a) Share Application A/c
To Share Capital Reserve A/c
To Securities Premium A/c
(Amount due on $I^{st}/2^{nd}$ call @Rs— per share including premium)

(b) Bank A/c Dr.
To Share Call A/c
(Call 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 Reserve A/c				70,000
	(Amount due on allotment of 35,000 shares @ Rs. 5 per share including premium)				
	Bank A/c	Dr.		1,75,000	
	To Equity Share Allotment A/c				1,75,000
	(Money received including premium)				
	Equity Share First and Final Call A/c	Dr.		1,40,000	
	To Equity Share Capital A/c				1,40,000
	(Amount due on First and Final Call of Rs. 4 per share on 35,000 shares)				
	Bank A/c	Dr.		1,40,000	
	To Equity Share First and Final Call A/c				1,40,000
	(Money received on First and Final Call)				

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 issue of sweat equity shares.

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 such cash is received for 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. The number of shares to be issued to the vendor will be calculated as follows:

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

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 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 shares 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. To Share Capital A/c (5,400 Shares issued at par)	5,40,000	 5,40,000
(b)	*When shares are issued at premium of 20%* Handa Limited Dr. To Share Capital A/c To Securities Premium Reserve A/c (4,500 shares issued at Rs.120 per share)	 5,40,000	 4,50,000 90,000

Illustration 9

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 entries passed if the shares are issued :

(a) at par
(b) at 20% premium

Solution:

Number of shares will be calculated as follows:

(a) When shares issued at par

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

(b) 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. To Bank A/c To High Life Machine Limited (Machine purchased and Rs. 20,000 paid in cash and the balance paid by issue of share)		3,80,000	 20,000 3,60,000
(a)	*When shares are issued at par* High Life Machine Limited Dr. To Share Capital A/c (3,600 Shares are Rs.100 each)		 3,60,000	 3,60,000

(b)	*When shares are issued at premium* High Life Machine Limited Dr. To Share Capital A/c To Securities Premium Reserve A/c (3,000 shares issued at Rs.120 per share)		3,60,000	 3,00,000 60,000

Test your Understanding – II

Choose the correct answer.

(a) Equity shareholders are:
- (i) creditors
- (ii) owners
- (iii) customers of the company
- (iv) none of the above

(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 F” at :
- (i) 10%
- (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
- (iv) none of the above

(e) Shares can be forfeited :
- (i) for non-payment 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 Profit on 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
- (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. These provisions are usually based on Table F 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. Following is the accounting treatment of shares issued at par, premium or at a discount. 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 the respective unpaid calls accounts's or calls in arrears account with the amount already received. Thus, the journal entry will be as follows:

(a) *Forfeiture of Shares issued at Par:*

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

It may be noted here that when the shares are forfeited, all entries relating to the forfeited shares must be reversed except the entry relating to share premium received, if any. Accordingly, the share capital is debited to the extent to called-up capital and credited to (i) respective unpaid calls account i.e., calls in arrears and (ii) share forfeiture account with the amount already received on shares.

The balance of shares forfeited account is shown as an addition to the total paid-up capital of the company under the head *'Share Capital'* under title *'Equity and Liabilities'* of the Balance Sheet till the forfeited shares are reissued.

Illustration 10

Honda Limited issued 10,000 equity shares of 100 each payable as follows: Rs. 20 on application, Rs. 30 on allotment, Rs. 20 on first call and Rs. 30 on second and final calls 10,000 shares were applied for and allotted. 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 Honda Limited
Journal

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

Forfeiture of Shares issued at a Premium: If shares were initially issued at a premium and the premium amount has been fully realised, but some of the shares are forfeited due to non-payment of call money, the accounting treatment for forfeiture shall 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 securities premium account is not to be debited at the time of forfeiture if the premium has been received in respect of the forefeited shares and the amount of forfeiture shall be excluding premium amount.

In case, however, if the premium amount has not been received, either wholly or partially, in respect of the shares forfeited, the Securities Premium Reserve 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 Reserve 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: If Calls in Arrears Account is maintained, Calls in Arrears Account is credited and not the Share Allotment and/or Share Call/Calls Accounts.

Illustration 11

Sahil, a share holder, failed to pay the money for 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 second and Final Call A/c			20,000
	To Share Forfeiture A/c			80,000
	(Forfeiture of 1,000 shares for non-payment of the second and final call)			

Illustration 12

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 Reserve A/c	Dr.		5 ,000	
	Securities Premium A/c	Dr.		1,000	
	To Share Allotment A/c				2,000
	To Share first and final Call A/c				1,500
	To Share Forfeiture A/c				2,500
	(Forfeiture of 500 shares for non-payment of first and final call)				

Illustration 13

Ashok Limited issued 3,00,000 equity shares of Rs. 10 each at a premium of Rs. 2 per share, payable as 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 Reserve A/c			6,00,000
	(Allotment money due on 3,00,000 shares)			
	Bank A/c Dr.		12,00,000	
	To Equity Share Allotment Reserve 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 on 3,00,000 Shares)			
	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 Forfeiture A/c			4,800
	To Call in Arrears A/c			3,200
	(Forfeiture of 800 shares)			

Balance Sheet of Ashok Limited as on ....

Particulars	*Note No.*	*Amount (Rs.)*
I EQUITY AND LIABILITIES		
1. Shareholders' Funds		
(a) Share Capital	1	29,96,800
(b) Reserves and Surplus	2	6,00,000
		35,96,800
II ASSETS		
1. Current Assets		
Cash and Cash Equivalents	3	35,96,800
		35,96,800

Notes to Accounts

		Rs.
1. *Share Capital*		
Authorised Capital		
... Equity shares of Rs. 10 each		
Issued Capital		
3,00,000 Equity shares of Rs. 10 each		**30,00,000**
Subscribed Capital		
Subscribed and Fully Paid-up		
2,99,200 Equity shares of Rs. 10 each		29,92,000
Add: Share forfeiture accounts		4,800
		29,96,800
2. *Reserves and Surplus*		
Securities Premium Reserve		**6,00,000**
3. *Cash and Cash Equivalents*		
Cash at bank		**35,96,800**

Illustration 14

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 and 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 was utilised towards allotment.

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

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

Second and final call was made. All the money due on second 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 Reserve 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 Application A/c	Dr.		2,00,000	
	To Bank A/c				2,00,000
	(Amount returned on 500 shares)				
	Share Allotment A/c	Dr.		9,00,000	
	To Share Capital A/c				6,00,000
	To Securities Premium Reserve A/c				3,00,000
	(Money due on allotment)				
	Bank A/c	Dr.		6,86,000	
	To Share Allotment A/c				6,86,000
	(Amount received in allotment)				
	Share Capital A/c	Dr.		30,000	
	Securities Premium Reserve A/c	Dr.		6,000	
	To Share Allotment A/c				14,000
	To Share Forfeiture A/c				22,000
	(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. To Share First Call A/c To Share Forfeiture A/c (Forfeiture of 900 Aman Shares)		72,000	 27,000 45,000
	Share Second and Final Call A/c Dr. To Share Capital A/c (Second and Final Call money due on 28,500 shares)		5,70,000	 5,70,000
	Bank A/c Dr. To Share Second and Final Call A/c (Due money received)		5,70,000	 5,70,000
	Bank A/c Dr. Share Forfeiture A/c Dr. To Share Capital A/c (Reissue of 1,000 forfeited shares)		80,000 20,000	 1,00,000
	Share Forfeiture A/c Dr. To Capital Reserve (Profit on 1,000 reissued shares transferred to capital reverve)		18,333	 18,333

Working Notes:

(I) Excess amount received on Rohan's application

Rohan has been alloted = 600 Shares

He must have applied for $\frac{\text{Rs. } 35{,}000}{\text{Rs. } 30{,}000} \times 600$ 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)
	6,86,000

(III) Money received on First Call

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 $= \frac{22{,}000}{600} \times 100 \quad = \quad 3{,}667$

Profit in 900 shares = 45,000

48,667

Less: Loss on reissue of 1,000 shares (20,000)

28,667

(V) Balance in Share Forfeiture Account of 500 shares

$$\text{Rs. } \frac{22{,}000}{600} \times 500 = \text{Rs. } 18{,}333$$

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 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 first and final calls of Rs.2 each. Calculate the amount forfeited by the company and pass the journal entry for forefeiture of the shares.

Illustration 15

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, excess application money under pro-rata distribution credited to share allotment and money refunded on rejected application)			
	Equity Share Allotment A/c Dr.		2,00,000	
	To Equity Share Capital A/c			1,20,000
	To Securities Premium Reserve 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.		1,09,200	
	Calls-in-Arrears A/c Dr.		10,800	
	To Equity Share Call A/c			1,20,000
	(Money received on first call)			
	Equity Share Capital A/c Dr.		36,000	
	Securities Premium Reserve A/c Dr.		3,200	
	To Share Forfeiture A/c			21,680
	To Call-in-Arrears A/c			17,520
	(Entry for forfeiture of 3,600 shares)			

Working Notes :

I. Amount received on allotment **Rs.**

(a) Amount due on allotment 2,00,000
40,000 shares × Rs. 5 per share

(b) Amount actually due on allotment 2,00,000
Amount due on allotment
Less Excess Application amount applied for allotment 32,000

Amount actually due 1,68,000

(c) Allotment amount due from Chitnis
Allotment money due on Chitnis's share
1,600 shares × Rs. 5 per share 8,000
Less excess application money paid
Due to pro-rata distribution –
(1,920 shares – 1,600 shares) 320 × 4 1,280

Allotment amount due from Chitnis 6,720

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) Rs.7 per share	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, they reissue such shares which may be at par, at premium or at a discount. Forfeited shares may be reissued as fully paid at a par, premium, 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 at the time of initial issue, and that the discount allowed on reissue of forfeited shares should be debited to the 'Forfeited Share Account'. The balance, if any, left in the Share-Forfeited Account relating to reissued Shares, 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:

Share Forfeiture 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 forfeiture 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 be transferred to capital reserve, ensuring that the remaining balance in share forefeiture account is proportionate to the amount forefeited on shares not yet reissued.

Illustration 16

The director of Poly Plastic Limited resolved that 200 equity shares of Rs.100 each be forfeited for non-payment of the second 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 Shares Forfeiture A/c				14,000
	To Share Second 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	
	Shares 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)				
	Shares Forfeiture A/c	Dr.		4,500	
	To Capital Reserve A/c				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 shares × Rs. 70)
Amount forfeited on 150 shares	=	10,500	(150 shares × Rs. 70)
Amount of loss on reissue of 150 shares	=	6,000	(150 shares × Rs. 40)
Amount of profit on reissued shares transferred to capital reserve	=	4,500	(Rs. 10,500 – Rs. 6,000)
Amount forfeited on 50 shares	=	3,500	(50 shares × Rs. 70)
Balance left in share forfeited account (equal to amount forfeited on 50 shares)	=	3,500	(Rs.14,000 – Rs. 6,000 – Rs. 4,500)

Illustration 17

On January 1, 2015, 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 on May 01, 2015.

The lists were closed on February 10, 2015 by which date applications for 70,000 shares 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, 2015.

All the shareholders paid the call due on May 01, 2015 with the exception of an allottee of 500 shares.

These shares were forfeited on September 29, 2015 and reissued us fully paid at Rs. 8 per share on November 01, 2015.

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 2015	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
Feb.10	Bank A/c Dr.		3,50,000	
	To Equity Share Application A/c			3,50,000
	(Amount received on application for 70,000 shares @ Rs. 5 per share Including Premium)			
Feb.16	Equity Share Application A/c Dr.		2,50,000	
	To Equity Share Capital A/c			1,50,000
	To Securities Premium Reserve A/c			1,00,000
	(Transfer of application money on 50,000 shares to share capital and premium accounts consequent upon allotment)			
Feb.16	Equity Share Application A/c Dr.		1,00,000	
	To Bank A/c			40,000
	To Equity Share Allotment A/c			60,000
	(Excess application money credited to share allotment and money refunded on rejected application)			

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	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 and 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 and Final Call A/c (Money received on first call)		1,48,500	 1,48,500
Sept. 29	Equity Share Capital A/c Dr. To Shares Forfeiture A/c To Equity Share First and Final Call A/c (Forfieted of 500 shares for non-payment of call)		5,000	 3,500 1,500
Nov. 1	Bank A/c Dr. Shares Forfeiture A/c Dr. To Equity Share Capital A/c (Reissue of 500 forfeited shares as fully paid at Rs. 8 per share)		4,000 1,000	 5,000
Nov. 1	Shares Forfeiture A/c Dr. To Capital Reserve (Profit on reissue of Forfeited Shares Accounts transferred to capital reserve)		2,500	 2,500

Illustration 18

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 first call)	Rs. 2.50 per share

Subscriptions were received for 3,17,000 shares on April 23, 2017 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, 2017.

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, 2017 and reissued to Aman 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 to transaction would appear in the balance sheet assuming that the company paid interest due from it on October 31, 2017.

Solution:

Books of O Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
2017 April 30	Share Application A/c Dr.		7,92,000	
	To Equity Share Capital A/c			5,00,000
	To Bank			77,500
	To Equity Share Allotment A/c			2,09,000
	To Calls in Advance			6,000
	(Transfer of Application Money to share capital after allotment and excess application money on 86,000 shares due to pro-rata allotment credited to share allotment and calls in advance)			
April 30	Equity Share Allotment A/c Dr.		9,00,000	
	To Equity Share Capital A/c			5,00,000
	To Securities Premium Reserve A/c			4,00,000
	(Allotment amount due on 2,000,000 shares @ Rs. 4.50 per share including premium)			

July 31	Equity Share First Call A/c Dr. To Equity Share Capital A/c (First call money due on 2,00,000 shares @ Rs. 2.50 per share)		5,00,000	 5,00,000
Oct. 31	Equity Share Second and Final Call A/c Dr. To Equity Share Capital A/c (Second call money due on 2,00,000 shares @ Rs. 2.50 per share)		5,00,000	 5,00,000
Oct. 31	Calls in Advance A/c Dr. Calls in Arrears A/c Dr. To Equity Share Second and Final Call A/c (Calls in advance on 8,000 shares adjusted against second call money due)		21,000 250	 21,250
Nov. 15	Equity Share Capital A/c Dr. To Calls in Arrears A/c To Share Forfeiture A/c (Forfeiture of 100 shares for the non-payment of call money)		1,000	 250 750
Nov. 16	Share Forfeiture A/c Dr. To Equity Share Capital A/c (Amount due from A for the reissue of 100 shares as fully paid at Rs. 9 per share)		100	 100
Nov. 16	Share Forfeiture A/c Dr. To Capital Reserve (Profit on reissue of forfeited Shares transferred to Capital reserve)		650	 650

Cash Book

Dr. *Cr.*

Receipts	*Amount (Rs.)*	*Payments*	*Amount (Rs.)*
Equity Share Application	7,92,500	Equity Shares Application	77,500
Equity Share Allotment	6,91,000	Balance c/d	24,00,650
Calls in Advance	40,000		
Equity Share First Call	4,75,000		
Equity Share Second and Final Call	4,78,750		
Equity Share Capital	900		
	24,78,150		**24,78,150**

** Date column omitted.*

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%
ii	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

Buy-back of Shares : When a company purchase its own shares, it is called 'Buy-back of Shares'. Section 68 of The Companies Act, 2013 provides that the company can buy their own shares from either of the following sources :

(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'.

The following procedures have been laid down 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 in any financial year 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 19

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

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 received on 600 shares adjusted towards allotment money	(12,000)
	Net amount due on allotment on 3,000 shares	1,38,000
Less :	Allotment money due on 360 shares alloted to Renuka, not received $\frac{360}{3,000} \times 1,38,000$	(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 Securities premium account as per rules.

Amount forefeited has been worked out as follows :

Application money received from Renuka: $\left(360 \times \frac{3,600}{3,000}\right) = 432 \times$ 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

Excel 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 First 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. 200 of the forfeited shares were reissued as fully paid at Rs.8 per share. Draft necessary journal entries and prepare Share Capital and Share Forfeiture 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 as 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) Ahluwalia 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 20

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 forfeiture account.

Solution:

Books of Sunrise Company Limited
Journal

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

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

Share Forfeiture Account

Dr. Cr.

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.)
	Total money due on 10,000 shares @ Rs. 4 per share	40,000
Less:	Application Money Received on 2,000 shares adjusted against allotment money	(6,000)
	Net amount due on allotment	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 Forfeiture Account represents the money received on forfeited shares excluding Securites 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 200 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	360
Amount received from *Mr. Basu* on 50 shares forfeited which have been reissued $\frac{50}{200} \times$ Rs. 1,200	300
Total amount received on 150 shares which have been forfeited and later reissued	660
Less: Discount on reissue of forfeited shares (150 × Rs. 2)	300
Amount of Capital Profit transferred to capital reserve	360

Illustration 21

Devam Limited issued a prospectus inviting application for 30,000 equity shares of Rs.10 each at a premium of Rs. 4 per share payable as follows:

With Application (including premium Rs.1)	Rs. 3
On Allotment (including premium Rs.1)	Rs. 4
On First call (including premium Rs.1)	Rs. 4
On Second and Final call	Balance

Applications were received for 45,000 shares. 20% of the applications received were rejected and their application money was refunded. Remaining applicants were allotted shares on pro-rata basis.

Mr. Sudhir, who has applied for 600 shares, failed to pay the allotment money and his shares were forfeited immediately after that.

Ms. Muskan, to whom 750 shares were allotted failed to pay the first call and hence her shares were forfeited.

The forfeited shares of Mr. Sudhir were re-issued to Lakshya for Rs. 8 per share as fully paid up.

Final call was made due on remaining applicants and was received except on 1,000 shares of Amit. These shares were forfeited.

Of the shares forfeited, 1,500 shares were re-issued to Devika for Rs. 12 per share as fully paid up, the whole of Lakshya's share being included. Record journal entries in the books of the company.

Solution:

Books of Devam Limited
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
	Bank A/c Dr. To Equity Share Application A/c (Application money received on 45,000 shares)		1,35,000	 1,35,000
	Equity Share Application A/c Dr. To Equity Share Capital A/c To Securities Premium Reserve To Equity Share Allotment A/c To Bank A/c (Application money on 30,000 shares transferred to share capital A/c and securities premium reserve account, on 9,000 shares refunded and the excess amount adjusted to share allotment account)		1,35,000	 60,000 30,000 18,000 27,000
	Equity Share Allotment A/c Dr. To Equity Share Capital A/c To Securities Premium Reserve (Allotment amount due on 30,000 Shares @ Rs. 4 per share including premium)		1,20,000	 90,000 30,000
	Bank A/c Dr. To Equity Share Allotment A/c (Allotment amount received after adjusting excess money received on application except shares of Sudhir)		1,00,300	 1,00,300
	Equity Share Capital A/c Dr. Securities Premium Reserve A/c Dr. To Equity Share Allotment A/c To Share Forfeiture A/c (Forfeiture of 500 shares of Sudhir)		2,500 500	 1,700 1,300
	Equity Share First Call A/c Dr. To Equity Share Capital A/c To Securities Premium Reserve (First Call amount due on 29,500 shares)		1,18,000	 88,500 29,500
	Bank A/c Dr. To Equity Share First Call A/c (First call amount received on 28,750 shares)		1,15,000	 1,15,000

	Equity Share Capital A/c Dr. Securities Premium Reserve A/c To Equity Share First Call A/c To Share Forfeiture A/c (Forfeiture of 750 shares of Muskan)		6,000 750 	 3,000 3,750
	Bank A/c Dr. Share Forfeiture A/c Dr. To Equity Share Capital A/c (Re-issue of 500 forfeited shares of Sudhir)		4,000 1,000 	 5,000
	Share Forfeiture A/c Dr. To Capital Reserve (Profit on 500 re-issued shares transferred to Capital reserve)		300 	 300
	Equity Share Second and Final Dr. To Equity Share Capital A/c To Securities Premium Reserve A/c (Second and Final Call money due on 28,750 shares)		86,250 	 57,500 28,750
	Bank A/c Dr. To Equity Share Second and Final Call A/c (Second and final call amount received on 27,750 shares)		83,250 	 83,250
	Equity Share Capital A/c Dr. Securities Premium Reserve Dr. To Equity Share Second and Final Call A/c To Share Forfeiture A/c (Forfeiture of 1,000 shares of Amit)		10,000 1,000 	 3,000 8,000
	Bank A/c Dr. To Equity Share Capital A/c To Securities Premium Reserve A/c (Re-issue of 1,500 forfeited shares, including 1,000 shares of Lakshya and 500 shares of Muskan)		18,000 	 15,000 3,000
	Share Forfeiture A/c Dr. To Capital Reserve (Profit on 1,500 re-issued shares transferred to Capital Reserve)		10,500 	 10,500

Working Notes:

1. Amount received on allotment *(Rs.)*

a. Amount due on allotment		
30,000 shares × Rs. 4 per share		1,20,000
b. Amount actually due on allotment		
Amount due on allotment		1,20,000
Less: Excess Application amount applied for allotment		18,000
Amount actually due.		1,02,000
c. Allotment money due from Sudhir		
Shares Applied by Sudhir	= 600	
Shares Allotted to Sudhir	$= \frac{30,000}{36,000} \times 600 = 500$	
Allotment money due from Sudhir		
500 shares × Rs. 4 per share		2,000
Less – Excess application money paid		
(600 shares – 500 shares) × Rs. 3		300
Allotment money due from Sudhir		1,700
d. Amount actually due on Allotment		1,02,000
Less Amount Unpaid by Sudhir		1,700
Amount received on allotment		1,00,300

2. 1,500 shares have been re-issued including 1,000 shares of Amit and balance 500 shares of Muskan.

Profit on 1,000 shares of Amit		8,000
Profit on 500 shares of Muskan	$= \frac{3,750}{750} \times 500 =$	2,500
		10,500

3. Balance in Share Forfeiture Account of 250 shares of Muskan $= \frac{3,750}{750} \times 250 = 1,250$

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 reissued 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.

Termes Used in the Chapter

1. Joint Stock Company
2. Share Capital
3. Authorised Capital
4. Issued Capital
5. Unissued Capital
6. Subscribed Capital
7. Subscribed and fully paid-up
8. Subscribed but not fully paid up
9. Paid-up Capital
10. Reserve Capital
11. Shares
12. Preference Shares
13. Non-redeemable Preference Shares
14. Equity Shares
15. Issue of Shares for Consideration Other than Cash
16. Premium on Shares
17. Application Money
18. Minimum Subscription
19. Calls on Shares
20. Calls in Arrears
21. Calls in Advance
22. Over subscription
23. Under subscription
24. Forfeiture of Shares
25. Reissue of forfeited shares
26. 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 legal person as regards its business through 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, 2013. 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 discreet 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.

Over Subscription: It is possible for the shares of some companies to be over subscribed which means that applications for more shares are received than the number offered for subscription.

If the amount of minimum subscription is not received to the extent of 90%, the issue dissolves. 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 Reserve 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. for 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. According to the Companies Act, 2013, only sweat equity shares can 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 Forfeiture Shares Account.

Reissue 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 Share forfeiture account relating to shares being reissued. Therefore, discount allowed on the reissue of forfeited shares is debited to Share forfeiture account.

Once all the forfeited shares have been reissued, any credit balance on Share forfeiture 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 Share forfeiture 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 a private company.
3. When can shares be Forfeited?
4. What is meant by Calls in Arrears?
5. What do you mean by a listed company?
6. What are the uses of securities premium?
7. What is meant by Calls in Advance?
8. 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, 2013 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 the amount of Securities Premium.
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 Adarsh 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 shares were fully subscribed and all money was dully received. Prepare journal and Cash Book.

3. Software Solution India Ltd. invited applications for 20,000 equity shares 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 shares allotted half of the number of shares applied and excess application money adjusted into allotment. All money due on allotment and call was received.

   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 members paid 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 rejected 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 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, with an authorised capital of Rs.10,00,000 is divided into 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 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 premium of 5%. The shares were payable Rs.25 on application, Rs. 50 on allotment and Rs.30 on first and final call. The issue was fully subscribed and money was duly received except the final call on 400 shares. The premium was adjusted on allotment.

Give journal entries and prepare the balance sheet.

9. Kumar Ltd. purchased 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 shares are issued, (a) at par, and (b) at premium of 20%.

(Answer: Numbers of shares issued (a) 6,300 (b) 5,250)

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 shares 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.

(Answer: Numbers 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 the 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.

(Answer: Capital Reserve = Rs. 4,500)

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

On application	Rs.20
On allotment	Rs.50 (Rs.40 + premium 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 share.

Give journal entries in the books of the company.

(Answer: 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

Applications 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 shares were also forfeited. All these shares were sold to Kartika as fully paid for Rs.80 per share.

Give journal entries in the books of the company.

(Answer: Capital Reserve = Rs.15,500)

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 and show the transactions relating to share capital in the company's balance sheet.

(Answer = Rs. 14,400)

16. Prince Limited issued a prospectus inviting applications for 20,000 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 his 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.

(Answer: 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. All shareholders paid the call due, with the exception of one shareholder of 500 shares. These shares were forfeited and reissued as fully paid at Rs.8 per share. Journalise the transactions.

    (Answer: 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 reissued as fully paid at Rs.9 per share. Give journal entries and prepare the balance sheet.

    (Answer: 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.

    (Answer: Capital Reserve = Rs. 2,100)

20. Ashoka Limited Company which had issued equity shares of Rs.20 each at a premium of Rs. 4 per share, forfeited 1,000 shares for non-payment of final call of Rs.2 per share. 400 of the forfeited shares were 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.

    (Answer: Capital Reserve = Rs. 6,800, Balance of Share Forfeiture Account: Rs. 4800)

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 failed 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.

    (Answer: Capital Reserve = Rs. 2,500)

22. Ajanta Company Limited having a nominal 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.

    (Answer: Capital Reserve = Rs. 2,600)

23. Journalise the following transactions in the books Bhushan Oil Ltd.:

    (a) 200 shares of Rs.100 each issued at a premium of Rs.10 were forfeited for the non-payment of allotment money of Rs.60 per share. The first and final call of Rs.20 per share on these shares were not made. The forfeited shares 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 calls of Rs.4 per share were not made. The forfeited shares were reissued at Rs.15 per share fully paid-up.

(c) 400 shares of Rs.50 each issued at par were forfeited for non-payment of final call of Rs.10 per share. These shares were reissued at Rs.45 per share fully paid-up.

(Answer: Capital Reserve = (a) NIL (b) Rs. 300 (c) Rs.14,000)

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

Applications were received for 50,000 shares and allotment was made on pro-rata basis. Excess money on application was adjusted against the 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 1,000 shares failed to pay the two calls and her shares were forfeited after the second call. Of the shares forfeited, 1,200 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.

(Answer: Capital Reserve = Rs. 48,000 Balace of Share Forfeiture A/c Rs.12,000)

Answers to Test your Understanding

Test your Understanding – I

(a) True, (b) False, (c) False, (d) True, (e) True, (f) True, (g) False, (h) True, (i) False, (j) True, (k) 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 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(30) of The Companies Act, 2013 'Debenture' includes Debenture Inventory, Bonds and any other securities of a company whether constituting a charge on the assets of the company or not.

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 'share' represents ownership of the company whereas a debenture is only acknowledgement of Debt. 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 prefixed. The payment of dividend is an appropriation of 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, whereas, generally, the debentures are issued for a specified period and repayable on the expiry of that period. However, in the year 1998, the amendements (Section 77A and 77 B sub Section 2) in the Companies Act, permitted companies to buy back its shares specially when market value of shares are less than its book value.

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

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 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 give any undertaking for the repayment of money borrowed by issuing such debentures. These debentures are repayable on the 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 fall in this category.

2.3.4 From Coupon Rate Point of view

(a) *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.

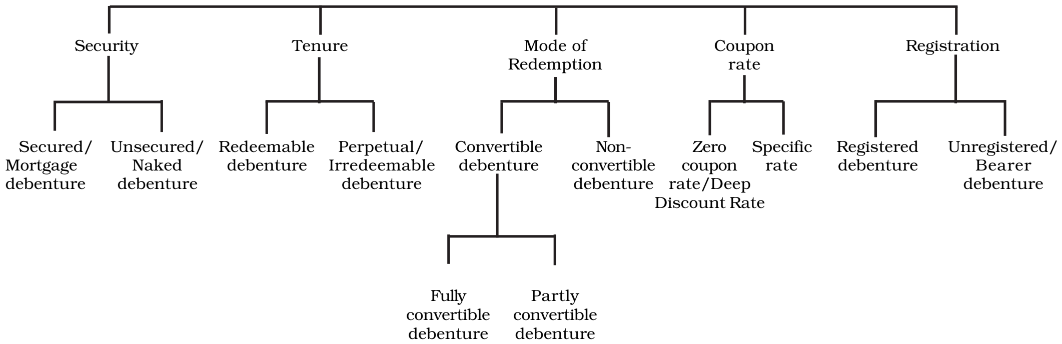
(b) *Zero Coupon Rate Debentures*: These debentures do not carry a specific rate of interest. In order to compensate the investors, such debentures are issued at substantial discount and the difference between the nominal value and the issue price is treated as the amount of interest related to the duration 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 application money
Bank A/c Dr.
To Debenture Application & Allotment A/c

(ii) On Allotment of debentures
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 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

Note: 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.

Illustration 1

ABC Lmited issued 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 was duly received. Give journal entries in the books of ABC Ltd., and exhibit the relevent information in 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

ABC Limited

***Balance Sheet as at ....**

Particulars	*Note No.*	*Amount (Rs)*
I. Equity and Liabilities		
Non-current liabilities	1	**9,00,000**
Long-term borrowings		
II. Assets		
Current assets		
Cash and cash equivalents	2	**9,00,000**

* Relevant data only

Notes to Accounts

Particulars	*Amount (Rs)*
1. Long-term borrowings	
9,000, 12% Debentures of Rs 100 each	**9,00,000**
2. Cash and cash equivalents	
Cash at bank	**9,00,000**

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 under the line item 'Other Non-Current Assets' or 'Other Current Assets' depending upon the time period in which it is to be written off. The discount on issue of debentures can be written off either by debiting it to Statement of Profit and Loss or out of Securities Premium Reserve A/c, if any, during the life time of debentures.

Discount on issue of debentures to be written off within 12 months of the balance sheet date or the period of operating cycle is shown under 'Other Current Assets' and the part which is to be written off after 12 months of balance sheet is shown under 'Other Non-Current Assets'.

The Companies Act, 2013 does not impose any restrictions upon the issue of debentures at a discount.

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 those 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)			

TV Components Limited

Balance Sheet as at..................

Particulars	*Note No.*	*Amount (Rs)*
I. Equity and Liabilities		
1. Non-current Liabilities		
Long-term borrowings	1	**10,00,000**
II. Assets		
1. Non-current assets		
Other non-current assets	2	45,000
2. Current assets		
a) Cash and cash equivalents	3	9,50,000
b) Other current assets	4	5,000
		10,00,000

Notes to Accounts

Particulars	*Amount (Rs)*
1. Long-term borrowings	
10,000, 12% secured debentures of Rs 100 each	10,00,000
2. Other non-current assets	
Discount on issue of debentures	45,000
3. Cash and cash equivalents	
Cash at bank	9,50,000
4. Other current assets	
Discount on issue of debentures (To be written-off within 12 months of the balance sheet date or the period of operating cycle)	5,000

Notes:
1 It is presumed that debentures are redeemable after 10 years.
*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 Reserve 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 a 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.		1,00,000	
	To 10% Debenture Application A/c			1,00,000
	(Application money Rs 50 per debentures received)			
	10% Debenture Application A/c Dr.		1,00,000	
	To 10% Debentures A/c			1,00,000
	(Transfer of application money to debenture account)			
	10% Debenture Allotment A/c Dr.		1,20,000	
	To 10% Debentures A/c			1,00,000
	To Securities Premium Reserve 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)			

XYZ Industries Limited
Balance Sheet as at ———

Particulars	Note No.	Amount (Rs)
I. Equity and Liabilities		
1. Shareholders' Funds		
Reserve and Surplus	1	20,000
2. Non-current Liabilities		
Long-term borrowings	2	2,00,000
		2,20,000
II. Assets		
Current Assets		
Cash and cash equivalents		**2,20,000**

Notes to Accounts

Particulars	*Amount (Rs)*
1. Reserve and surplus	
Securties Premium Reserve	**20,000**
2. Long-term borrowings	
2,000, 10% debentures of Rs 100 each	**2,00,000**
3. Cash and cash equivalents	
Cash at bank	**2,20,000**

Illustration 4

A Limited 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 the 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 Reserve A/c			50,000
	(Allotment money of due on debentures including the premium)			

	Bank A/c Dr. To 10% Debenture Allotment A/c (Allotment money received)		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)		2,00,000	 2,00,000
	Bank A/c Dr. To 10% Debenture First & Final Call A/c (First and final call money received)		2,00,000	 2,00,000

A Limited

Balance Sheet as at ———

Particulars	*Note No.*	*Amount (Rs)*
I. Equity and Liabilities		
1. Shareholders' Funds		
a) Reserve and Surplus	1	50,000
2. Non-current Liabilities		
Long term borrowings	2	5,00,000
Total		**5,50,000**
II. Assets		
1. Current assets		
a) Cash and cash equivalents		**5,50,000**

Notes to Accounts

Particulars	*Amount (Rs)*
1. Reserve and surplus	
Securities Premium Reserve	**50,000**
2. Long-term borrowings	
5,000, 10% debentures of Rs 100 each	**5,00,000**

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 Limited Issued 10,000, 12% debentures of Rs 100 each payable Rs 40 on application and Rs 60 on allotment. The public applied for 14,000 debentures. Applications for 9,000 debentures were accepted in full; applications for 2,000 debentures were allotted 1,000 debentures and the remaining applications, 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.		5,60,000	
	To 12% Debentures A/c			4,00,000
	To Debentures Allotment A/c			40,000
	To Bank A/c			1,20,000
	(Debenture Application money transferred to Debenuture A/c, Excess application money credited to Debenture Allotment account and money refunded on rejected application)			
	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	
	To Debenture Allotment A/c			5,60,000
	(Allotment money received)			

2.6 Issue of Debentures for Consideration other than Cash

Sometimes a company purchase assets from vendors and instead of making payment in cash issues debentures for consideration thereof. Such issue of debentures is called debentures 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 Reserve A/c

   (c) At a discount

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

Illustration 6

Aashirward Company Limited 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. To Vendors (Assets purchased from vendors)		2,00,000	2,00,000
	Vendors Dr. To 10% Debentures A/c (Allotment of debentures to vendors as purchase consideration)		2,00,000	2,00,000

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 Reserve 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 Company
Journal

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

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

Sometimes a company may purchase the assets as well as takeover its liabilities of another concern. It happens usually in 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 (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.		20,00,000	
	To Kapil Enterprises			18,00,000
	To Sundry Creditors A/c			2,00,000
	(Purchase of business from Kapil Enterprises)			
	Kapil Enterprises Dr.		18,00,000	
	To 8% Debentures A/c			18,00,000
	(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, the 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 11). 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 Reserve 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 $= \dfrac{\text{Purchase Consideration}}{\text{Issue Price of a Debenture}}$

$= \dfrac{\text{Rs } 3,15,000}{105} = 3,000$

Illustration 12

A Limited 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 Limited.*

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
	(Purchased assets and took over liabilities from B Ltd.)				

	B & Co. Ltd. Dr.		2,70,000	
	To 15% Debentures A/c			2,25,000
	To Securities Premium Reserve A/c			45,000
	(Issue of 2,250 debentures of Rs 100 each at a premium of 20%)			

Do it Yourself

1. Amrit Company Limited purchased assets of the 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
	Securities Premium Reserve A/c			18,000
	(12% Debentures issued to Suppliers Ltd. at 10% premium)			

Workings:

(a)

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

Number of debentures issued in case of 10% discount $= \dfrac{\text{Rs. } 1{,}98{,}000}{90}$

= 2,200 debenture

(b)

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

Number of debentures issued in case of 10% premium $= \dfrac{\text{Rs.} 1{,}98{,}000}{110}$

= 1,800 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 additional 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 falls short of the loan money. In such situation, the company may issue its own debentures to the lenders in addition to some other assets already pledged. Such an issue of debentures is known as 'Debentures issued as Collateral Security'.

If the company fails to repay the loan along with interest, the lender 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 within 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:

X Company
Balance Sheet as at __________

Particulars	*Note No.*	*Amount (Rs)*
I. Equity and Liabilities		
1. Non-current Liabilities		
Long-term borrowings	1	**10,00,000**

Notes to Accounts

Particulars	*Amount (Rs)*
1. Long-term borrowings	
Bank Loan	
(Secured by issue of 10,000, 10% debentures of Rs. 10 each as Collatoral Security)	**10,00,000**

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 in notes to accounts of long-term borrowings. 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 Co. ____________ (Extract)

Particulars	*Note No.*	*Amount (Rs)*
I. Equity and Liabilities		
1. Non-current Liabilities		
Long term borrowings	1	**10,00,000**

Notes to Accounts

Particulars	*(Rs)*	*Amount (Rs)*
1. Long term borrowings		10,00,000
Bank loan		
10,000, 9% debentures of		
Rs 100 each	10,00,000	
Less: Debenture suspense	10,00,000	—
		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)

Particulars	*Note No.*	*Amount (Rs)*
I. Equity and Liabilities		
1. Non-current Liabilities		
Long-term borrowings	1	**10,00,000**

Notes to Accounts

Particulars	*Amount (Rs)*
1. Long-term borrowings	
Bank loan	**10,00,000**
(Secured by issue of 12,000, 10% debentures of Rs. 100 each as Collatoral Security	

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 P.N.Bank)				

Balance Sheet (Extract)

Particulars	*Note No.*	*Amount (Rs)*
I. Equity and Liabilities		
1. Non-current Liabilities		
Long-term borrowings	1	**10,00,000**

Notes to Accounts

Particulars	*(Rs)*	*Amount (Rs)*
1. Long-term borrowings		
Secured Loan from PNB		10,00,000
12,000, 10% debentures of Rs. 100 each	12,00,000	
Less: Debenture Suspense	12,00,000	—
		10,00,000

Do it Yourself

1. Raghuveer Limited issued Rs 10,00,000, 8% debentures as follows to:

		Rs
1.	Sundry Subscribers for Cash at 90%	5,50,000
2.	Vendor of Machinery for Rs 2,00,000 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 will 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 the 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 lakh. 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 balance sheet of the company.

2.8 Terms of Issue of Debentures

When a company issues debentures, it usually mentions the terms on which they will be redeemed on their maturity. Redemption of debentures means discharge of liability on account of debentures by repayment made to the debenture holders. 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

In all the above six cases, the following journal entries will be passed:

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 Reserve 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 Reserve 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 on 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 Non-current liabilities under sub-head 'Long-term Borrowings' until debentures are redeemed.
3. Loss on issue of debentures is a capital loss and it is to be written-off gradually charged to statement of profit and loss or securities premium account.

Illustration 15

Give Journal entries for the following:

1. Issue of Rs 1,00,000, 9% debentures of Rs 100 each at par and redeemable at par.

2. Issue of Rs 1,00,000, 9% debentures of Rs 100 each at premium of 5% but redeemable at par.
3. Issue of Rs 1,00,000, 9% debentures of Rs 100 each at discount of 5% repayable at par.
4. Issue of Rs 1,00,000, 9% debentures of Rs 100 each at par but repayable at a premium of 5%.
5. Issue of Rs 1,00,000, 9% debentures of Rs 100 each at discount of 5% but redeemable at premium of 5%.
6. Issue of Rs 1,00,000, 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 Reserve 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.		1,00,000	
	To 9% Debenture Application & Allotment A/c			1,00,000
	(Debentures Application money received)			
	Debenture Application & Allotment A/c Dr.		1,00,000	
	Loss on Issue of Debentures A/c Dr.		5,000	
	To 9% Debentures A/c			1,00,000
	To Premium on Redemption of Debentures A/c			5,000
	(Debentures Application money transferred to Debentures account)			
5	Bank A/c Dr.		95,000	
	To 9% Debenture Application & Allotment A/c			95,000
	(Debentures Application money received)			
	Debenture Application & Allotment A/c Dr.		95,000	
	Loss on Issue of Debentures A/c Dr.		10,000	
	To 9% Debentures A/c			1,00,000
	To Premium on Redemption of Debentures A/c			5,000
	(Debentures application money transferred to debentures and Premium on debenture account)			
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 Reserve A/c			5,000
	(Debenture application money transferred to debentures account)			

Illustration 16

You are required to pass 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	
	To Debenture Application and Allotment A/c			
	(Debenture application money received)			1,14,000
	Debenture Application and Allotment A/c Dr.		1,14,000	
	Discount on Issue of Debentures A/c Dr.		6,000	
	To 8% Debentures A/c			1,20,000
	(Debentures application money transferred to Debentures A/c)			

Books of X Ltd.

Balance Sheet as at____________

Particulars	Note No.	Amount (Rs)
I. Equity and Liabilities		
1. Non-current Liabilities		
Long-term borrowings	1	1,20,000
		1,20,000
II. Assets		
1. Non-current assets		
Other non-current assets	2	4,800
2. Current assets		
Cash and cash equivalents	3	1,14,000
Other current assets	4	1,200
		1,20,000

Notes to Accounts

Particulars	Amount (Rs)
1. Long-term borrowings	
120, 8% debentures of Rs 1,000 each	**1,20,000**
2. Other non-current assets	
Discount on issue of debentures	**4,800**
3. Cash and cash equivalents	
Cash at bank	**1,14,000**
4. Other current assets	
Discount on issue of debentures	**1,200**

Note: Discount on Issue of Debentures is written-off in 5 years, presuming that debentures are redeemable after 5 years.

Books of X Ltd.

(b) **Journal**

Date	Particulars	L.F.	Debit Amount (Rs)	Credit Amount (Rs)
	Bank A/c Dr.		1,42,500	
	To Debenture Application and Allotment A/c			
	(Debenture application money received)			1,42,500
	Debenture Application and Allotment A/c Dr.		1,42,500	
	Loss on Issue of Debentures A/c Dr.		22,500	
	To 8% Debentures A/c			1,50,000
	To Premium on Redemption of Debenture A/c			15,000
	(Debentures application money transferred to Debentures A/c)			

Books of X Ltd.

Balance Sheet as at________________

Particulars	Note No.	Amount (Rs)
I. Equity and Liabilities		
1. Non-current Liabilities		
a) Long-term borrowings	1	1,50,000
b) Other long-term liabilities	2	15,000
		1,65,000
II. Assets		
1. Non-current assets		
Other non-current assets	3	18,000
2. Current assets		
a) Cash and cash equivalents	4	1,42,500
b) Other current assets	5	4,500
		1,65,000

Notes to Accounts

Particulars	Amount (Rs)
1. Long-term borrowings	
150, 7% debentures of Rs 1,000 each	**1,50,000**
2. Other long-term liabilities	
Premium on redemption of debentures	**15,000**
3. Other non-current assets	
Loss on issue of debentures	**18,000**
4. Cash and cash equivalents	
Cash at bank	**1,42,500**
5. Other current assets	
Loss on issue of debentures	**4,500**

Note: Discount on Issue of Debentures is written-off in 5 years, presuming that debentures are redeemable after 5 years.

Books of X Ltd.

(c) **Journal**

Date	Particulars	L.F.	Debit Amount (Rs)	Credit Amount (Rs)
	Bank A/c Dr.		84,000	
	To Debenture Application and Allotment A/c			84,000
	(Debenture application money received)			
	Debenture Application and Allotment A/c Dr.		84,000	
	To 9% Debentures A/c			80,000
	To Securities Premium Reserve A/c			4,000
	(Debentures application money transferred to Debentures A/c and securities premium reserve A/c)			

X Ltd.

Balance Sheet as at ....

Particulars	Note No.	Amount (Rs)
I. Equity and Liabilities		
1. Shareholder's funds		
Reserves and surplus	1	4,000
2. Non-current Liabilities		
Long-term borrowings	2	80,000
		84,000
II. Assets		
1. Current assets		
Cash and cash equivalents	3	84,000
		84,000

Notes to Accounts

Particulars	Amount (Rs)
1. Reserves and surplus	
Securities premium reserve	**4,000**
2. Long-term borrowings	
80, 9% debentures of Rs 1,000 each	**80,000**

Books of X Ltd.

(d) **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)			

X Ltd.

Balance Sheet as at ____________ (Extract)

Particulars	Note No.	Amount (Rs)
I. Equity and Liabilities		
1. Long-term borrowings	1	**40,000**

Notes to Accounts

Particulars	Amount (Rs)	Amount (Rs)
1. Long-term borrowings		
Bank loan		40,000
400, 8% debentures of Rs 100 each	40,000	
Less: Debentures suspense	40,000	-
		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 Rs 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 at premium of 5%.

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 statement of Profit and Loss*
   Statement of Profit and Loss Dr.
   To Debenture Interest A/c
   (Debenture interest transferred to profit and loss A/c)

4. *On payment of tax deducted at source to the 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 2,000, 10% debentures of Rs 100 each on April 01, 2016 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 March 31, 2017 assuming that interest was paid half yearly on September 30 and March 31 and tax deducted at source is 10%.

Solution:

Book of A Ltd.

Journal

Date	Particulars	L.F.	Debit Amount (Rs)	Credit Amount (Rs)
2016 Apr. 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
Apr. 01	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
Sept.30	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
	Income Tax payable A/c Dr. Bank A/c (Tax deducted at source paid to the government)		1,000	 1000
2017 Sept.	Debentureholders A/c Dr. To Bank A/c (Payment of interest)		9,000	 9,000
March 31	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
March 31	Debenturesholders A/c Dr. To Bank A/c (Payment of interest)		9,000	 9,000
March 31	Income Tax Payable A/c Dr. To Bank A/c (Paid tax deducted at source to the government)		1,000	 1,000
March 31	Statement of Profit and Loss 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, 2016. Interest is paid on September 30, 2016 and March 31, 2017.

   Record necessary journal entries assuming that income tax is deducted @10% of the amount of interest.
2. Laser India Ltd. Issued 7,00,000, 8% debentures of Rs 100 each at par. Interest is to be paid on these debentures half-yearly on September 30 and March 31, every year. Record necessary journal entries asuming that income tax is deducted @ 10% of the amount of interest.

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. The discount may be charged to Securities Premium A/c or may be written-off over 3 to 5 years through statement of profit and loss as per guidelines issued by ICAI. 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.

Statement of Profit and Loss 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 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

Do it Yourself

1. X Ltd. issued 2,000, 10% debentures of Rs 100 each at a discount of 8% on April, 2014 which are redeemable at par by annual drawings in 4 years commencing from March 31, 2015 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% debentures 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 1.4.2014. The debentures are to be redeemed every year by draw of lots – 1,000 debentures to be redeemed every year starting on 31.03.2015. Record the necessary journal entries including the payment of interest and writing off the discount on issue of debentures. The interest is payable on September 30 and March 31. Z Ltd. closes its books of accounts on March 31 every year.

4. M Ltd. issued 10,000, 8% debentures of Rs 100 each at a premium of 10% on 1.1.2016. It purchased sundry assets of the value of Rs,2,50,000 and took over the liabilities of Rs,60,000 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 31.03.2017. Ignore interest.

5. On 1.4.2016, 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 1.4.2016. 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 18

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	Statement of Profit & Loss Balance c/d	2,000 4,000
		6,000			**6,000**
IInd year	Balance b/d	4,000	IInd year	Statement of Profit & Loss Balance c/d	1,600 2,400
		4,000			**4,000**
IIIrd year	Balance b/d	2,400	IIIrd year	Statement of Profit & Loss Balance c/d	1,200 1,200
		2,400			**2,400**
IVth year	Balance b/d	1,200	IVth year	Statement of Profit & Loss Balance c/d	800 400
		1,200			**1,200**
Vth year	Balance b/d	400	Vth year	Statement of Profit & Loss	400
		400			**400**

Workings Notes:

Total discount on the issue of debentures = $1,00,000 \times \frac{6}{100}$ = Rs 6,000

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

Year	Amount (Rs.)	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
		15	

Test your Understanding-I

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

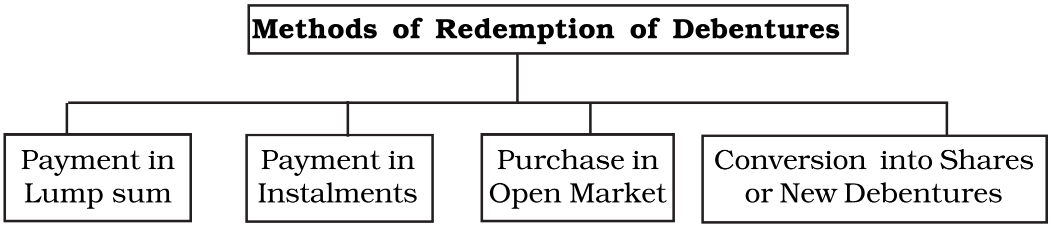
1. Debenture is a part of owned capital.
2. The payment of interest on debentures is a charge on the profits of the company.
3. The debentures cannot be issued at a discount of more than 10% of the face value.
4. Redeemable debentures are those debentures, which are payable on the expiry of the specific period.
5. Perpetual debentures are also known as irredeemable debentures.
6. Debentures cannot be converted into shares.
7. Debentures cannot be issued at a premium.
8. A collateral security is a subsidiary security.
9. Debentures cannot be issued at a premium and redeemable at par.
10. Loss on issue of debentures account is a revenue loss.
11. 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 amount in lump sum to the debentureholders at the maturity thereof as per terms of issue.

Payment in instalments **:** Under this method, normally redemption of debentures is made in instalments on the specified date during the tenure of the debentures. The total amount of debenture liability is divided by the number of years. It is to note that the actual debentures redeemable are identified by means of drawing the requisite number of lots out of the debentures outstanding for payment.

Purchase in open market: When a company purchases its own debentures 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 shares or new class of debentures. If debentureholders find that the offer is beneficial to them, they can exercise their right of converting their debentures into shares or new class of debentures. 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 were originally issued at discount, the actual amount realised from them at the time of issue would be 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.

The following factors should be taken into consideration by the company at the time of redemption of debentures :

1. **Time of redemption of debentures :-** Generally, debentures are redeemed on due date but a company may redeem its debentures before maturity date, if its articles provides for such.
2. **Sources of Redemption of debentures :-** A company may source its redemption of debentures either out of capital or out of profits.

a. *Out of Capital :-* Only those companies which are exempted from creating DRR may redeem debentures out of Capital.

b. *Out of Profits :-* When any company planning to redeem its debentures purely out of profit, it should transfer 100 percent of the face value of the redeemable debentures to DRR out of the surplus available for payment of dividend.

c. *Out of Capital and Profits :-* In case, Company is planning to redeem its debentures by using both the sources partially, it does not transfer 100 percent of face value of outstanding debentures of a particular class to DRR out of the surplus available for payment of dividend.

2.12 Redemption by Payment in Lump Sum

When the company pays the whole amount in lump sum, 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 Debentureholders	
(b)	Debentureholders	Dr.
	To Bank A/c	

Illustration 19

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

1. X Ltd. issued 5,000, 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 A/c				5,00,000
	(Amount due on redemption debentures)				
	Debentureholders A/c	Dr.		5,00,000	
	To Bank A/c				5,00,000
	(Payment made to debentureholders)				
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 A/c	Dr.		1,10,000	
	To Bank A/c				1,10,000
	(Payment made to debentureholders)				
3.	12% Debentures A/c	Dr.		1,00,000	
	To Debentureholders A/c				1,00,000
	(Amount due on redemption)				

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

As per the provisions of the Companies Act, 2013, the company must set 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 :

(a) Where a company has issued debentures, 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.

According to Rule 18(7) of COMPANIES (SHARE CAPITAL AND DEBENTURES) RULES, 2014, the company shall create a Debenture Redemption Reserve for the purpose of redemption of debentures, in accordance with the conditions given below:

(a) The Debenture Redemption Reserve shall be create out of the profits of the company available for payment of dividend;

(b) The company shall create Debenture Redemption Reserve (DRR) in accordance with following conditions:

   i. No DRR is required for debentures issued by All India Financial Institutions (AIFIs) regulated by Reserve Bank of India and Banking Companies for both public as well as privately placed debentures.

   ii. For NBFCs registered with the RBI and for Housing Finance Companies registered with the National Housing Bank, DRR will be 25% of the value of outstanding debentures issued through public issue as per present SEBI (Issue and Listing of Debt Securities) Regulations, 2008, and no DRR is required in the case of privately placed debentures.

iii. For other companies including manufacturing and infrastructure companies, the adequacy of DRR will be 25% of the value of outstanding debentures issued through public issue as per present SEBI (Issue and Listing of Debt Securities) Regulations, 2008.

iv. 25% DRR is required in the case of privately placed debentures by listed companies. For unlisted companies issuing debentures on private placement basis, the DRR will be 25% of the value of outstanding debentures.

(c) Every company required to create Debenture Redemption Reserve shall on or before the 30^{th} day of April in each year, invest or deposit, as the case may be, a sum which shall not be less than fifteen per cent, of the amount of its debentures maturing during the year ending on the 31^{st} day of March of the next year, in any one or more of the following methods, namely :-

i. Deposits with any scheduled bank, free from any charge or lien;

ii. Securities of the Central Government or of any State Government;

iii. Securities mentioned in sub-clauses (a) to (d) and (ee) of section 20 of the Indian Trusts Act, 1882;

iv. Bonds issued by any other company which is notified under sub-clause (f) of section 20 of the Indian Trusts Act, 1882;

v. The amount invested or deposited as above shall not be used for any purpose other than for redemption of debentures maturing during the year referred above:

(d) In case of partly convertible debentures, Debenture Redemption Reserve shall be created in respect of non-convertible portion of debenture issue.

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

Illustration 20

XYZ Ltd. issued 200, 15% debentures of Rs 100 each on April 01, 2013 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 March 31, 2016.

Solution:

Books of XYZ Ltd.
Journal

Date	Particulars		L.F.	Debit Amount (Rs)	Credit Amount (Rs)
2013 April 01	Bank A/c	Dr.		18,000	
	To Debenture Application and Allotment A/c				18,000
	(Application money received on debentures)				
April 01	Debenture Application and Allotment A/c	Dr.		18,000	
	Loss on Issue of Debentures A/c	Dr.		4,000	
	To 15% Debentures A/c				20,000
	To Premium on Redemption of Debentures A/c				2,000
	(Issue of Debentures at 10% discount an redeemable at 10% premium)				
2016 March 31	Balance in Statement of Profit and loss	Dr.		5,000	
	To Debenture Redemption Reserve A/c				5,000
	(Transfer of profits to DRR)				
April 30	Debenture Redemption Investment A/c	Dr.		3,000	
	To Bank A/c				3,000
	(Required amount invested in DRI)				
2017 March 31	Bank A/c	Dr.		3,000	
	To Debenture Redemption Investment				3,000
	(DRI encashed at the time of redemption of debentures)				
March 31	15% Debentures A/c	Dr.		20,000	
	Premium on Redemption of Debentures A/c	Dr.		2,000	
	To Debentureholders A/c				22,000
	(Amount due on redemption)				
March 31	Debentureholders A/c	Dr.		22,000	
	To Bank A/c				22,000
	(Amount paid to debentureholders)				
March 31	Debenture Redemption Reserve A/c	Dr.		5,000	
	To General Reserve				5,000
	(Transfer of DRR to General Reserve After redemption of debentures)				

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) Statement of profit and loss 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 21

ABC Ltd. issued 3,000, 14% Debentures of Rs 100 each at a discount of 5% on April 1, 2012. Interest on these debentures is payable annually on March 31 each year. The debentures are redeemable at par in three equal instalments at the end of the third, fourth and fifth year. Prepare 14% Debentures Account, Discount on Issue of Debentures Account and Debenture Interest Account in the books of the company.

Solution:

14% Debentures Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs)*
2013 Mar.31	Balance c/d		3,00,000	2012 Apr.01	Debenture Application		2,85,000
					Discount on Issue of Debentures		15,000
			3,00,000				**3,00,000**

2014 Mar.31	Balance c/d		3,00,000	2013 Apr.01	Balance b/d		3,00,000
			3,00,000				**3,00,000**
2015 Mar.31	Bank A/c		1,00,000	2014 Apr.01	Balance b/d		3,00,000
Mar.31	Balance c/d		2,00,000				
			3,00,000				**3,00,000**
2016 Mar.31	Bank A/c		1,00,000	2015 Apr.01	Balance b/d		2,00,000
Mar.31	Balance c/d		1,00,000				
			2,00,000				**2,00,000**
2017 Mar.31	Balance c/d		1,00,000	2016 Apr.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)*
2013 Mar.31	Bank		**42,000**	2013 Mar.31	Statement of Profit and Loss		**42,000**
2014 Mar.31	Bank		**42,000**	2014 Mar.31	Statement of Profit and Loss		**42,000**
2015 Mar.31	Bank		**42,000**	2015 Mar.31	Statement of Profit and Loss		**42,000**
2016 Mar.31	Bank		**28,000**	2016 Mar.31	Statement of Profit and Loss		**28,000**
2017 Mar.31	Bank		**14,000**	2017 Mar. 31	Statement of Profit and Loss		**14,000**

Discount on Issue Debentures Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs)*
2012 Apr.01	To 14% debentures A/c		15,000	2013 Mar.31	Statement of Profit and Loss		3,750
				Mar.31	Balance c/d		11,250
			15,000				**15,000**

2013 Apr.01	Balance b/d		11,250	2014 Mar. 31	Statement of Profit and Loss		3,750
				Mar. 31	Balance c/d		7,500
			11,250				**11,250**
2014 Apr.01	Balance b/d		7,500	2015 Mar. 31	Statement of Profit and Loss		3,750
				Mar. 31	Balance c/d		3,750
			7,500				**7,500**
2015 Apr.01	Balance b/d		3,750	2016 Mar. 31	Statement of Profit and Loss		2,500
				Mar. 31	Balance c/d		1,250
			3,750				**3,750**
2016 Apr.01	Balance b/d		1,250	2017 Mar. 31	Statement of 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 April 1, each year is:

	Debenture Outstanding Rs
April 2012	3,00,000
April 2013	3,00,000
April 2014	3,00,000
April 2015	2,00,000
April 2016	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	***Rs***	***Amount Rs***
2012	Rs 15,000 $\times \frac{3}{12}$	3,750
2013	Rs 15,000 $\times \frac{3}{12}$	3,750
2014	Rs 15,000 $\times \frac{3}{12}$	3,750
2015	Rs 15,000 $\times \frac{2}{12}$	2,500
2016	Rs 15,000 $\times \frac{1}{12}$	1,250

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 own 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. Statement of profit and loss Dr.

   To Loss on Redemption of Debentures A/c

Illustration 22

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

* Alternatively, the following two journal entries may be passed:

Date	*Particulars*	*L.F.*	*Debit Amount (Rs)*	*Credit Amount (Rs)*
	Own Debentures A/c To Bank A/c (Purchased its own debentures of Rs. 20,000 @ Rs. 92 each)		18,000	 18,000
	Debentures A/c To Own Debentures A/c To Profit on Redemption of Debentures A/c (Own debentures purchased being cancelled)		20,000	 18,000 2,000

Illustration 23

X Ltd. decided to redeem 250, 12% debentures of Rs 100 each amounting to Rs 25,000. For this purpose, the company purchased debentures amounting to Rs 20000 in the open market at Rs 98.50 each. Expenses of Rs 100 was incurred on it. The balance of debentures amounting to Rs 5,000 were reedemed by draw of lots. Journalise.

Solution:

Books of X Ltd.
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs)*	*Credit Amount (Rs)*
	Balance in Statement of profit and loss A/c Dr. To Debenture Redemption Reserve A/c (Transfer of profits to Debenture Reserve A/c		6,250	 6,250
	Debenture Redemption Investment A/c Dr. To Bank A/c (Required amount invested in DRI)		3,750	 3,750
	Bank A/c Dr. To Debenture Redemption Investment A/c (DRI encashed at the time of redemption of debentures)		3,750	 3,750

	12% Debentures A/c Dr. To Bank A/c To Profit on Redemption of Debentures A/c (Purchase of 200 debentures @ Rs. 98.50 plus expenses amounting to Rs. 100.)		20,000	 19,800 200
	Profit on Redemption of Debentures A/c Dr. To Capital Reserve (Profit on Redemption transferred to Capital Reserve.)		200	 200
	12% Debentures A/c Dr. To Bank A/c (Redemption of Rs. 50 debentures)		5,000	 5,000
	Debenture Redemption Reserve A/c Dr. To General Reserve (Balance is DRR transferred to General Reserve on Redemption of Debentures)		6,250	 6,250

Illustration 24

On April 01, 2013, 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 31 March 2015 either by purchase or by draw of lot at par at the company's option. Rs 10,000 was written-off as the debenture discount account in years ending on March 31, 2014–15. On 31.03.2015, 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)*
2013 Apr. 01	Bank A/c Dr. To 6% Debentures Application & Allotment A/c (Debentures application money received)		9,60,000	 9,60,000
Apr. 01	6% Debentures Application & Allotment A/c Dr. Discount on Issue of Debentures A/c Dr. To 6% Debentures A/c (Debentures application money transferred to Debentures A/c)		9,60,000 40,000	 10,00,000

2014 Mar. 31	Statement of profit and loss Dr. To Discount on Issue of Debenture A/c (Discount on issue of debentures written-off)		10,000	 10,000
Mar. 31	Balance in Statement of profit and loss Dr. To Debenture Redemption Reserve A/c (Transfer of profits DRR)		2,00,000	 2,00,000
Apr. 30	Debenture Redemption Investment A/c Dr. To Bank A/c (Required amount invested in DRI)		30,000	 30,000
2015 Mar. 31	Bank A/c Dr. To Debenture Redemption Investment A/c (DRI encashed at the time of Redemption of debentures)		30,000	 30,000
Mar. 31	6% Debentures A/c Dr. To Bank A/c To Profit on Redemption of Debenture A/c (Redemption of 80 debentures by purchasing @ Rs 950 per debenture)		80,000	 76,000 4,000
Mar. 31	6% Debentures A/c Dr. To Bank A/c To Profit on Redemption of Debentures A/c (Redemption of 80 debentures @ Rs 900 by purchasing in open market)		1,20,000	 1,08,000 12,000
Mar. 31	Profit on Redemption of Debentures A/c Dr. To Capital Reserve A/c (Transfer of profits on cancellation of debentures of Capital Reserve A/c)		16,000	 16,000
Mar. 31	Statement of profit and loss Dr. To Discount on Issue of Debentures A/c (Discount on debentures written-off)		10,000	 10,000
Mar. 31	Debenture Redemption Reserve A/c Dr. To General Reserve A/c (Debenture Redemption Reserve in r/o debentures redeemed transferred to General Reserve A/c)		50,000	 50,000

2.14 Redemption by Conversion

As stated earlier the debentures can also be 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 25

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)
	Statement of Profit and Loss Dr. To Debenture Redemption Reserve A/c (Transfer of profit to Debenture Redemption Reserve)		50,000	 50,000
	Debenture Redemption Investment A/c Dr. To Bank A/c (Required amount invested in DRI)		7,500	 7,500
	15% Debentures A/c Dr. To Debentureholders A/c (Amount due to debentureholders)		1,00,000	 1,00,000
	Debentureholders A/c Dr. To Equity Shares Capital A/c To Securities Premium Reserve A/c (Issue of 800 equity shares at a premium of Rs 2.50 per share)		1,00,000	 80,000 20,000
	Bank A/c Dr. To Debenture Redemption Investment A/c (DRI encashed at the time of redemption of debentures)		7,500	 7,500
	Debenture A/c Dr. To Debentureholders A/c (Amount due to debentureholders)		50,000	 50,000
	Debentureholders A/c Dr. To Bank A/c (Payment to debentureholders)		50,000	 50,000
	Debenture Redemption Reserve A/c Dr. To General Reserve (Debenture Redemption Reserve transferred to General Reserve on redemption of Debentures)		50,000	 50,000

Illustration 26

On April 01, 2013, a company made an issue of 10,000, 9% Debentures of Rs 100 each at Rs. 92 per debenture. The terms of issue provided for the redemption of 2,000 debentures every year starting from the March 31, 2016 either by conversion in to equity shares of Rs 20 each or by draw of lot at per at the company's option. On March 31, 2016, company redemption, 2,000, 9% debentures by converting them into Equity shares of Rs 20 each. Give the necessary Journal entries.

Books of a Company
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs)*	*Credit Amount (Rs)*
2016 Mar. 31	9% Debentures A/c Dr. To Debentureholders A/c To Statement of Profit & Loss To Discount on Issue of Debentures A/c (Amount due to debentureholders on redemption by conversion)		2,00,000	 1,84,000 9,600 8,400
Mar. 31	Debentureholders A/c Dr. To Equity Share Capital A/c (New equity shares issued to debentureholders)		1,84,000	 1,84,000

Working Notes :-

i. Total Discount on the issue of 10,000 Debentures $= 10,00,000 \times \frac{8}{100}$
$= \text{Rs } 80,000$

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

Year	*Amount (Rs)*	*Ratio*	*Amount (Rs)*
2013-14	10,00,000	5	$80,000 \times \frac{5}{25} = 16,000$
2014-15	10,00,000	5	$80,000 \times \frac{5}{25} = 16,000$
2015-16	10,00,000	5	$80,000 \times \frac{5}{25} = 16,000$
2016-17	8,00,000	4	$80,000 \times \frac{4}{25} = 12,800$
2017-18	6,00,000	3	$80,000 \times \frac{3}{25} = 9,600$
2018-19	4,00,000	2	$80,000 \times \frac{2}{25} = 6,400$
2019-20	20,000	1	$80,000 \times \frac{1}{25} = 3,200$
		25	**80,000**

ii. Up to March 31, 2016 discount on issue of debentures written off is Rs 48,000 out of total amount of Rs. 80,000.
So, on 2,000 debentures, now converted into shares amount of discount on issue of debentures written off is = $(2,00,000 \times \frac{8}{100}) \times \frac{48000}{80000}$ = Rs. 9,600

Remaining amount of discount amounting to Rs. 6,400 (Rs. 16,000 – Rs. 9,600) is not written off till March 31, 2016.

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 which 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. These investment earn 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 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 debentureholdeRs
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 maturity, 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

Statement of profit and loss 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 A/c
  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

Statement of profit and loss 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
Statement of profit and loss 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

(i) In case of Profit
Debenture Redemption Fund Investment A/c Dr.
To Debenture Redemption Fund A/c

Or

(ii) 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 27

X Ltd. issued Rs 10,00,000 debentures on April 01, 2014. These were to be redeemed on March 31, 2017. 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 Re.1 in 3 years on March 31, 2017, 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. Ignore entries for interest on debentures.

Solution:

Books of X Ltd.
Journal

Date	*Particulars*	*L.F.*	*Debit Amount (Rs)*	*Credit Amount (Rs)*
2014 Apr.1,	Bank A/c Dr. To Debentures A/c (Issue of debentures of Rs 10,00,000)		10,00,000	10,00,000
Mar.31,	Statement of Profit and Loss Dr. To Debenture Redemption Fund A/c (Annual instalment for redemption debited to statement of profit and loss)		3,17,208	3,17,208
	Debenture Redemption Fund Investments A/c Dr. To Bank A/c (Investment purchased)		3,17,200	3,17,200
2016 Mar.31,	Bank A/c Dr. To Interest on DRFI A/c (Interest received @ 5% on investment)		15,860	15,860
Mar. 31,	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

	Statement of profit and loss 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
2017 Mar.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
	Statement of profit and loss 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

Debentures Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs)*
2015 Mar.31	Balance c/d		10,00,000	2014 Apr.01	Bank		10,00,000
			10,00,000				**10,00,000**
2016 Mar.31	Balance c/d		10,00,000	2015 Apr.01	Balance b/d		10,00,000
			10,00,000				**10,00,000**
2017 Mar.31	Bank		10,00,000	2016 Apr.01	Balance b/d		10,00,000
			10,00,000				**10,00,000**

Debentures Redemption Fund Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs)*
2015 Mar.31	Balance c/d		3,17,208	2014 Apr.01	Statement of profit and loss		3,17,208
			3,17,208				**3,17,208**
2016 Mar.31	Balance c/d		6,50,276	2015 Apr.01	Balance b/d		3,17,208
					Interest on DRFI		15,860
					Statement of profit and loss		3,17,208
			6,50,276				**6,50,276**
2017 Mar.31	General Reserve		10,05,700	2016 Apr.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)*
2015 Mar.31	Bank		3,17,200	2015 Mar.31	Balance c/d		3,17,200
			3,17,200				**3,17,200**
2015 Apr.01	Balance b/d		3,17,200	2016 Mar.31	Balance c/d		6,50,300
Mar.31	Bank		3,33,100				
			6,50,300				**6,50,300**
2016 Apr.01	Balance b/d		6,50,300	2017 Mar.31	Bank (Sale Proceeds)		6,56,000
Mar.31	DRF		5,700				
			6,56,000				**6,56,000**

Bank Account

Date	*Particulars*	*J.F.*	*Amount (Rs)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs)*
2017 Mar.31	Balance b/d		4,20,000	2017 Mar.31	Debenture		10,00,000
	DRF		6,56,000	Mar.31	Balance c/d		76,000
			10,76,000				**10,76,000**
2017 Apr.01	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 28

The balance sheet of XYZ Ltd., disclosed the following information as on March 31, 2015.

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

The contribution to Debenture Redemption Fund was Rs 1,30,800 p.a. for the year 2015–16 and 2016–17. Debentures are due for payment on December 31, 2017. Prepare the above accounts in the books of company assuming that securities were realised on March 31, 2017 for a sum of Rs 13,52,000 and interest on securities on March 31, was immediately invested.

Solution:

Debentures Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs)*
2016				2015			
Mar.31	Balance c/d		15,00,000	Apr.01	Balance b/d		15,00,000
			15,00,000				**15,00,000**
2017				2016			
Mar.31	Bank		15,00,000	Apr.01	Balance b/d		15,00,000
			15,00,000				**15,00,000**

Debentures Redemption Fund Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs)*
2016				2015			
Mar.31	Balance c/d		14,10,760	Apr.01	Balance b/d		11,63,600
				Mar.31	Interest on DRFI		1,16,360
				Mar.31	Statement of profit and loss		1,30,800
			14,10,760				**14,10,760**
2017	Debenture			2016			
Mar.31	Redemption Fund Investment		58,760	Apr.01	Balance b/d		14,10,760
					Interest on DRFI		1,41,076
Mar.31	General Reserve		16,23,876	2017	Statement of		1,30,800
				Mar.31	profit and loss		
			16,82,636	Mar.31			**16,82,636**

Debenture Redemption Fund Investment Account

Dr. *Cr.*

Date	Particulars	J.F.	Amount (Rs)	Date	Particulars	J.F.	Amount (Rs)
2015 Apr.01	Balance b/d		11,63,600	2016 Mar.31	Balance c/d		14,10,760
2016 Mar.31	Bank		2,47,160*				
			14,10,760				**14,10,760**
2016 Apr.01	Balance b/d		14,10,760	2017 Mar.31	Bank		13,52,000
					Debenture Redemption Fund		58,760
			14,10,760				**14,10,760**

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

Illustration 29

LCM Ltd. purchased for cancellation its own 10,00,000, 9% Debentures 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 debentures @ Rs 480 each)			
	9% Debenture A/c Dr.		50,00,00,000	
	To Own Debenture			48,00,00,000
	To Profit on cancellation of debentures 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 30

The following balances appeared in the books of Madhu Ltd. as on April 01, 2016:

	(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 March 31 2017, 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 2016–2017. 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)*
2017				2016 April 1	Balance b/d		1,25,000
Mar.31	Debenture Redemption Fund Investment (Loss on Sale)		15,800	2017 Mar.31	Interest on Debenture Redemption Fund Investment (9% on Rs 1,30,000)		11,700
Mar.31	General Reserve (Transfer)		1,41,500	Mar.31	Statement of profit and loss		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)*
2016 April 01	Balance b/d (Face value Rs 1,30,000)		1,25,000	2017 Mar.31	Bank (84% of Rs 1,30,000)		1,09,200
					By Debenture Redemption Fund (Loss on Sale)		15,800
			1,25,000				**1,25,000**

Bank Account

Dr. *Cr.*

Date	*Particulars*	*J.F.*	*Amount (Rs)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs)*
2017				2017			
Mar.31	Balance b/d		40,000	Mar.31	Debenture		1,50,000
	Interest on D.R.F Investment		11,700	Mar.31	Balance c/d		10,900
Mar.31	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)*
2017				2016			
Mar.31	Bank A/c		1,50,000	April 30	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) Statement of profit and loss,
   (b) Other non-Corrent Assets,
   (c) Debentures account.
6. When debentures are issued at par and are redeemable at a premium, the loss on such an issues debited to :
   (a) Statement of profit and loss,
   (b) Debentures applications and 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) Statement of profits and loss.
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) Statement of profit and loss,
    (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) Statement of profit and loss,
    (c) General reserve account.
14. The balance of sinking fund investment account after the realisation of investments is transferred to:
    (a) Statement of Profit and Loss,
    (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. Identify the account to be debited in case of the following transactions.

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. Identify the account to be credited in case of the following transactions.

1. Debentures issued at a discount and are redeemable at par.
2. Transfer of interest on Sinking fund investments to sinking fund account.
3. Balance of DRR account after the redemption of Debentures.
4. Profit on sale of sinking fund investment account.
5. Writing-off the loss on issue of debentures.

Do it Yourself

1. G. Ltd., has Rs 800 lakh, 10% debentures of Rs 100 each due for redemption on March 31, 2017. 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 debentures.
2. R. Ltd., issued 88,00,000, 8% debenture of Rs 50 each at a premium of 5 % on July 1, 2014 redeemable at par by conversion of debentures into shares of

Rs 20 each at a premium of Rs 2 per share on June 30, 2017. Record necessary entries for redemption of debentures.

3. C. Ltd. has outstanding 11,00,000, 10% debentures of Rs 200 each, on April 1, 2017. The Board of Directors have decided to purchase 20% of own debentures for cancellation at Rs 200 each. Record necessary entries for the same.
4. Record necessary journal entries in the books of the Company in each of the following cases 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 Shares 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 March, 2017 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, 2017. The company has a debenture redemption reserve of Rs 50,000 on that date. Assuming that no interest is due, record the necessary journal entries at the time of redemption of debentures.

Illustration 31

The following balances appeared in the books of a company on April 01, 2016:

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 March 31 each year. On March 31, 2017, balance at Bank was Rs 3,00,000 after receipt of interest on Debentures 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 2016–17:

(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)
2017 Mar.31	Bank		4,00,000	2016 Apr.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)
2017 Mar.31	General Reserve		4,28,000	2017 Apr.01	Balance b/d		3,00,000
				2017 Mar.31	Statement of profit and loss		60,000
				Mar.31	Interest on Debenture Sinking Fund Investment		40,000
				Mar.31	Debenture Fund Investment		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)
2016 Apr.01	Balance b/d		3,00,000	2017 Mar.31	Bank		3,28,000
Mar.31	To Debenture Sinking Fund		28,000				
	(Profit Transfers)		**3,28,000**				**3,28,000**

Bank Account

Dr. Cr.

Date	Particulars	J.F.	Amount (Rs)	Date	Particulars	J.F.	Amount (Rs)
2016 Apr.1	Balance b/d balance includes Rs 40,000, interest @ 10% on Rs 4,00,000)		3,00,000	2017 Mar.31	12% Debentures		4,00,000
					Balance c/d		2,28,000
Mar.31	12% Debentures Sinking Fund Investment		3,28,000				
			6,28,000				**6,28,000**

Illustration 32

The following balances stood as on 31 March, 2017 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)
2017 March 31	Bank		10,00,000	2017 March 31	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)
2017 March 31	General Reserve		10,30,000	2017	balance b/d		10,00,360
				March 31	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)
2017	Balance b/d			2017	Bank (9% Loan)		4,00,000
March 31	9% Loan		3,80,000	March 31	Bank		6,30,000
March 31	8% Govt.Paper		6,20,360	March 31	(8% Govt.Paper)		
March 31	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)
2017 March 31	To Debenture Redemption Fund Investment:			2017 March 31	By 12% Debentures		10,00,000
					By Balance c/d		30,000
	9% Loan		4,00,000				
	8% Govt. Paper		6,30,000				
			10,30,000				**10,30,000**

Note: The Bank Balance has not been given in the question.

Do it Yourself

1. X Ltd. decides to redeem 8,000, 10% debentures of Rs 100 each on April 1, 2017 at a premium of 5%. The company has a surplus of Rs 9,00,000 in the statement of profit and loss. The company closes its books on December 31 every year. What journal entries the company will be recording to redeem the above debentures ?
2. G Ltd. issued 5,00,000, 12% debentures of Rs 100 each on April 1, 2013 redeemable at par on July 1, 2017. The company received applications for 6,00,000 debentures and the allotment was made to all the applicants on pro-rata basis. The debentures 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.

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 of Lots
19. Own Debentures
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 pre-determined rate of interest as it is in case of deep discount bonds.

Charge: Charge is an incumbrance to meet the obligation under trust deed on certain assets which company agrees to mortgage 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 asset will realise their claim from the net realisable value of such assets. Any amount of surplus from such assets given under first charge will be utilised for setting the claims for holder of second charge.

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: Debentures 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 Debentures for consideration other than Cash: Sometimes debentures 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.

Questions 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. 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% debentures 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 debentures. 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, 2014 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 debentures 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 debentures.

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, applications for 5000 debentures were alloted 40% of received application, and the remaining applications were 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% debentures 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% debentures 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.

    (Note: Goodwill Rs 30,000)

11. X. Ltd. purchased a Machinery from Y. Ltd. at 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 present it in 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% debentures of Rs 100 at a discount of 6% on April 01, 2009, redeemable at premium of 4% by draw of lots as under:

    20,00,000 debentures on March, 2011

    10,00,000 debentures on March, 2013

    20,00,000 debentures on March, 2014.

    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 April 01, 2012. These debentures are redeemable by annual drawings of Rs,1,00,000 made on March 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 April 01, 2011. 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 March 31 every year.

18. B. Ltd. issued debentures at 94% for Rs 4,00,000 on April 01, 2011 repayable by five equal drawings of Rs 80,000 each. The company prepares its final accounts on March 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: 2012 Rs 8,000; 2013 Rs 6,400; 2014 Rs 4,800; 2015 Rs 2,000; 2016 Rs 1,600).

19. B. Ltd. issued 1,000, 12% debentures of Rs 100 each on April 01, 2014 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 March 31, 2015 assuming that interest is paid half-yearly on September 30 and March 31 and tax deducted at source is 10%.

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 at par; and (c) when debentures were issued at discount with a condition to redeem them at premium?

21. On April 01, 2012, 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 March 31, 2015 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.

    (Answer: Loss on sale of Investment Rs 2,246)

22. On April 01, 2014 a company issued 15% debentures of Rs 10,00,000 at par. The debentures were redeemable at par after three years from the date of Issue. 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 March 31, 2017, 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 March 31.

23. On April 01, 2016 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 March 31, 2017, 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.

24. The following balances appeared in the books of A. Ltd. on April 01, 2017

	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 April 01, 2017, 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 April 01, 2016

	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 March 31, 2017, 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 2016–17.
(Answer: Loss 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 April 01, 2013 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 April 01, 2013 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. Record the journal entries.

31. X. Ltd. redeemed 1,000, 12% debentures of Rs 50 each by converting them into 15% New Debentures of Rs 100 each. Journalise.

32. On April 01, 2014, a company made an issue of 5,000, 8% debentures of Rs 100 each at Rs 94 per debentures. The terms of issue provided for the redemption of 1,000 debenture every year starting from March 31, 2016 either by purchase from open market or by converting them into Equity shares of Rs 10 each at a premium of Rs 2.50 per share. On March 31, 2016, the company redeemed 1,000 debentures by converting them into equity shares. Give the necessary journal entries.

Answers to Test your Understanding

Test your Understanding – I

1. False, 2. True, 3. False, 4. True, 5. True, 6. False, 7. False, 8. True, 9. False, 10. False, 11. 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) Surplus i.e, Balance in Statement of Profit and Loss (3) Debenture Redemption Reserve Account, (4) Own Debentures Account, (5) Statement of Profit and Loss.

(II) (1) Debenture Account, (2) Sinking Fund Account, (3) General Reserve Account, (4) Sinking Fund 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 Statement of Profit and Loss of a company as per schedule III;*
- *describe the form and content of balance sheet of a company as per schedule III;*
- *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 statement of profit and loss of a company. Now-a-days, the cash flow statement is also taken as an integral component of the financial statements of a company.

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, trade receivables, 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 statement of profit and loss 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 Judgements:* Under more than one circumstance, facts and figures presented through financial statements are based on personal opinion, estimates and judgements. The depreciation is provided taking into consideration the useful economic life of fixed assets. Provisions for doubtful debts are made on estimates and personal judgements. 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 judgements are to be made based on certain considerations. Personal opinion, judgements 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 the following 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 business concern. They provide information about the results of the business concern during a specified period of time 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: balance sheet and statement of profit and loss which are required for external reporting and also for internal needs of the management like planning, decision-making and control. Apart from these, there is also 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 is prepard.

Every company registered under The Companies Act 2013 shall prepare its balance sheet, statement of profit and loss and notes to account thereto in accordance with the manner prescribed in the revised Schedule III to the Companies Act, 2013 to harmonise the disclosure requirement with the accounting standards and to converge with new reforms. With regard to this, the Ministry of Corporate Affairs (MCA) had prescribed a (Revised) Schedule VI to the Companies Act, 1956 (vide Notification dated 28.02.2011). It is applied to the financial statements prepared for all financial periods beginning on or after April 01, 2011 by the Indian Companies.

Balance Sheet as at 31st March, 20.....

Particulars	Note No.	Figure as at the end of Current reporting period	Figure as at the end of Previous reporting period
I. EQUITY AND LIABILITIES			
1) Shareholder's Funds			
(a) Share Capital			
(b) Reserves and Surplus			
(c) Money received against share warrants			
2) Share Application money pending allotment			
3) Non-current Liabilities			
(a) Long term borrowings			
(b) Deferred tax liabilities (net)			
(c) Other long term liabilities			
(d) Long term provisions			
4) Current Liabilities			
(a) Short-term borrowings			
(b) Trade payables			
(c) Other current liabilities			
(d) Short-term provisions			
Total			
II. ASSETS			
1) Non-Current Assets			
(a) Fixed assets			
(i) Tangible assets			
(ii) Intangible assets			
(iii) Capital work-in-progress			
(iv) Intangible assets under development			
(b) Non-current investments			
(c) Deferred tax assets (net)			
(d) Long-term loans and advances			
(e) Other non-current assets			
2) Current Assets			
(a) Current investments			
(b) Inventories			
(c) Trade receivables			
(d) Cash and cash equivalents			
(e) Short term loans and advances			
(f) Other current assets			
Total			
See accompanying notes to the financial statements **NOTES:**			

Exhibit. 3.1: Vertical Form of Balance Sheet

Important Features of Presentation

1. It applies to all Indian companies preparing financial statement commencing on or after April 01, 2011.
2. It does not apply to (i) Insurance or Banking Company, (ii) Company for which a form of balance sheet or income statement is specified under any other Act.
3. Accounting standards shall prevail over Schedule III of the Companies Act, 2013.
4. Disclosure on the face of the financial statements or in the notes are essential and mandatory.
5. Terms in the revised Schedule III will carry the meaning as defined by the applicable accounting standards.
6. Balance to be maintained between excessive details that may not assist users of financial statements and not providing important information.
7. Current and non-current bifurcation of assets and liabilities is applicable.

Box 1

Rounding-off Rule for figures in the Presentation of Financial Statements

Rounding off of figures to be reported in the financial statements is based on the size of turnover:

1. Turnover < Rs.100 crore: Nearest hundreds, thousands, lakhs or millions or decimal thereof;
2. Turnover > Rs.100 crore: Nearest lakhs or millions or decimal thereof;

8. Rounding off requirements is mandatory (refer box 1).
9. Vertical format for presentation of financial statement is prescribed (refer Exhibit 3.1).
10. Debit balance in the statement of profit and loss to be disclosed as negative figure under the head "Surplus".
11. Mandatory disclosure for share application money pending allotment.
12. 'Sundry Debtors' and 'Sundry Creditors' replaced by terms 'Trade Receivables' and 'Trade Payables'.

Shareholders Fund

The shareholders' funds are sub-classified on the face of the balance sheet.

a) Share Capital
b) Reserves and Surplus
c) Money received against Share Warrants

Share Capital

Disclosures relating to share capital are to be given in notes to accounts. The following additions/modifications are significant:

a) For each class of shares, recognition of the number of shares outstanding at the beginning and at the end of the reporting period is required.

b) The rights, preferences and restrictions attached to each class of shares including restrictions on the distribution of dividends and repayment of capital.

c) In order to bring clarity regarding the identity of ultimate owners of the company:

   i) Disclosure of shares in respect of each class in the company held by its holding company or its ultimate holding company including shares held by subsidiaries or associates of holding company or the ultimate holding company in aggregate.

   ii) Disclosure of shares in the company held by each shareholder holding more than 5% shares specifying the number of shares held.

   iii) Disclosure of the following for the period of 5 years immediately preceding the date of the balance sheet:

   - Aggregate number and class of shares allotted as fully paid up pursuant to contracts without payment being received in cash.
   - Aggregate number and class of shares allotted as fully paid up by way of bonus shares.
   - Aggregate number and class of shares bought back.

This may be noted that the information of shareholders funds are presented on the face of financial statements limited only to broad and significant items. Details are given in Notes to Accounts.

d) For each class of share capital:

   i) The number and amount of share authorised.

   ii) The number of shares issued, subscibed, fully paid and subscribed but not fully paid.

   iii) Par value per share.

   iv) Reconciliation of the number of shares outstanding at the beginning and end of the accounting period.

   v) Rights, preferences and restrictions attaching each class of shares including restrictions on the distribution of dividends and repayment of capital.

   vi) Aggregate number of shares with respect to each class in the company held by its holding company, its ultimate holding company including shares held by or by subsidiaries or associates of the holding company or the ultimate holding company.

vii) Shares reserved for issue under options and contracts/commitments for the sale of shares/disinvestment, including terms and amount.

viii) For a period of 5 years immediately proceeding the date at which balance sheet in prepared for:
  (a) Shares reserved under contracts/commitments.
  (b) Number and class of shares bought back.
  (c) Number and class of shares allotted for consideration other than cash and bonus shares.

ix) Terms of any securities convertible into equity/preference shares issued along with earliest date of conversion in descending order, starting from the farthest such date.

x) Calls unpaid (aggregate).

xi) Forfeited shares (amout originally paid up).

Reserve and Surplus

Reserves and Surplus are required to be classified as:

i) Capital Reserve
ii) Capital Redemption Reserve
iii) Securities Premium Reserve
iv) Debenture Redemption Reserve
v) Revaluation Reserve
vi) Share Options Outstanding Account
vii) Other Reserves (Specifying nature and purpose)
viii) Surplus: Balance in statement of profit and loss; disclosing allocations and Appropriation such as dividend, bonus shares, transfer to/from reserve, etc.

Significant additions/modifications regarding disclosure of reserve and surplus are as follows:

a) A reserve specifically represented by earmarked investments shall be termed as "Fund".
b) 'Debit' balance of statement of profit and loss shall be shown as a negative figure under 'Surplus' head.
c) The balance of "Reserve and Surplus" after adjusting negative balance of Surplus, if any, shall be shown under "Reserve and Surplus" read even if the resulting figure is 'negative'.
d) Share options outstanding account has been recognised as a separate item under 'Reserve and Surplus'. ICAI's Guidance Note on Accounting for Employee share based payments requires a credit balance in the *'Stock option outstanding Account'* to be disclosed in balance sheet under separate heading' between share capital and reserves and surplus as a part of shareholders fund.

Money Received against share warrants

Money received against share warrants' to be disclosed as a separate line item under 'shareholder's fund'.

Illustration 1

Dinkar Ltd. has an authorised capital of Rs. 50,00,000 divided into equity shares of Rs. 100 each. The company invited applications for 40,000 shares, applications for 36,000 shares were received. All calls were made and duly received except for 500 shares on which the final call of Rs. 20 was not received. The company forfeited 200 shares on which final call was not received. Show how share capital will appear in the balance sheet of the company. Also prepare 'Notes to Accounts' for the same.

Solution:

Books of Dinkar Limited
Balance Sheet as at .... (Date)

Particulars	Note No.	Amount (Rs.)
I. Equity and Liabilities		
1. Shareholders' funds		
a) Share capital	1	**35,90,000**

Notes to Accounts

Particulars	Amount (Rs.)	Amount (Rs.)
1. Share capital		
Authorised share capital		
50,000 equity shares of Rs. 100 each		50,00,000
Issued capital		
40,000 equity shares of Rs. 100 each		40,00,000
Subscirbed and fully paid up capital		
35,500 equity shares of Rs. 100 each fully paid		35,50,000
Subscirbed but not fully paid-up capital		
300 equity shares of Rs. 100 each fully called up	30,000	
Less: Calls-in-arrears (300×20)	(6,000)	
	24,000	
Add: Share forfeiture A/c (200 shares × Rs. 80)	16,000	40,000
		35,90,000

Current and Non-current Classification

The classified balance sheet in terms of current and non-current assets and current and non-current liabilities have been introduced. The criteria for defining current assets and liabilities has been clearly spelled out with non-current assets and liabilities being the residual items.

Current/Non-current distinction

An item is classified as current:

- if it is involved in entity's operating cycle or,
- is expected to be realised/settled within twelve months or,
- if it is held primarily for trading or,
- is cash and cash equivalent or,
- if entity does not have on unconditional rights to defer settlement of liability for atleast 12 months after the reporting period,
- Other assets and liabilities are non-current.

Illustration 2

Show the following items in the balance sheet of Amba Ltd. as on March 31, 2017:

	Rs.
8% Debentures	10,00,000
Equity share capital	50,00,000
Securities premium	20,000
Preliminary expenses	40,000
Statement of Profit & Loss (cr.)	1,50,000
Discount on issue of 8% debentures	40,000
(Amount to be written in next 4 years approx.)	
Loose tools	20,000
Bank balance	60,000
Cash in hand	38,000

Solution:

Books of Amba Ltd.

***Balance Sheet as at March 31, 2017**

Particulars		Note No.	Amount (Rs.)
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital			50,00,000
b) Reserve and surplus		1	1,30,000
2. Non-current Liabilities			
a) Long-term borrowings		2	10,00,000
II. Assets			
1. Non-current assets			
a) Other non-current assets		3	30,000
2. Current assets			
a) Inventories		4	20,000
b) Cash and cash equivalents		5	98,000
c) Other current assets		6	10,000

* Relevant items only

Notes to Accounts

Particulars		Amount (Rs.)	Amount (Rs.)
1. Reserve and surplus			
Securities premium	20,000		
Less: Preliminary expenses	(40,000)		
		(20,000)	
Statement of profit and loss		1,50,000	**1,30,000**
2. Long-term borrowings			
8% debentures			10,00,000
3. Other non-current assets			
Discount on issue of 8% debentures (¾ of Rs. 40,000)			30,000
4. Inventory			
Loose tools			20,000
5. Cash and cash equivalents			
Bank balance		60,000	
Cash in hand		38,000	**98,000**
6. Other current assets			
Discount on issue of 8% debentures (¼ of Rs. 40,000)			**10,000**

Important points:

- Preliminary expenses are to be written-off completely in the year in which such expenses are incurred. They should be written-off first from securities premium and the balance if any, from statement of profit & loss.
- Borrowing costs such as discount on issue of debentures could be written-off over loan period.

Share application money pending allotment

Share application money not exceeding the issued capital and to the extent non-refundable shall be classified as non-current. It will be shown on this face of balance sheet as share application money pending allotment.

Borrowings

Total borrowings are categorised into long-term borrowings, short-term borrowings and current maturities to long-term debt.

(i) Loans which are repayable in more than twelve months/operating cycle are classified as long-term borrowings on the face of balance sheet.

(ii) Loans repayable on demand or whose original tenure is not more than twelve months/operating cycle are classified as short-term borrowings on the face of balance sheet.

(iii) Current maturities to long-term loan include amount repayable within twelve months/operating cycle under other current liabilities with Note to Account.

Deferred tax assets/liabilities are always non-current. This is in accordance to IAS-I.

Trade payables

Sundry creditors have been replaced with the term Trade payables and are classified as current and non-current. Trade payables to be settled beyond 12 months from the date of balance sheet or beyond the operating cycle are classified under "other long-term liabilities" with Note to Account. For example, purchase of goods and services in normal course of business. The balance of trade payables are classified as current liabilities on the face of balance sheet.

Provisions

The amount of provision settled within 12 months from balance sheet date or within operating cycle period from date of its recognition is classified as short term provisions and shown under current liabilities on the face of balance sheet. Others are depicted as long-term provisions under non-current liabilities on the face of balance sheet.

Fixed assets

There is no change in the treatment of fixed assets. Both tangible and intangible assets are non-current. This may also be noted if the useful life of the asset is less than 12 months, it will still fall under non-current.

Investments

Investments are also classified into current and non-current categories. Investments expected to realise within twelve months are considered as current investments under current assets. Others are classified as non-current investments under non-current assets. Both are however shown on the face of the balance sheet.

Inventories

All inventories are always treated as current.

Trade receivables

Trade receivables realised beyond twelve months from reporting date/operating cycle starting from the date of their recognition are classified as "Other non-current assets" under the head non-current assets with Note to Accounts. For example, sale of goods or services rendered in normal course of business. Others are classified as current assets and shown on the face of the balance sheet.

Cash and cash equivalent

It is always current however, amounts which qualify as cash and cash equivalents as per IAS-3 is shown here. The supremacy is accorded to AS over Schedule III, cash and cash equivalents are to the disclosed in accordance to IAS-3.

Illustration 3

Show the following items in the balance sheet of Sunfill Ltd. as at March 31, 2017:

Particulars	Amount (Rs.)
General Reserve (since 31 March 2012)	5,00,000
Statement of profit & loss (debit balance) for 2016–17	(3,00,000)

Solution:

Books of Sunfill Ltd.
Balance Sheet as at March 31, 2017

Particulars	Note No.	31st March 2017 (Rs.)	31st March 2016 (Rs.)
I. Equity and Liabilities			
1. Shareholders' Funds			
Reserve and surplus	1	2,00,000	5,00,000

Notes to Accounts

Particulars	Amount (Rs.)
1. Reserve and surplus	
General Reserve (1 April, 2016)	5,00,000
Less: Statement of profit and loss (Dr. balance)	(3,00,000)
	2,00,000

Illustration 4

Show the following items in the balance sheet of Avalon Ltd., as at March 31, 2017:

	Rs. in Lakh
General Reserve (since 31 March 2016)	5
Statement of Profit & Loss (Debit Balance) for 2016–17	(8)

Solution:

Books of Avalon Ltd.
Balance Sheet as at March 31, 2017

Particulars	Note No.	31 March 2017 (Rs.)
I. Equity and Liabilities		
1. Shareholders' Funds		
a) Reserve and Surplus	1	(3,00,000)

Notes to Accounts

Particulars	Amount (Rs.)
1. Reserve and Surplus	
i) General reserve (1 April, 2012)	**5,00,000**
ii) Less: Statement of profit and loss	**(8,00,000)**
(debit balance)	(3,00,000)

Illustration 5

Arushi Ltd. issued 5,000, 10% debentures of Rs. 100 each at par but redeemable at a premium of 5% after 5 years. Give journal entries and also prepare the balance sheet of the company.

Solution:

Books of Arushi Ltd.
Journal

Date	Particulars	L.F.	Debit (Rs.)	Credit (Rs.)
	Bank A/c Dr.		5,00,000	
	To 10% Debenture Application and Allotment A/c			5,00,000
	(Being application money received)			
	10% Debenture Application and Allotment A/c Dr.		5,00,000	
	Loss on Issue of Debentures A/c Dr.		25,000	
	To 10% Debentures A/c			5,00,000
	To Premium on Redemption of Debentures A/c			25,000
	(Being debentures issued at par but redeemable at premium)			

Arushi Ltd.
Balance Sheet as at ....

Particulars		Note No.	Amount (Rs.)
I. Equity and Liabilities			
1. Non-current Liabilities			
a) Long-term borrowing		1	5,00,000
b) Other long-term liabilities		2	25,000
Total			**5,25,000**
II. Assets			
1. Non-current assets			
a) Other non-current assets		3	20,000
2. Current Assets			
a) Cash and cash equivalents		4	5,00,000
b) Other current assets		5	5,000
Total			**5,25,000**

Notes to Accounts

Particulars	Amount (Rs.)
1. Long-term borrowings	
5,000, 10% debentures of Rs. 100 each	5,00,000
2. Other long term liabilities	
Premium on redemption of debentures A/c	25,000
3. Other non-current assets	
Loss on issue of debentures (4/5th of Rs. 25,000)	20,000
4. Cash and cash equivalents	
Cash at bank	5,00,000
5. Other current assets	
Loss on issue of debentures (1/5th of Rs. 25,000, i.e., amount to be written-off in next 12 months)	5,000

Do it yourself

Classify the following items in the balance sheet of a company under Major heads and Sub-heads

S. No.	Items	Major Head	Sub-head (if any)
1.	Goodwill		
2.	Forfeited shares		
3.	Acceptances		
4.	Preliminary expenses		
5.	Capital reserve		
6.	Loans from banks		
7.	Investment in shares and debentures		
8.	Interest accrued and due on debentures		

	9.	Interest accrued but not due on Secured Loans			
	10.	Interest accrued but not due on Unsecured Loans			
	11.	Interest accrued on Investments			
	12.	Surplus			
	13.	Securities Premium Reserve			
	14.	Loose Tools			
	15.	Provision for Taxation			
	16.	Under writing Commission			
	17.	Bills of Exchange			
	18.	Unclaimed dividend			
	19.	Short term loans & advances			
	20.	Live stock			
	21.	Calls unpaid/calls in arrears			
	22.	Uncalled liability on shares partly paid			
	23.	Discount allowed on issue of shares and debentures (if amortised after 12 months)			
	24.	Discount allowed on issue of shares and debentures (if amortised within 12 months)			
	25.	Pre-paid Insurance			
	26.	Stores and spare parts			
	27.	Advances from customers			
	28.	Debentures redemption reserve			
	29.	Premium on redemption of debentures			
	30.	Loss on issue of debentures			
	31.	Debentures redemption fund			
	32.	Debentures redemption fund investment			
	33.	Vehicles			
	34.	Sinking fund			
	35.	Sinking fund investment			
	36.	Advances to suppliers			
	37.	Patents, trademarks, design			
	38.	Calls in advance			
	39.	Deposits with custom authorities			
	40.	Arrears of fixed cumulative dividend			
	41.	Furniture and fittings			
	42.	Brokerage on issues of shares			
	43.	Statement of profit & loss (Dr.)			
	44.	Capital work-in-progress			
	45.	Provision for doubtful debts			
	46.	Statement of profit & loss (Cr.)			

47.	Uncalled liability on partly paid shares held as investments		
48.	Claims against the company not acknowledged as debt		
49.	Capital redemption reserve		
50.	Public deposits		
51.	Authorised capital		

Illustration 6

From the given particulars of Shine and Bright Co. Ltd., as at March 31, 2017, prepare balance sheet in accordance to the Schedule III:

Particulars	Amount Rs.	Particulars	Amount Rs.
Preliminary expenses	2,40,000	Goodwill	30,000
Discount on Issue of shares	20,000	Loose Tools	12,000
10% Debentures	2,00,000	Motor vehicles	4,75,000
Stock in trade	1,40,000	Provision for tax	16,000
Cash at bank	1,35,000		
Bills receivables	1,20,000		

Solution:

Book of Shine and Bright Ltd.

Balance Sheet as at March 31, 2017

Particulars	Note No.	Figure as at the end of current reporting period	Figure as at the end of previous reporting period
I. Equity and Liabilities			
1. Non-current Liabilities			
a) Long-term borrowings	1	2,00,000	
2. Current liabilities			
a) Short-term provisions	2	16,000	
II. Assets			
1. Non-current assets			
a) Fixed assets			
Tangible assets	3	4,75,000	
Intangible assets	4	30,000	
2. Other non-current assets*	5	2,60,000	
Current assets			
a) Inventories	6	1,52,000	
b) Trade receivables	7	12,000	
c) Cash and cash equivalents		1,35,000	

Notes to Accounts

Particulars		Amount (Rs.)
1. Long-term borrowings:		
10% debentures		2,00,000
2. Short-term provisions:		
Provision for taxation		16,000
3. Fixed assets:		
(i) Tangible assets		
Motor vehicles		4,75,000
(ii) Intangible assets		
Goodwill		30,000
4. Other non-current assets		
Preliminary expenses	2,40,000	
Discount on issue of debentures	20,000	2,60,000
5. Inventories		
Stock in trade	1,40,000	
Loose tools	12,000	1,52,000
6. Trade receivables		
Bills receivables		12,000
7. Cash & cash equivalents		
Cash at bank		1,35,000

* It has been assumed that discount on issue of debentures is not written-off in the next 12 months of the reporting period.

3.4.2 Form and content of Statement of Profit and Loss

Statement of Profit and Loss for the year ended ______________

	Particulars	Note No.	Figure as at the end of Current reporting period	Figure as at the end of Previous reporting period
I	Revenue from operations			
II	Other income			
III	Total Revenue (I+II)			
IV	Expenses:			
	Cost of materials consumed			
	Purchases of stock-in-trade			
	Changes in inventories of finished goods			

	Work-in-progress and stock-in-trade Employee benefits expense Finance costs Depreciation and amortisation expense Other expenses Total expenses			
V	Profit before extraordinary items and tax (III-IV)			
VI	Exceptional items			
VII	Profit before extraordinary items and tax (V-VI)			
VIII	Extraordinary items			
IX	Profit before tax (VII-VIII)			
X	Tax expense: (1) Current tax (2) Deferred tax			
XI	Profit/(Loss) for the period from continuing operations (IX-X)			
XII	Profit/(Loss) from discontinuing operations			
XIII	Tax expense of discontinuing operations			
XIV	Profit/(Loss) from Discontinuing operations (after tax) (XII-XIII)			
XV	Profit/(Loss) for the period (XI + XIV)			
XVI	Earnings per equity share: (1) Basic (2) Diluted			

Exhibit. 3.2: Form of Statement of Profit and Loss

The items of statement of profit and loss are discussed as follows:

1. Revenue from operations

   This includes:

   (i) Sale of products

   (ii) Sale of services

   (iii) Other operating revenues

In respect to a finance company, revenue from operational shall include revenue from interest, dividend and income from other financial services.

It may be noted that under each of the above heads shall be disclosed separately by way of notes to accounts to the extent applicable.

2. Other income

   (i) Interest income (in case of a company other than a finance company),

   (ii) Dividend income,

   (iii) Net gain/loss on sale of investments,

   (iv) Other non-operating income (net of expenses directly attributable to such income).

3. Expense

Expenses incurred to earn the income shown under various heads as discussed below:	
(a) Cost of Materials	It applies to manufacturing companies. It consists of raw materials and other materials consumed in manufacturing of goods.
(b) Purchase of Stock-in-trade	It means purchases of goods for the purpose of trading.
(c) Changes in inventories of finished goods, WIP and stock-in-trade	It is the difference between opening inventory (stock) of finished goods, WIP and stock-in-trade and closing inventory.
(d) Employees benefit expenses	Expenses incurred on employees towards salary, wages, leave encashment, staff welfare, etc., are shown under this head. Employees benefit expenses may be further categorised into direct and indirect expenses.
(e) Finance cost	It is the expenses towards interest charges during the year on the borrowings. Only the interest cost is to be shown under this head. Other financial expenses such as bank charges are shown under "Other Expenses".
(f) Depreciation	Depreciation is the diminution in the value of fixed assets whereas amortisation is writing off the amount relating to intangible assets.
(g) Other expenses	All other expenses which do not fall in the above categories are shown under other expenses. Other expenses may further be categorised into direct expenses, indirect expenses and non-operating expenses.

Illustration 8

From the following particulars, prepare Statement of profit and loss for the year ending March 2017:

Balances	Rs.	Rs.
Plant and Machinery	1,60,000	
Land	6,74,000	
Depreciation on Plant and Machinery	16,000	
Purchases (Adjusted)	4,00,000	
Closing stock	1,50,000	
Wages	1,20,000	
Sales (Net)		10,00,000
Salaries	80,000	
Bank overdraft		2,00,000
10% debentures (issued on 1st April, 2016)		1,00,000
Equity share capital – shares of Rs. 100 each (fully paid)		2,00,000
Preference share capital – 1,000; 6% shares of Rs. 100 each (fully paid)		1,00,000
	16,00,000	**16,00,000**

Additional information

(i) Equity dividend @ 10% declared on paid up capital.
(ii) Dividend on the preference share capital paid in full.
(iii) Rs. 2,00,000 transferred to general reserve.

Solution

Statement of Profit and Loss
for the year ending 31st March, 2017

Particulars	Note No.	Amount (Rs.)
I. Income		
Revenue from operations (Sales)		10,00,000
Total		10,00,000
II. Expenses		
Cost of materials consumed (Adjusted purchase)		4,00,000
Employees benefit expenses	1	2,00,000
Finance cost		10,000
Depreciation and amortisation		16,000
Total		6,26,000
Profit before tax (I-II)		**3,74,000**

Notes to Accounts

Particulars	Amount Rs.	Amount Rs.
Employee Benefit Expenses		
(i) Wages	1,20,000	
(ii) Salary	80,000	2,00,000

3.5 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 report of the company in addition to 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.

3.6 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 judgements 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:* Statement of Profit and Loss 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 the 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. Statement of profit and loss
3. Balance Sheet
4. Cost of Material consumed
5. Shareholders Funds

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. Financial Statements are prepared and published by corporate undertakings for the benefit of various stakeholders. These statements include Statement of profit and loss 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.

Statement of Profit and Loss: The Statement of profit and loss is prepared for a specific 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. 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 judgement apart from accepted concepts. Hence, these statements need proper analysis before their use in decision-making.

Questions for Practice

Short Answer Questions

1. State the meaning of financial statements?
2. What are limitations of financial statements?
3. List any three objectives of financial statements?
4. State the importance of financial statements to :
   (i) shareholders
   (ii) creditors
   (iii) government
   (iv) investors

5. How will you disclose the following items in the Balance Sheet of a company;
   (i) Loose tools
   (ii) Uncalled liability on partly paid-up shares
   (iii) Debentures redemption reserve
   (iv) Mastheads and publishing titles
   (v) 10% debentures
   (vi) Proposed dividend
   (vii) Share forfeited account
   (viii) Capital redemtion reserve
   (ix) Mining rights
   (x) Work-in-progress

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 statement of profit and loss and explain its items.
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 judgements'. Discuss.
8. Explain the process of preparing income statement and balance sheet.

Numerical Questions

1. Show the following items in the balance sheet as per the provisions of the companies Act, 2013 in Schedule III:

Particulars	Rs.	Particulars	Rs.
Preliminary Expenses	2,40,000	Goodwill	30,000
Discount on issue of shares	20,000	Loose tools	12,000
10% Debentures	2,00,000	Motor Vehicles	4,75,000
Stock in trade	1,40,000	Provision for tax	16,000
Cash at bank	1,35,000		
Bills receivable	1,20,000		

2. On 1 April, 2017, Jumbo Ltd., issued 10,000; 12% debentures of Rs. 100 each a discount of 20%, redeemable after 5 years. The company decided to write-off discount on issue of such debentures over the life time of the Debentures. Show the items in the balance sheet of the company immediately after the issue of these debentures.

3. From the following information prepare the balance sheet of Gitanjali Ltd.

   Inventories Rs. 14,00,000; Equity Share Capital Rs. 20,00,000; Plant and Machinery Rs. 10,00,000; Preference Share Capital Rs. 12,00,000; Debenture Redemption Reserve Rs. 6,00,000; Outstanding Expenses Rs. 3,00,000; Proposed Dividend Rs. 5,00,000; Land and Building Rs. 20,00,000; Current Investments Rs. 8,00,000; Cash Equivalent Rs. 10,00,000; Short term loan from Zaveri Ltd. (A Subsidiary Company of Twilight Ltd.) Rs. 4,00,000; Public Deposits Rs. 12,00,000.

4. From the following information prepare the balance sheet of Jam Ltd.

   Inventories Rs. 7,00,000; Equity Share Capital Rs. 16,00,000; Plant and Machinery Rs. 8,00,000; Preference Share Capital Rs. 6,00,000; General Reserves Rs. 6,00,000; Bills payable Rs. 1,50,000; Provision for taxation Rs. 2,50,000; Land and Building Rs. 16,00,000; Non-current Investments Rs. 10,00,000; Cash at Bank Rs. 5,00,000; Creditors Rs. 2,00,000; 12% Debentures Rs. 12,00,000.

5. Prepare the balance sheet of Jyoti Ltd., as at March 31, 2017 from the following information.

   Building Rs. 10,00,000; Investments in the shares of Metro Tyers Ltd. Rs. 3,00,000; Stores & Spares Rs. 1,00,000; Discount on issue of 10% debentures Rs. 10,000; Statement of Profit and Loss (Dr.) Rs. 90,000; 5,00,000 Equity Shares of Rs. 20 each fully paid-up; Capital Redemption Reserve Rs. 1,00,000; 10% Debentures Rs. 3,00,000; Unpaid dividends Rs. 90,000; Share options outstanding account Rs. 10,000.

6. Brinda Ltd., has furnished the following information:

   (a) 25,000, 10% debentures of Rs.100 each;

   (b) Bank Loan of Rs.10,00,000 repayable after 5 years;

   (c) Interest on debentures is yet to be paid.

Show the above items in the balance sheet of the company as at March 31, 2017.

7. Prepare a balance sheet of Black Swan Ltd., as at March 31, 2017 from the following information:

		Rs.
General Reserve	:	3,000
10% Debentures	:	3,000
Balance in Statement of Profit and Loss	:	1,200
Depreciation on fixed assets	:	700
Gross Block	:	9,000
Current Liabilities	:	2,500
Preliminary Expenses	:	300
6% Preference Share Capital	:	5,000
Cash & Cash Equivalents	:	6,100

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 common size 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.

> Financial statement analysis is 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 Analysis of Financial Statements

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 statement of profit and loss. 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. It has a broad scope which includes top management in general and 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 of the company's operations, appraising the individual's performance and evaluating the system of internal control.

(c) *Trade payables:* Trade payables, through an analysis of financial statements, appraises not only the ability of the company to meet its short-term obligations, but also judges the probability of its continued ability to meet all its financial obligations in future. Trade payables are particularly interested in the firm's ability to meet their claims over a very short period of time. Their analysis will, therefore, evaluate 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 over a period of time, 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 lenders analyse the historical financial statements to assess 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 Analysis of Financial Statements

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.

4.4 Tools of Analysis of Financial Statements

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 statement of profit and loss 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 a common item by expressing each item as a percentage of that common item. The percentage thus calculated can be easily compared with the results of 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, in 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 or poor management is detected.

4. *Ratio Analysis:* It describes the significant relationship which exists between various items of a balance sheet and a statement of profit and loss 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 statement of profit and loss and the 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 accounts 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 Exhibit 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.

$$\frac{\text{Absolute Increase or Decrease (Col.4)}}{\text{First year absolute figure (Col.2)}} \times 100$$

Particulars	First Year	Second Year	Absolute Increase (+) or Decrease (–)	Percentage Increase (+) or Decrease (–)
1	2	3	4	5
	Rs.	**Rs.**	**Rs.**	**%.**

Exhibit. 4.1

Illustration 1

Convert the following statement of profit and loss into the comparative statement of profit and loss of BCR Co. Ltd.:

Particulars	*Note No.*	*2015-16 Rs.*	*2016-17 Rs.*
(i) Revenue from operations		60,00,000	75,00,000
(ii) Other incomes		1,50,000	1,20,000
(iii) Expenses		44,00,000	50,60,000
(iv) Income tax		35%	40%

Solution:

Comparative statement of profit and loss for the year ended March 31, 2016 and 2017:

Particulars	*2015-16*	*2016-17*	*Absolute Increase (+) or Decrease (–)*	*Percentage Increase (+) or Decrease (–)*
	Rs.	**Rs.**	**Rs.**	**%**
I. Revenue from operations	60,00,000	75,00,000	15,00,000	25.00
II. Add: Other incomes	1,50,000	1,20,000	(30,000)	(20.00)
III. Total Revenue I+II	**61,50,000**	**76,20,000**	**14,70,000**	**23.90**
IV. Less: Expenses	44,00,000	50,60,000	6,60,000	15.00
Profit before tax	**17,50,000**	**25,60,000**	**8,10,000**	**46.29**
V. Less: Tax	6,12,500	10,24,000	4,11,500	67.18
Profit after tax	**11,37,500**	**15,36,000**	**3,98,500**	**35.03**

Illustration 2

From the following statement of profit and loss of Madhu Co. Ltd., prepare comparative statement of profit and loss for the year ended March 31, 2016 and 2017:

Particulars	*Note No.*	*2015-16* Rs.	*2016-17* Rs.
Revenue from operations		16,00,000	20,00,000
Employee benefit expenses		8,00,000	10,00,000
Other expenses		2,00,000	1,00,000
Tax rate 40 %			

Solution:

Comparative statement of profit and loss of Madhu Co. Limited for the year ended March 31, 2016 and 2017:

Particulars	*2015-16*	*2016-17*	*Absolute Increase (+) or Decrease (–)*	*Percentage Increase (+) or Decrease (–)*
	Rs.	**Rs.**	**Rs.**	**%**
I. Revenue from operations	**16,00,000**	**20,00,000**	**4,00,000**	**25**
II. Less: Expenses				
a) Employee benefit expenses	8,00,000	10,00,000	2,00,000	25
b) Other expenses	2,00,000	1,00,000	(1,00,000)	(50)
Profit before tax	**6,00,000**	**9,00,000**	**3,00,000**	**50**
III. Less tax @ 40%	2,40,000	3,60,000	1,20,000	50
Profit after tax	**3,60,000**	**5,40,000**	**1,80,000**	**50**

Do it yourself

From the following particulars, prepare comparative statement of profit and loss of Narang Colours Ltd. for the year ended March 31, 2016 and 2017:

Particulars	*Note No.*	*2016-17*	*2015-16*
1. Revenue from operations		40,00,000	35,00,000
2. Other income		50,000	50,000
3. Cost of material consumed		15,00,000	18,00,000
4. Changes in inventories of finished goods		10,000	(15,000)
5. Employee benefit expenses		2,40,000	2,40,000
6. Depreciation and amortisation		25,000	22,500
7. Other expenses		2,66,000	3,02,000
8. Profit		20,09,000	14.27,300

Notes to Accounts

Particulars	*2016-17*	*2015-16*
1. Other expenses		
i) Power and fuel	36,000	40,000
ii) Carriage outwards	7,500	9,500
iii) License fees	2,500	2,500
iv) Selling and distribution	1,70,000	1,90,000
v) Provision of tax	50,000	60,000
	2,66,000	**3,02,000**

Illustration 3

The following are the Balance Sheets of J. Ltd. as at March 31, 2016 and 2017. Prepare a Comparative balance sheet.

Particulars	*Note No.*	*March 31, 2017 (Rs.)*	*March 31, 2016 (Rs.)*
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital		20,00,000	15,00,000
b) Reserve and surplus		3,00,000	4,00,000
2. Non-current Liabilities			
Long-term borrowings		9,00,000	6,00,000
3. Current liabilities			
Trade payables		3,00,000	2,00,000
Total		**35,00,000**	**27,00,000**
II. Assets			
1. Non-current assets			
a) Fixed assets			
- Tangible assets		20,00,000	15,00,000
- Intangible assets		9,00,000	6,00,000
2. Current assets			
- Inventories		3,00,000	4,00,000
- Cash and cash equivalents		3,00,000	2,00,000
Total		**35,00,000**	**27,00,000**

Solution:

Comparative Balance Sheet of J. Limited
as at March 31, 2016 and March 2017:

(Rs. in Lakhs)

Particulars	*March 31, 2016*	*March 31, 2017*	*Absolute Change*	*Percentage Change*
I. Equity and Liabilities				
1. Shareholders' Funds				
a) Share capital	15	20	05	33.33
b) Reserve and surplus	04	03	(01)	(25)
2. Non-current Liabilities				
a) Long-term borrowings	06	09	03	50
3. Current liabilities				
a) Trade payables	02	03	01	50
Total	**27**	**35**	**08**	**29.63**

II. Assets				
1. Non-current assets				
a) Fixed assets				
- Tangible assets	15	20	05	33.33
- Intangible assets	06	09	03	50
b) Current assets				
- Inventories	04	03	(01)	(25)
- Cash and cash equivalents	02	03	01	50
Total	**27**	**35**	**08**	**29.63**

Illustration 4

From the following Balance Sheets of Amrit Limited as at March 31, 2016 and 2017, prepare a comparative balance sheet:

Particulars	*Note No.*	*March 31, 2017 (Rs.)*	*March 31, 2016 (Rs.)*
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital		20,00,000	15,00,000
b) Reserve and surplus		13,00,000	14,00,000
2. Non-current Liabilities			
Long-term borrowings		19,00,000	16,00,000
3. Current liabilities			
Trade payables		3,00,000	2,00,000
Total		**55,00,000**	**47,00,000**
II. Assets			
1. Non-current assets			
a) Fixed assets			
- Tangible assets		20,00,000	15,00,000
- Intangible assets		19,00,000	16,00,000
2. Current assets			
- Inventories		13,00,000	14,00,000
- Cash and Cash Equivalents		3,00,000	2,00,000
Total		**55,00,000**	**47,00,000**

Solution:

Comparative Balance Sheet of Amrit Limited
as at March 31, 2016 and March 31, 2017

(Rs. in Lakhs)

Particulars	*March 31, 2016* **Rs.**	*March 31, 2017* **Rs.**	*Absolute Increase (+) or Decrease (–)* **Rs.**	*Percentage Increase (+) or Decrease (–)* **%**
I. Equity and Liabilities				
1) Shareholders' funds				
a) Share capital	15	20	5	33.33
b) Reserves and surplus	14	13	(1)	(7.14)
2) Non-current liabilities				
Long-term borrowings	16	19	3	18.75
3) Current liabilities				
Trade payables	2	3	1	50
Total	**47**	**55**	**8**	**17.02**
II. Assets				
1) Non-current assets				
Fixed assets				
a) Tangible assets	15	20	5	33.33
b) Intangible assets	16	19	3	18.75
2) Current assets				
a) Inventories	14	13	(1)	(7.14)
b) Cash and Cash Equivalents	2	3	1	50
Total	**47**	**55**	**8**	**17.02**

Do it yourself

From the Balance Sheets for the year ended March 31, 2016 and 2017, prepare the comparative Balance Sheet of Omega Chemicals Ltd.:

Rs. in Lakhs

Particulars	*Note No.*	*2017 (Rs.)*	*2016 (Rs.)*
I. Equity and Liabilities			
1) Shareholders' Fund			
a) Share capital		5	10
b) Reserve and surplus		3	2
2) Non-current liabilities			
Long-term borrowings		5	8
3) Current liabilities			
Trade Payable		2	4
Total		**15**	**24**

II. Assets				
1) Non-current assets				
a) Fixed assets				
- Tangible assets		14	8	
- Intangible assets		3	2	
2) Current assets				
a) Inventories		5	4	
b) Cash and cash equivalents		2	1	
Total		**24**	**15**	

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 statement of profit and loss, the items of expenditure are shown as a percentage of the net revenue from operations. If such a statement is prepared for successive periods, it shows the changes of the respective percentages over a period of time.

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 4.2).
2. Choose a common base (as 100). For example, revenue from operations may be taken as base (100) in case of statement of profit and loss and total assets or total liabilities (100) in case of balance sheet.
3. For all items of Col. 2 and 3 work out the percentage of that total. Column 4 and 5 shows these percentages in Exhibit 4.2.

Common Size Statement

Particulars	Year one	Year two	Percentage of year 1	Percentage of year 2
1	2	3	4	5

Exhibit 4.2

Illustration 5

From the following information, prepare a Common size Income Statement for the year ended March 31, 2016 and March 31, 2017:

Particulars	*2016-17* Rs.	*2015-16* Rs.
Net sales	18,00,000	25,00,000
Cost of good sold	10,00,000	12,00,000
Operating expenses	80,000	1,20,000
Non-operating expenses	12,000	15,000
Depreciation	20,000	40,000
Wages	10,000	20,000

Solution:

Common Size Income Statement
for the year ended March 31, 2016 and March 31, 2017

Particulars	*Absolute Amounts*		*Percentage of Net Sales*	
	2015-16 *Rs.*	*2016-17* *Rs.*	*2015-16* *(%)*	*2016-17* *(%)*
Net Sales	25,00,000	18,00,000	100	100
(Less) Cost of goods Sold*	12,00,000	10,00,000	48	55.56
Gross Profit	**13,00,000**	**8,00,000**	**52**	**44.44**
(Less) Operating Expenses**	1,20,000	80,000	4.80	4.44
Operating Income	**11,80,000**	**7,20,000**	**47.20**	**40**
(Less) Non-Operating expenses	15,000	12,000	0.60	0.67
Profit	**11,65,000**	**7,08,000**	**46.60**	**39.33**

* Wages is the part of cost of goods sold;
** Depreciation is the part of operating expenses.

Illustration 6

From the following information, prepare Common size statement of profit and loss for the year ended March 31, 2016 and March 31, 2017:

Particulars	*2015-16* Rs.	*2016-17* Rs.
Revenue from operations	25,00,000	20,00,000
Other income	3,25,000	2,50,000

Employee benefit expenses	8,25,000	4,50,000
Other expenses	2,00,000	1,00,000
Income tax (% of the profit before tax)	30%	20%

Solution:

Common size statement of Profit and Loss for the year ended March 31, 2016 and March 31, 2017:

Particulars	*Absolute Amounts*		*Percentage of Net Revenue from operations*	
	2015-16	*2016-17*	*2015-16*	*2016-17*
	Rs.	*Rs.*	*(%)*	*(%)*
Revenue from Operations	25,00,000	20,00,000	100	100
(Add) Other income	3,25,000	2,50,000	13	12.5
Total revenue	28,25,000	22,50,000	113	112.5
(Less) expenses:				
a) Employee benefit expenses	8,25,000	4,50,000	33	22.5
b) Other expenses	2,00,000	1,00,000	8	5
Profit before tax	18,00,000	17,00,000	72	85
(Less) taxes	5,40,000	3,40,000	21.6	17
Profit after tax	12,60,000	13,60,000	50.4	68

Illustration 7

Prepare common size Balance Sheet of XRI Ltd. from the following information:

Particulars	*Note No.*	*March 31, 2016*	*March 31, 2017*
I. Equity and Liabilities			
1. Shareholders' Fund			
a) Share capital		15,00,000	12,00,000
b) Reserves and surplus		5,00,000	5,00,000
2. Non-current liabilities			
Long-term borrowings		6,00,000	5,00,000
3. Current liabilities			
Trade Payable		15,50,000	10,50,000
Total		**41,50,000**	**32,50,000**
II. Assets			
1. Non-current assets			
a) Fixed assets			
- Tangible asset			
Plant & machinery		14,00,000	8,00,000
- Intangible assets			
Goodwill		16,00,000	12,00,000
b) Non-current investments		10,00,000	10,00,000
2. Current assets			
Inventories		1,50,000	2,50,000
Total		**41,50,000**	**32,50,000**

Solution:

Common size Balace Sheet
as at March 31, 2016 and March 31, 2017:

Particulars	*Absolute Amounts*		*Percentage of Total Assets*	
	31.03.2016	*31.03.2017*	*31.03.2016*	*31.03.2017*
	Rs.	*Rs.*	*(%)*	*(%)*
I. Equity and Liabilities				
1. Shareholders fund				
a) Share capital	15,00,000	12,00,000	36.14	36.93
b) Reserve and surplus	5,00,000	5,00,000	12.05	15.38
2. Non-current liabilities				
Long-term borrowings	6,00,000	5,00,000	14.46	15.38
3. Current liabilities				
Trade payables	15,50,000	10,50,000	37.35	32.31
Total	**41,50,000**	**32,50,000**	**100**	**100**
II. Assets				
1. Non-current assets				
a) Fixed assets				
- Tangible asset				
Plant & machinery	14,00,000	8,00,000	33.73	24.62
- Intangible assets				
Goodwill	16,00,000	12,00,000	38.55	36.92
Non-current investments	10,00,000	10,00,000	24.10	30.77
2. Current assets				
Inventories	1,50,000	2,50,000	3.62	7.69
Total	**41,50,000**	**32,50,000**	**100**	**100**

Do it yourself

Prepare common size balance sheet of Raj Co. Ltd. as at March 31, 2016 and March 31, 2017 from the given information:

Particulars	*2017*	*2016*
I. Equity and Liabilities		
1. Shareholders fund		
a) Share capital	20,00,000	15,00,000
b) Reserve and surplus	3,00,000	4,00,000
2. Non-current liabilities		
Long-term borrowings	9,00,000	6,00,000
3. Current liabilities		
Trade payables	3,00,000	2,00,000
Total	**35,00,000**	**27,00,000**

II. Assets		
1. Non-current assets		
a) Fixed assets		
- Tangible assets	20,00,000	15,00,000
- Intangible assets	9,00,000	6,00,000
b) Current assets		
- Inventories	3,00,000	4,00,000
- Cash and cash equivalents	3,00,000	2,00,000
Total	**35,00,000**	**27,00,000**

Test your Understanding – II

Choose the right answer :

1. The financial statements of a business enterprise include:
   - (a) Balance sheet
   - (b) Statement of 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 statements are also known as:
   - (a) Dynamic analysis
   - (b) Horizontal analysis
   - (c) Vertical analysis
   - (d) External analysis

Test your Understanding – III

State whether each of the following is True or False :

(a) The financial statements of a business enterprise include cash 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) Statement of 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.

4.7 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 reports of the company.
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 accounting 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 Statement
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, Statement of Profit and Loss and Cash Flow Statement. It also carries management's discussion of corporate performance of the year under review for futuristic prospects.

Tools of Financial Analysis

Commonly used tools of financial analysis are: Comparative statements, Common size statement, trend analysis, ratio analysis, and cash flow analysis.

Comparative Statement

Comparative statement shows 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 statement expresses all items of a financial statement as a percentage of some common base such as revenue from operations for statement of profit and loss and total assets for balance sheet.

Questions for Practice

Short Answer Questions

1. List the techniques of Financial Statement Analysis.
2. Distinguish between Vertical and Horizontal Analysis of financial data.
3. State the meaning of Analysis and Interpretation.
4. State the importance of Financial Analysis?
5. What are Comparative Financial Statements?
6. What do you mean by Common Size Statements?

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 its importance.
5. Explain how common size statements are prepared giving an example.

Numerical Questions

1. Following are the balance sheets of Alpha Ltd., as at March 31, 2016 and 2017:

Particulars	*March 31, 2016* Rs.	*March 31, 2017* Rs.
I. Equity and Liabilities		
Equity share capital	2,00,000	4,00,000
Reserves and surplus	1,00,000	1,50,000
Long-term borrowings	2,00,000	3,00,000
Short-term borrowings	50,000	70,000
Trade payables	30,000	60,000
Short-term provisions	20,000	10,000
Other current liabilities	20,000	30,000
Total	**6,20,000**	**10,20,000**
II. Assets		
Fixed assets	2,00,000	5,00,000
Non-current investments	1,00,000	1,25,000
Current investments	60,000	80,000

Inventories	1,35,000	1,55,000
Trade receivables	60,000	90,000
Short term loans and advances	40,000	60,000
Cash at bank	25,000	10,000
Total	**6,20,000**	**10,20,000**

You are required to prepare a Comparative Balance Sheet.

2. Following are the balance sheets of Beta Ltd. at March 31, 2016 and 2017:

Particulars	*March 31, 2017 (Rs.)*	*March 31, 2016 (Rs.)*
I. Equity and Liabilities		
Equity share capital	4,00,000	3,00,000
Reserves and surplus	1,50,000	1,00,000
Loan from IDBI	3,00,000	1,00,000
Short-term borrowings	70,000	50,000
Trade payables	60,000	30,000
Short-term provisions	10,000	20,000
Other current liabilities	1,10,000	1,00,000
Total	**11,00,000**	**7,00,000**
II. Assets		
Fixed assets	4,00,000	2,20,000
Non-current investments	2,25,000	1,00,000
Current investments	80,000	60,000
Stock	1,05,000	90,000
Trade receivables	90,000	60,000
Short-term loans and advances	1,00,000	85,000
Cash and cash equivalents	1,00,000	85,000
Total	**11,00,000**	**7,00,000**

3. Prepare Comparative Statement of profit and loss from the following information:

Particulars	*2016-17 (Rs.)*	*2015-16 (Rs.)*
Freight Outward	20,000	10,000
Wages (office)	10,000	5,000
Manufacturing Expenses	50,000	20,000

Stock adjustment	(60,000)	30,000
Cash purchases	80,000	60,000
Credit purchases	60,000	20,000
Returns inward	8,000	4,000
Gross profit	(30,000)	90,000
Carriage outward	20,000	10,000
Machinery	3,00,000	2,00,000
10% depreciation on machinery	10,000	5,000
Interest on short-term loans	20,000	20,000
10% debentures	20,000	10,000
Profit on sale of furniture	20,000	10,000
Loss on sale of office car	90,000	60,000
Tax rate	40%	50%

4. Prepare Comparative Statement of Profit and Loss from the following information:

Particulars	*2015-16 (Rs.)*	*2016-17 (Rs.)*
Manufacturing expenses	35,000	80,000
Opening stock	30,000	60% of closing stock
Sales	9,60,000	4,50,000
Returns outward	4,000 (out of credit purchase)	6,000 (out of cash purchase)
Closing stock	150% of opening stock	1,00,000
Credit purchases	1,50,000	150% of cash purchase
Cash purchases	80% of credit purchases	40,000
Carriage outward	10,000	30,000
Building	1,00,000	2,00,000
Depreciation on building	20%	10%
Interest on bank overdraft	5,000	-
10% debentures	2,00,000	20,00,000
Profit on sale of copyright	10,000	20,000
Loss on sale of personal car	10,000	20,000
Other operating expenses	20,000	10,000
Tax rate	50%	40%

5. Prepare a Common size statement of profit and loss of Shefali Ltd. with the help of following information:

Particulars	*2015-16*	*2016-17*
	(Rs.)	*(Rs.)*
Revenue from operations	6,00,000	8,00,00
Indirect expense	25% of gross profit	25% of gross profit
Cost of revenue from operations	4,28,000	7,28,000
Other incomes	10,000	12,000
Income tax	30%	30%

6. Prepare a Common Size balance sheet from the following balance sheet of Aditya Ltd., and Anjali Ltd.:

Particulars	*Aditya Ltd.*	*Anjali Ltd.*
	Rs.	Rs.
I. Equity and Liabilities		
a) Equity share capital	6,00,000	8,00,000
b) Reserves and surplus	3,00,000	2,50,000
c) Current liabilities	1,00,000	1,50,000
Total	**10,00,000**	**12,00,000**
II. Assets		
a) Fixed assets	4,00,000	7,00,000
b) Current assets	6,00,000	5,00,000
Total	**1,00,0000**	**12,00,000**

Answers to Test your Understanding

Test your Understanding – I

1. Simplifying 2. explaining the impact of 3. 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

LEARNING OBJECTIVES

After studying this chapter, you will be able to :

- *explain the meaning, objectives and limitations of 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.*

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. This 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 statements 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 enterprises.

5.1 Meaning of Accounting Ratios

As stated earlier, accounting ratios are an important tool of financial statements 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 'Revenue from Operations' are Rs. 1,00,000, it can be said that the gross profit is 10% $\frac{10,000}{1,00,000} \times 100$ of the 'Revenue from Operations' . This ratio is termed as gross profit ratio. Similarly, inventory turnover ratio may be 6 which implies that inventory turns into 'Revenue from Operations' six times in a year.

It needs to be observed that accounting ratios exhibit relationship, if any, between accounting numbers extracted from financial statements. Ratios 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 scenario. 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 lot 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; and
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 ratio analysis. These are summarised as follows:

1. *Helps to understand efficacy of decisions:* The ratio analysis helps you to 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's 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 unwarranted impression of precision and finality. In fact, accounting data "reflect a combination of recorded facts, accounting conventions and personal judgements which 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 of the enterprises 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 inventory, calculation of depreciation, treatment of intangibles Assets 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 evaluating 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) Analysis of data provided in the financial statements is termed as financial analysis.

(c) Long-term borrowings are concerned about the ability of a firm to discharge its obligations to pay interest and repay the principal amount.

(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) A ratio reflects quantitative and qualitative aspects of results.

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. *'Statement of Profit and Loss Ratios:* A ratio of two variables from the statement of profit and loss is known as statement of profit and loss ratio. For example, ratio of gross profit to revenue from operations is known as gross profit ratio. It is calculated using both figures from the statement of profit and loss.

2. *Balance Sheet Ratios:* In case both variables are from the balance sheet, it is classified as balance sheet ratios. For example, ratio of current assets to current liabilities known as current ratio. It is calculated using both figures from balance sheet.
3. *Composite Ratios:* If a ratio is computed with one variable from the statement of profit and loss and another variable from the balance sheet, it is called composite ratio. For example, ratio of credit revenue from operations to trade receivables (known as trade receivables turnover ratio) is calculated using one figure from the statement of profit and loss (credit revenue from operations) and another figure (trade receivables) from the balance sheet.

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 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 is 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'. These 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'. These are essentially long-term in nature.
3. *Activity (or Turnover) Ratios:* This refers to the ratios that are calculated for measuring the efficiency of operations 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 revenue from operations or funds (or assets) employed in the business and the ratios calculated to meet this objective are known as 'Profitability Ratios'.

5.6 Liquidity Ratios

Liquidity ratios are calculated to measure 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. The two ratios included in this category are current ratio and liquidity ratio.

5.6.1 Current Ratio

Current ratio is the proportion of current assets to current liabilities. It is expressed as follows:

$$\text{Current Ratio} = \text{Current Assets : Current Liabilities or } \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current assets include current investments, inventories, trade receivables (debtors and bills receivables), cash and cash equivalents, short-term loans and advances and other current assets such as prepaid expenses, advance tax and accrued income, etc.

Current liabilities include short-term borrowings, trade payables (creditors and bills payables), other current liabilities and short-term provisions.

Illustration 1

Calulate Current Ratio from the following information:

Particulars	Rs.
Inventories	50,000
Trade receivables	50,000
Advance tax	4,000
Cash and cash equivalents	30,000
Trade payables	1,00,000
Short-term borrowings (bank overdraft)	4,000

Solution:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Assets = Inventories + Trade receivables + Advance tax + Cash and cash equivalents
= Rs. 50,000 + Rs. 50,000 + Rs. 4,000 + Rs. 30,000
= Rs. 1,34,000

Current Liabilities = Trade payables + Short-term borrowings
= Rs. 1,00,000 + Rs. 4,000
= Rs. 1,04,000

$$\text{Current Ratio} = \frac{\text{Rs.}1,34,000}{\text{Rs.}1,04,000} = 1.29:1$$

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 firm's credit worthiness adversely. Normally, it is safe to have this ratio within the range of 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 inventories at the end and other current assets such as prepaid expenses, advance tax, etc., from the current assets. Because of exclusion of non-liquid current assets 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:

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

$$\begin{aligned} \text{Quick Assets} &= \text{Current assets} - (\text{Inventories} + \text{Advance tax}) \\ &= \text{Rs. } 1{,}34{,}000 - (\text{Rs. } 50{,}000 + \text{Rs. } 4{,}000) \\ &= \text{Rs. } 80{,}000 \\ \text{Current Liabilities} &= \text{Rs. } 1{,}04{,}000 \end{aligned}$$

$$\text{Quick Ratio} = \frac{\text{Rs. } 80{,}000}{\text{Rs. } 1{,}04{,}000} = 0.77 : 1$$

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 'Liquidity Ratio' from the following information:

Current liabilities	=	Rs. 50,000
Current assets	=	Rs. 80,000
Inventories	=	Rs. 20,000
Advance tax	=	Rs. 5,000
Prepaid expenses	=	Rs. 5,000

Solution

$$\text{Liquidity Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}$$

Liquidity Assets = Current assets – (Inventories + Prepaid expenses + Advance tax)

= Rs. 80,000 – (Rs. 20,000 + Rs. 5,000 + Rs. 5,000)

= Rs. 50,000

$$\text{Liquidity Ratio} = \frac{\text{Rs. }50,000}{\text{Rs. }50,000} = 1:1$$

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 inventories 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
Inventories	=	Current assets – Quick assets
24,000	=	3.5x – 2x
24,000	=	1.5x
x	=	Rs.16,000
Current Liabilities	=	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
Non-current liabilities	=	Rs. 80,000
Shareholders' Funds	=	Rs. 2,00,000
Non-Current Assets:		
Fixed assets	=	Rs. 1,60,000
Non-current Investments	=	Rs. 1,00,000

Solution:

Total assets	=	Non-current assets + Current assets
Rs. 3,00,000	=	Rs. 2,60,000 + Current assets
Current assets	=	Rs. 3,00,000 – Rs. 2,60,000 = Rs. 40,000
Total assets	=	Equity and Liabilities
	=	Shareholders' Funds + Non-current 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

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$= \frac{\text{Rs. } 40,000}{\text{Rs. } 20,000} = 2:1$$

Do it Yourself

1. Current liabilities of a company are Rs. 5,60,000, current ratio is 2.5:1 and quick ratio is 2:1. Find the value of the Inventories.
2. Current ratio = 4.5:1, quick ratio = 3:1.Inventory is Rs. 36,000. Calculate the current assets and current liabilities.
3. Current assets of a company are Rs. 5,00,000. Current ratio is 2.5:1 and Liquid ratio is 1:1. Calculate the value of current liabilities, liquid assets and inventories.

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) Payment of current liability;
(b) Purchased goods on credit;
(c) Sale of a Computer (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 given current ratio is 2 : 1. Let us assume that current assets are Rs. 50,000 and current liabilities are Rs. 25,000; Thus, 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 : 1 (Rs. 40,000/Rs.15,000). Hence, it has *improved*.
(b) Assume that goods of Rs. 10,000 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 1.7:1 (Rs. 60,000/Rs. 35,000). Hence, it has *reduced*.
(c) Due to sale of a computer (a fixed asset) the current assets will increase to Rs. 53,000 without any change in the current liabilities. The new ratio will be 2.12 : 1 (Rs. 53,000/Rs. 25,000). Hence, it has *improved*.
(d) This transaction will decrease the inventories by Rs. 10,000 and increase the cash by Rs. 11,000 thereby increasing the current assets by Rs. 1,000 without any change in the current liabilities. The new ratio will be 2.04 : 1 (Rs. 51,000/Rs. 25,000). Hence, it has *improved*.
(e) Assume that ₹5,000 is given by way of dividend. It will reduce the current assets to ₹45,000 and short-term provisions (current liabilities) by ₹5,000. The new ratio will be 2:25:1 (₹45,000/₹20,000). Hence, it has improved.

5.7 Solvency Ratios

The persons who have advanced money to the business on long-term basis are interested in safety of their periodic payment of interest 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 to Capital Employed 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. However, it may vary from industry to industry. It is computed as follows:

$$\text{Debt-Equity Ratio} = \frac{\text{Long – term Debts}}{\text{Shareholders' Funds}}$$

where:

Shareholders' Funds (Equity)	=	Share capital + Reserves and Surplus + Money received against share warrants
Share Capital	=	Equity share capital + Preference share capital
		or
Shareholders' Funds (Equity)	=	Non-current sssets + Working capital – Non-current liabilities
Working Capital	=	Current Assets – Current Liabilities

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.

Illustration 7

From the following balance sheet of ABC Co. Ltd. as on March 31, 2015. Calculate debt equity ratio:

ABC Co. Ltd.
Balance Sheet as at 31 March, 2017

Particulars	Note No.	Amount (Rs.)
I. Equity and Liabilities		
1. Shareholders' funds		
a) Share capital		12,00,000
b) Reserves and surplus		2,00,000
c) Money received against share warrants		1,00,000
2. Non-current Liabilities		
a) Long-term borrowings		4,00,000
b) Other long-term liabilities		40,000
c) Long-term provisions		60,000
3. Current Liabilities		
a) Short-term borrowings		2,00,000
b) Trade payables		1,00,000
c) Other current liabilities		50,000
d) Short-term provisions		1,50,000
		25,00,000
II. Assets		
1. Non-Current Assets		
a) Fixed assets		15,00,000
b) Non-current investments		2,00,000
c) Long-term loans and advances		1,00,000
2. Current Assets		
a) Current investments		1,50,000
b) Inventories		1,50,000
c) Trade receivables		1,00,000
d) Cash and cash equivalents		2,50,000
e) Short-term loans and advances		50,000
		25,00,000

Solution:

Debt-Equity Ratio $= \dfrac{\text{Debts}}{\text{Equity}}$

Debt = Long-term borrowings + Other long-term liabilities + Long-term provisions
= Rs. 4,00,000 + Rs. 40,000 + Rs. 60,000
= Rs. 5,00,000

Equity = Share capital + Reserves and surplus + Money received against share warrants

= Rs. 12,00,000 + Rs. 2,00,000 + Rs. 1,00,000
= Rs. 15,00,000

Alternatively,

Equity = Non-current assets + Working capital – Non-current liabilities
= Rs. 18,00,000 + Rs. 2,00,000 – Rs. 5,00,000
= Rs. 15,00,000

Working Capital = Current assets – Current liabilities
= Rs. 7,00,000 –Rs. 5,00,000
= Rs. 2,00,000

Debt Equity Ratio $= \frac{50,0000}{1,50,0000} = 0.33 : 1$

Illustration 8

From the following balance sheet of a company, calculate Debt-Equity Ratio:

Balance Sheet

Particulars	Note No.	Rs.
I. Equity and Liabilities		
1. Shareholders' funds		
a) Share capital		10,00,000
b) Reserves and surplus	1	1,00,000
2. Non-Current Liabilities		
Long-term borrowings		1,50,000
3. Current Liabilities		1,50,000
		14,00,000
II. Assets		
1. Non-Current Assets		
a) Fixed assets		
- Tangible assets	2	11,00,000
2. Current Assets		
a) Inventories		1,00,000
b) Trade receivables		90,000
c) Cash and cash equivalents		1,10,000
		14,00,000

Notes to Accounts

	Rs.
1. Share Capital	
Equity Share Capital	8,00,000
Preference Share Capital	2,00,000
	10,00,000

Fixed Assets

	Rs.
2. Tangible Assets:	
Plant and Machinery	5,00,000
Land and Building	4,00,000
Motor Car	1,50,000
Furniture	50,000
	11,00,000

Solution:

$$\text{Debt-Equity Ratio} = \frac{\text{Long - term Debts}}{\text{Equity (Shareholders' Funds)}}$$

Long-term Debts = Long-term Borrowings
= Rs. 1,50,000

Equity = Share capital + Reserves and surplus
= Rs. 10,00,000 + Rs. 1,00,000 = Rs. 11,00,000

$$\text{Debt Equity Ratio} = \frac{1,50,000}{11,00,000} = 0.136 : 1$$

5.7.2 Debt to Capital Employed Ratio

The Debt to capital employed 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:

Debt to Capital Employed Ratio = Long-term Debt/Capital Employed (or Net Assets)

Capital employed is equal to the long-term debt + shareholders' funds. Alternatively, it may be taken as net assets which are equal to the total assets – current liabilities taking the data of Illustration 7, capital employed shall work out to Rs. 5,00,000 + Rs. 15,00,000 = Rs. 20,00,000. Similarly, Net Assets as Rs. 25,00,000 – Rs. 5,00,000 = Rs. 20,00,000 and the Debt to capital employed ratio as Rs. 5,00,000/Rs. 20,00,000 = 0.25:1.

Significance: Like debt-equity ratio, it shows proportion of long-term debts in capital employed. Low ratio provides security to lenders and high ratio helps management in trading on equity. In the above case, the debt to Capital Employed ratio is less than half which indicates reasonable funding by debt and adequate security of debt.

It may be noted that Debt to Capital Employed Ratio can also be computed in relation to total assets. In that case, it usually refers to the ratio of total debts (long-term debts + current liabilities) to total assets, i.e., total of non-current and current assets (or shareholders', funds + long-term debts + current liabilities), and is expressed as

$$\text{Debt to Capital Employed Ratio} = \frac{\text{Total Debts}}{\text{Total Assets}}$$

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. 15,00,000/Rs. 20,00,000 = 0.75 : 1

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 instead of net assets (capital employed). It may be noted that the total of debt to capital employed ratio and proprietory ratio is equal to 1. Take these ratios worked out on the basis of data of Illustration 7, the debt to Capital Employed ratio is 0.25 : 1 and the Proprietory Ratio 0.75 : 1 the total is 0.25 + 0.75 = 1. In terms of percentage it can be stated that the 25% of the capital employed is funded by debts and 75% by owners' funds.

5.7.4 Total Assets to Debt Ratio

This ratio measures the extent of the coverage of long-term debts by assets. It is calculated as

Total assets to Debt Ratio = Total assets/Long-term debts

Taking the data of Illustration 8, this ratio will be worked out as follows:

Rs. 14,00,000/Rs. 1,50,000 = 9.33 : 1

The higher ratio indicates that assets have been mainly financed by owners funds and the long-term loans 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 is observed that in that case, the ratio is the reciprocal of the debt to capital employed ratio.

Significance: This ratio primarily indicates the rate of external funds in financing the assets and the extent of coverage of their debts are covered by assets.

Illustration 9

From the following information, calculate Debt Equity Ratio, Total Assets to Debt Ratio, Proprietory Ratio, and Debt to Capital Employed Ratio:

Balance Sheet as at March 31, 2017

Particulars	Note No.	Rs.
I. Equity and Liabilities:		
1. Shareholders' funds		
a) Share capital		4,00,000
b) Reserves and surplus		1,00,000
2. Non-current Liabilities		
Long-term borrowings		1,50,000
3. Current Liabilities		50,000
		7,00,000
II. Assets		
1. Non-current Assets		
a) Fixed assets		4,00,000
b) Non-current investments		1,00,000
2. Current Assets		2,00,000
		7,00,000

Solution:

i) Debt-Equity Ratio $= \dfrac{\text{Debts}}{\text{Equity}}$

Debt = Long-term borrowings = Rs. 1,50,000

Equity = Share capital + Reserves and surplus

= Rs. 4,00,000 + Rs. 1,00,000 = Rs. 5,00,000

Debt-Equity Ratio $= \dfrac{\text{Rs. } 1,50,000}{\text{Rs. } 5,00,000} = 0.3 : 1$

ii) Total Assets to Debt Ratio $= \dfrac{\text{Total assets}}{\text{Long-term debts}}$

Total Assets = Fixed assets + Non-current investments + Current assets

= Rs. 4,00,000 + Rs. 1,00,000 + Rs. 2,00,000 = Rs. 7,00,000

Long-term Debt = Rs. 1,50,000

Total Asset to Debt Ratio $= \dfrac{\text{Rs. } 7,00,000}{\text{Rs. } 1,50,000} = 4.67 : 1$

iii) Proprietary Ratio = or $\frac{\text{Shareholders' Funds}}{\text{Total Assets}}$

$$= \frac{\text{Rs. } 5,00,000}{\text{Rs. } 7,00,000} = 0.71 : 1$$

iv) Debt to Capital Employed Ratio = $\frac{\text{Long-term debts}}{\text{Capital Employed}}$

Capital Employed = Shareholders' Funds + Long-term borrowings
= Rs. 5,00,000 + Rs. 1,50,000
= Rs. 6,50,000

Debt to Capital Employed Ratio= $\frac{\text{Long-term debts}}{\text{Capital Employed}}$

$$= \frac{\text{Rs. } 1,50,000}{\text{Rs. } 6,50,000} = 0.23 : 1$$

Illustration 10

The debt equity ratio of X Ltd. is 0.5 : 1. 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.
Now we will analyse the effect of given transactions on debt equity ratio.

(i) 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 0.45 : 1 (5,00,000/11,00,000). Thus, it is clear that further issue of equity shares decreases the debt-equity ratio.

(ii) Cash received from debtors will leave the internal and external funds unchanged as this will only affect the composition of current assets. Hence, the debt-equity ratio will remain unchanged.

(iii) This will also leave the ratio *unchanged* as sale of goods on cash basis neither affect Debt nor equity.

(iv) 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 0.4 : 1 (4,00,000/10,00,000). Redemption of debentures will decrease the debit-equity ratio.

(v) This will also leave the ratio *unchanged* as purchase of goods on credit neither affect Debt nor equity.

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 debts. It expresses the relationship between profits available for payment of interest and the amount of interest payable. It is calculated as follows:

$$\text{Interest Coverage Ratio} = \frac{\text{Net Profit before Interest and Tax}}{\text{Interest on long-term debts}}$$

Significance: It reveals the number of times interest on long-term debts is covered by the profits available for interest. A higher ratio ensures safety of interest on debts.

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) Ratio

These ratios indicate the speed at which, activities of the business are being performed. 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. Inventory Turnover;
2. Trade receivable Turnover;
3. Trade payable Turnover;
4. Investment (Net assets) Turnover
5. Fixed assets Turnover; and
6. Working capital Turnover.

5.8.1 Inventory Turnover Ratio

It determines the number of times inventory is converted into revenue from operations during the accounting period under consideration. It expresses the relationship between the cost of revenue from operations and average inventory. The formula for its calculation is as follows:

Inventory Turnover Ratio = Cost of Revenue from Operations / Average Inventory

Where average inventory refers to arithmetic average of opening and closing inventory, and the cost of revenue from operations means revenue from operations less gross profit.

Significance : It studies the frequency of conversion of inventory of finished goods into revenue from operations. It is also a measure of liquidity. It determines how many times inventory is purchased or replaced during a year. Low turnover of inventory may be due to bad buying, obsolete inventory, 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 inventory of goods.

Test your Understanding – II

(i) The following groups of ratios are primarily measure risk:
- A. liquidity, activity, and profitability
- B. liquidity, activity, and inventory
- C. liquidity, activity, and debt
- D. liquidity, debt and profitability

(ii) The ________ ratios are primarily measures of return:
- A. liquidity
- B. activity
- C. debt
- D. profitability

(iii) The ________ of business firm is measured by its ability to satisfy its short-term obligations as they become due:
- A. activity
- B. liquidity
- C. debt
- D. profitability

(iv) ________ ratios are a measure of the speed with which various accounts are converted into revenue from operations 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, trade receivable
- B. liquid ratio, trade receivable
- C. current ratio, inventory
- D. liquid ratio, inventory

Illustration 12

From the following information, calculate inventory turnover ratio :

		Rs.
Inventory in the beginning	=	18,000
Inventory at the end	=	22,000
Net purchases	=	46,000
Wages	=	14,000
Revenue from operations	=	80,000
Carriage inwards	=	4,000

Solution:

Inventory Turnover Ratio $= \dfrac{\text{Cost of Revenue from Operations}}{\text{Average Inventory}}$

Cost of Revenue from Operations = Inventory in the beginning + Net Purchases + Wages + Carriage inwards – Inventory at the end

= Rs. 18,000 + Rs. 46,000 + Rs. 14,000 + Rs. 4,000 – Rs. 22,000

= Rs. 60,000

Average Inventory $= \dfrac{\text{Inventory in the beginning + Inventory at the end}}{2}$

$= \dfrac{\text{Rs. } 18,000 + \text{Rs. } 22,000}{2}$ = Rs. 20,000

$\therefore$ Inventory Turnover Ratio $= \dfrac{\text{Rs. } 60,000}{\text{Rs. } 20,000}$ = 3 Times

Illustration 13

From the following information, calculate inventory turnover ratio:

		Rs.
Revenue from operations	=	4,00,000
Average Inventory	=	55,000
Gross Profit Ratio	=	10%

Solution:

Revenue from operations = Rs. 4,00,000

Gross Profit = 10% of Rs. 4,00,000 = Rs. 40,000

Cost of Revenue from operations = Revenue from operations – Gross Profit

= Rs. 4,00,000 – Rs. 40,000 = Rs. 3,60,000

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Revenue from Operations}}{\text{Average Inventory}}$$

$$= \frac{\text{Rs. } 3,60,000}{\text{Rs. } 55,000} = 6.55 \text{ times}$$

Illustration 14

A trader carries an average inventory of Rs. 40,000. His inventory turnover ratio is 8 times. If he sells goods at a profit of 20% on Revenue from operations, find out the gross profit.

Solution:

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Revenue from Operations}}{\text{Average Inventory}}$$

$$8 = \frac{\text{Cost of Revenue from Operations}}{\text{Rs. } 40,000}$$

$\therefore$ Cost of Revenue from operations = $8 \times$ Rs. 40,000

= Rs. 3,20,000

$$\text{Revenue from operations} = \text{Cost of Revenue from operations} \times \frac{100}{80}$$

$$= \text{Rs. } 3,20,000 \times \frac{100}{80} = \text{Rs. } 4,00,000$$

Gross Profit = Revenue from operations – Cost of Revenue from operations

= Rs. 4,00,000 – Rs. 3,20,000 = Rs. 80,000

Do it Yourself

1. Calculate the amount of gross profit:

Average inventory	=	Rs. 80,000
Inventory turnover ratio	=	6 times
Selling price	=	25% above cost

2. Calculate Inventory Turnover Ratio:

Annual Revenue from operations	=	Rs. 2,00,000
Gross Profit	=	20% on cost of Revenue from operations
Inventory in the beginning	=	Rs. 38,500
Inventory at the end	=	Rs. 41,500

5.8.2 Trade Receivables Turnover Ratio

It expresses the relationship between credit revenue from operations and trade receivable. It is calculated as follows :

Trade Receivable Turnover ratio = Net Credit Revenue from Operations/Average Trade Receivable

Where Average Trade 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 trade receivables are realised. This ratio indicates the number of times the receivables are turned over and converted into cash in an accounting period. Higher turnover means speedy collection from trade receivable. This ratio also helps in working out the average collection period. The ratio is calculated by dividing the days or months in a year by trade receivables turnover ratio.

$$\text{i.e., } \frac{\text{Number of days or Months}}{\text{Trade receivables turnover ratio}}$$

Illustration 15

Calculate the Trade receivables turnover ratio from the following information:

	Rs.
Total Revenue from operations	4,00,000
Cash Revenue from operations	20% of Total Revenue from operations
Trade receivables as at 1.4.2016	40,000
Trade receivables as at 31.3.2017	1,20,000

Solution:

Trade Receivables Turnover Ratio = $\frac{\text{Net Credit Revenue from Operations}}{\text{Average Trade Receivables}}$

Credit Revenue from operations = Total revenue from operations – Cash revenue from operations

Cash Revenue from operations = 20% of Rs. 4,00,000

= Rs. $4,00,000 \times \frac{20}{100}$ = Rs. 80,000

Credit Revenue from operations = Rs. 4,00,000 – Rs. 80,000 = Rs. 3,20,000

$$\text{Average Trade Receivables} = \frac{\text{Opening Trade Receivables + Closing Trade Receivables}}{2}$$

$$= \frac{\text{Rs. }40,000 + \text{Rs. }1,20,000}{2} = \text{Rs. }80,000$$

$$\text{Trade Receivables Turnover Rations} = \frac{\text{Net Credit Revenue Form Operations}}{\text{Average Inventoary}}$$

$$\text{Trade Receivables Turnover Ratio} = \frac{\text{Rs. }3,20,000}{\text{Rs. }80,000} = 4 \text{ times.}$$

5.8.3 Trade Payable Turnover Ratio

Trade payables turnover ratio indicates the pattern of payment of trade payable. As trade payable arise on account of credit purchases, it expresses relationship between credit purchases and trade payable. It is calculated as follows:

Trade Payables Turnover ratio = Net Credit purchases/ Average trade payable

Where Average Trade Payable = (Opening Creditors and Bills Payable + Closing Creditors and Bills Payable)/2

$$\text{Average Payment Period} = \frac{\text{No. of days/month in a year}}{\text{Trade Payables Turnover Ratio}}$$

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 Trade Payable Turnover Ratio.

Illustration 16

Calculate the Trade payables turnover ratio from the following figures:

		Rs.
Credit purchases during 2016-17	=	12,00,000
Creditors on 1.4.2016	=	3,00,000
Bills Payables on 1.4.2016	=	1,00,000
Creditors on 31.3.2017	=	1,30,000
Bills Payables on 31.3.2017	=	70,000

Solution:

$$\text{Trade Payables Turnover Ratio} = \frac{\text{Net Credit Purchases}}{\text{Average Trade Payables}}$$

$$\text{Average Trade Payables} = \frac{\text{Creditors in the beginning + Bills payables in the beginning + Creditors at the end + Bills payables at the end}}{2}$$

$$= \frac{\text{Rs. } 3,00,000 + \text{Rs. } 1,00,000 + \text{Rs. } 1,30,000 + \text{Rs. } 70,000}{2}$$

$$= \text{Rs. } 3,00,000$$

$$\therefore \text{ Trade Payables Turnover Ratio} = \frac{\text{Rs. } 12,00,000}{\text{Rs. } 3,00,000} = 4 \text{ times}$$

Illustration 17

From the following information, calculate –

(i) Trade receivables turnover ratio
(ii) Average collection period
(iii) Trade rayable turnover ratio
(iv) Average payment period

Given :

	(Rs.)
Revenue from Operations	8,75,000
Creditors	90,000
Bills receivable	48,000
Bills payable	52,000
Purchases	4,20,000
Trade debtors	59,000

Solution:

$$\text{(i) Trade Receivables Turnover Ratio} = \frac{\text{Net Credit Revenue from operation}}{\text{Average Trade Receivable}}$$

$$= \frac{\text{Rs. } 8,75,000}{(\text{Rs. } 59,000 + \text{Rs. } 48,000)^{*}}$$

$$= 8.18 \text{ times}$$

* This figure has not been divided by 2, in order to calculate average Trade Receivables 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 $= \dfrac{365}{\text{Trade Receivables Turnover Ratio}}$

$= \dfrac{365}{8.18}$

= 45 days

(iii) Trade Payable Turnover Ratio $= \dfrac{\text{Purchases *}}{\text{Average Trade Payables}}$

$= \dfrac{\text{Purchases}}{\text{Creditors + Bills payable}}$

$= \dfrac{4,20,000}{90,000 + 52,000}$

$= \dfrac{4,20,000}{1,42,000}$

= 2.96 times

(iv) Average Payment Period $= \dfrac{365}{\text{Trade Payables Turnover Ratio}}$

$= \dfrac{365}{2.96}$

= 123 days

*Since no information regarding credit purchase is given, hence it will be related as net purchases.

5.8.4 Net Assets or Capital Employed Turnover Ratio

It reflects relationship between revenue from operations and net assets (capital employed) in the business. Higher turnover means better activity and profitability. It is calculated as follows :

$$\text{Net Assets or Capital Employed Turnover ratio} = \frac{\text{Revenue from Operation}}{\text{Capital Employed}}$$

Capital employed turnover ratio which studies turnover of capital employed (or Net Assets) is analysed further by following two turnover ratios :

(a) *Fixed Assets Turnover Ratio :* It is computed as follows:

$$\text{Fixed asset turnover Ratio} = \frac{\text{Net Revenue from Operation}}{\text{Net Fixed Assets}}$$

(b) *Working Capital Turnover* Ratio : It is calculated as follows :

$$\text{Working Capital Turnover Ratio} = \frac{\text{Net Revenue from Operation}}{\text{Working Capital}}$$

Significance : High turnover of 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 :

	Amount (Rs.)		*Amount (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
Balance in Statement of Profit and Loss	3,00,000	Furniture	1,00,000
15% debentures	2,00,000	Inventory	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		

Revenue from operations for the year 2016-17 were Rs. 30,00,000

Solution:

Revenue from Operations = Rs. 30,00,000

Capital Employed = Share Capital + Reserves and Surplus + Long-term Debts (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 Ratio	=	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 ___________ may indicate that the firm is experiencing stockouts and lost sales.
A. average payment period
B. inventory turnover ratio
C. average collection period
D. quick ratio

(iv) 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. 37 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 the statement of profit and loss. 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 revenue from operations is computed to have an idea about gross margin. It is computed as follows:

Gross Profit Ratio = Gross Profit/Net Revenue of Operations × 100

Significance: It indicates gross margin on products sold. It also indicates the margin available to cover operating expenses, non-operating expenses, etc. Change in gross profit ratio may be due to change in selling price or cost of revenue from operations or a combination of both. A low ratio may indicate unfavourable purchase and sales policy. Higher gross profit ratio is always a good sign.

Illustration 19

Following information is available for the year 2016-17, calculate gross profit ratio:

	Rs.
Revenue from Operations: Cash	25,000
: Credit	75,000
Purchases : Cash	15,000
: Credit	60,000
Carriage Inwards	2,000

Salaries	25,000
Decrease in Inventory	10,000
Return Outwards	2,000
Wages	5,000

Solution:

Revenue from Operations	=	Cash Revenue from Operations + Credit Revenue from Opration
	=	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 Revenue from operations	=	Purchases + (Opening Inventory – Closing Inventory) + Direct Expenses
	=	Purchases + Decrease in inventory + Direct Expenses
	=	Rs.73,000 + Rs.10,000 + (Rs.2,000 + Rs.5,000)
	=	Rs.90,000
Gross Profit	=	Revenue from Operations – Cost of Revenue from Operation
	=	Rs.1,00,000 – Rs.90,000
	=	Rs. 10,000
Gross Profit Ratio	=	Gross Profit/Net Revenue from Operations ×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 revenue from operations. It is calculated as follows:

Operating Ratio = (Cost of Revenue from Operations + Operating Expenses)/ Net Revenue from Operations ×100

Operating expenses include office expenses, administrative expenses, selling expenses, distribution expenses, depreciation and employee benefit expenses etc.

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/ Revenue from Operations × 100

Where Operating Profit = Revenue from Operations – Operating Cost

Significance: Operating ratio is computed to express cost of operations excluding financial charges in relation to revenue from operations. 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.
Revenue from Operations	3,40,000
Cost of Revenue from Operations	1,20,000
Selling expenses	80,000
Administrative Expenses	40,000

Calculate Gross profit ratio and Operating ratio.

Solution:

Gross Profit = Revenue from Operations – Cost of Revenue from Operations
= Rs. 3,40,000 – Rs. 1,20,000
= Rs. 2,20,000

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Revenue from operation}} \times 100$$

$$= \frac{\text{Rs. } 2{,}20{,}000}{\text{Rs. } 3{,}40{,}000} \times 100$$

= 64.71%

Operating Cost = Cost of Revenue from Operations + Selling Expenses + Administrative Expenses
= Rs. 1,20,000 + 80,000 + 40,000
= Rs. 2,40,000

$$\text{Operating Ratio} = \frac{\text{Operating Cost}}{\text{Net Revenue from Operations}} \times 100$$

$$= \frac{\text{Rs. } 2{,}40{,}000}{\text{Rs. } 3{,}40{,}000} \times 100$$

= 70.59%

5.9.4 Net Profit Ratio

Net profit ratio is based on all inclusive concept of profit. It relates revenue from operations to net profit after operational as well as non-operational expenses and incomes. It is calculated as under:

Net Profit Ratio = Net profit/Revenue from Operations × 100

Generally, net profit refers to profit after tax (PAT).

Significance: It is a measure of net profit margin in relation to revenue from operations. 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 revenue from operations was Rs. 20,00,000 and its cash revenue from operations was 10% of the total revenue from operations. If the indirect expenses of the company were Rs. 50,000, calculate its net profit ratio.

Solution:

Cash Revenue from Operations	=	Rs.20,00,000 × 10/90
	=	Rs.2,22,222
Hence, total Revenue from Operations are	=	Rs.22,22,222
Gross profit = 0.25 × 22,22,222	=	Rs. 5,55,555
Net profit	=	Rs.5,55,555 – 50,000
	=	Rs.5,05,555
Net profit ratio	=	Net profit/Revenue from Operations × 100
	=	Rs.5,05,555/Rs.22,22,222 × 100
	=	22.75%.

5.9.5 Return on Capital Employed or Investment

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' funds, debentures and long-term loans. Alternatively, capital employed may be taken as the total of non-current assets and working capital. 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 loans. For inter-firm comparison, return on capital employed funds is considered a 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' Funds

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' funds, it is also termed as Return on Net Worth (RONW) and is calculated as under :

$$\text{Return on Shareholders' Fund} = \frac{\text{Profit after Tax}}{\text{Shareholders' Funds}} \times 100$$

5.9.7 Earnings per Share

The ratio is computed as:

EPS = Profit available for equity shareholders/Number 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 also for the share price in the stock market. This also helps comparison with other 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/Number of Equity Shares

Equity shareholder fund refers 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 to 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 computed as –

P/E Ratio = Market Price of a share/earnings per share

For example, if the EPS of X Ltd. 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 Ratio 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	Fixed Assets	Rs. 9,50,000
General Reserve	Rs. 1,84,000	Current Assets	Rs. 2,34,000
10% Debentures	Rs. 4,00,000		

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
	=	Rs. 4,00,000 + Rs. 1,00,000 + Rs. 1,84,000 + Rs. 4,00,000 = 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%
Shareholders' Fund	=	Equity Share Capital + Preference Share Capital + General Reserve
	=	Rs. 4,00,000 + Rs. 1,00,000 + Rs. 1,84,000
	=	Rs. 6,84,000
Return on Shareholders' Funds	=	Profit after tax/shareholders' Funds × 100
	=	Rs. 1,50,000/Rs. 6,84,000 × 100
	=	21.93%
EPS	=	Profit available for Equity Shareholders/ Number of Equity Shares
	=	Rs. 1,38,000/ 40,000 = Rs. 3.45
Preference Share Dividend	=	Rate of Dividend × Prefence Share Capital
	=	12% of Rs. 1,00,000
	=	Rs. 12,000
Profit available to equity Shareholders	=	Profit after Tax – Preference dividend on preference shares

where, Dividend on Prefrence shares	=	Rate of Dividend × Preference Share Capital
	=	12% of Rs. 1,00,000
	=	Rs.12,000
	=	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' fund/No. of equity shares
where, Number of Equity Shares	=	$\frac{\text{Equity share capital}}{\text{Face value per share}}$
	=	$\frac{\text{Rs. } 4,00,000}{\text{Rs.} 10}$
	=	40,000 shares
Hence, Book value per share	=	Rs. 5,84,000/40,000 shares = Rs. 14.60

It may be noted that various ratios are related with each other. Sometimes, the combined information regarding two or more ratios is given and missing figures may need to be calculated. In such a situation, the formula of the ratio will help in working out the missing figures (See Illsuatration 23 and 24).

Illustration 23

Calculate current assets of a company from the following information:

Inventory turnover ratio = 4 times
Inventory at the end is Rs. 20,000 more than the inventory in the beginning.
Revenue from Operations Rs. 3,00,000 and gross profit ratio is 20% of revenue from operations.
Current liabilities = Rs. 40,000
Quick ratio = 0.75 : 1

Solution:

Cost of Revenue from Operations	=	Revenue from Operations – Gross Profit
	=	Rs. 3,00,000 – (Rs. 3,00,000 × 20%)
	=	Rs. 3,00,000 – Rs. 60,000
	=	Rs. 2,40,000
Inventory Turnover Ratio	=	Cost of Revenue from Operations/ Average Inventory
Average Inventory	=	Cost of Revenue from Operations/4
	=	Rs. 2,40,000/4 = Rs. 60,000
Average Inventory	=	(Opening inventory + Closing inventory)/2
Rs. 60,000	=	Opening inventory + (Opening inventory +Rs.20,000)/2
Rs. 60,000	=	Opening inventory + Rs. 10,000
Opening Inventory	=	Rs. 50,000
Closing Inventory	=	Rs. 70,000
Liquid Ratio	=	Liquid assets/current liabilities

0.75	=	Liquid assets/Rs. 40,000
Liquid Assets	=	Rs. 40,000 × 0.75 = Rs. 30,000
Current Assets	=	Liquid assets + Closing inventory
	=	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

Illustration 25

Following information is given by a company from its books of accounts as on March 31, 2017:

Particulars	Rs.
Inventory	1,00,000
Total Current Assets	1,60,000
Shareholders' funds	4,00,000
13% Debentures	3,00,000
Current liabilities	1,00,000
Net Profit Before Tax	3,51,000
Cost of revenue from operations	5,00,000

Calculate:

i) Current Ratio
ii) Liquid Ratio
iii) Debt Equity Ratio
iv) Interest Coverage Ratio
v) Inventory Turnover Ratio

Solution:

i) Current Ratio $= \dfrac{\text{Current Assets}}{\text{Current Liabilities}}$

$$= \frac{\text{Rs. } 1,60,000}{\text{Rs. } 1,00,000} = 1.6 : 1$$

ii) Liquid Assets = Current assets – Inventory

= Rs. 1,60,000 – Rs. 1,00,000

= Rs. 60,000

Liquid Ratio $= \dfrac{\text{Liquid Assets}}{\text{Current Liabilities}}$

$= \dfrac{\text{Rs. } 60,000}{\text{Rs. } 1,00,000} = 0.6 : 1$

iii) Debt-Equity Ratio $= \dfrac{\text{Long-term Debts}}{\text{Shareholders' Funds}}$

$= \dfrac{\text{Rs. } 3,00,000}{\text{Rs. } 4,00,000} = 0.75 : 1$

iv) Net Profit before Interest & Tax = Net Profit before Tax + Interest on Long term Debts

= Rs. 3,51,000 + (13% of Rs. 3,00,000)

= Rs. 3,51,000 + Rs. 39,000 = Rs. 3,90,000

Interest Coverage Ratio $= \dfrac{\text{Net Profit before Interest \& Tax}}{\text{Interest on Long Term Debts}}$

$= \dfrac{\text{Rs. } 3,90,000}{\text{Rs. } 39,000} = 10 \text{ times}$

v) Inventory Turnover Ratio $= \dfrac{\text{Cost of Revenue from Operations}}{\text{Average Inventory}}$

$= \dfrac{\text{Rs. } 5,00,000}{\text{Rs. } 1,00,000} = 5 \text{ times}$

Note: In absence of information regarding 'Inventory in the beginning' and 'Inventory at the end', the 'Inventory' is treated as Average Inventory.

Illustration 26

From the following information calculate (i) Earning per share (ii) Book value per share (iii) Dividend payout ratio (iv) Price earning ratio

Particulars	Rs.
70,000 equity shares of Rs 10 each	7,00,000
Net Profit after tax but before dividend	1,75,000
Market price of a share	13
Dividend declared @ 15%	

Solution:

i) Earning per share $= \dfrac{\text{Profit available for Equity Shareholders}}{\text{Number of Equity Shares}}$

$= \dfrac{\text{Rs. } 1,75,000}{\text{Rs. } 70,000} = \text{Rs. } 2.50$

ii) Book value per share $= \dfrac{\text{Equity Shareholders' Funds}}{\text{Number of Equity Shares}}$

$= \dfrac{\text{Rs. } 8,75,000}{\text{Rs. } 70,000} = \text{Rs. } 12.50$

iii) Dividend payout ratio $= \dfrac{\text{Dividend per share}}{\text{Earnings per share}}$

$= \dfrac{1.50}{2.50} = 0.6$

iv) Price earning ratio $= \dfrac{\text{Market price of a share}}{\text{Earnings per share}}$

$= \dfrac{13}{2.50} = 5.20$

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. Shareholders' Funds (Equity)
9. Return on Net Worth
10. Average Collection Period
11. Trade Receivables
12. Turnover Ratios
13. Efficiency Ratios
14. Dividend Payout

Summary

Ratio Analysis: An important tool of financial statement analysis is ratio analysis. Accounting ratios represent relationship between two accounting numbers.

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.

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.

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. 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.

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 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 Inventory Turnover, Trade Receivables Turnover, Trade Payables Turnover, Working Capital Turnover, Fixed Assets Turnover and Current assets 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.

Questions for Practice

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. Trade receivables turnover
   c. Trade payables turnover
   d. Working capital turnover
4. The liquidity of a business firm is measured by its ability to satisfy its long-term obligations as they become due. What are the ratios used for this purpose?
5. The average age of inventory is viewed as the average length of time inventory is held by the firm for which explain with reasons.

Long Answer Questions

1. What are liquidity ratios? Discuss the importance of current and liquid ratio.
2. How would you study the Solvency position of the firm?
3. What are various profitability ratios? How are these worked out?
4. 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 Raj Oil Mills Limited as at March 31, 2017. Calculate current ratio.

Particulars	Rs.
I. Equity and Liabilities:	
1. Shareholders' funds	
a) Share capital	7,90,000
b) Reserves and surplus	35,000
2. Current Liabilities	
Trade Payables	72,000
Total	**8,97,000**
II. Assets	
1. Non-current Assets	
Fixed assets	
– Tangible assets	7,53,000

2. Current Assets	
a) Inventories	55,800
b) Trade Receivables	28,800
c) Cash and cash equivalents	59,400
Total	**8,97,000**

(**Ans**: Current Ratio 2:1)

2. Following is the Balance Sheet of Title Machine Ltd. as at March 31, 2017.

Particulars	Amount (Rs.)
I. Equity and Liabilities	
1. Shareholders' funds	
a) Share capital	24,00,000
b) Reserves and surplus	6,00,000
2. Non-current liabilities	
Long-term borrowings	9,00,000
3. Current liabilities	
a) Short-term borrowings	6,00,000
b) Trade payables	23,40,000
c) Short-term provisions	60,000
Total	**69,00,000**
II. Assets	
1. Non-current assets	
Fixed assets	
- Tangible assets	45,00,000
2. Current Assets	
a) Inventories	12,00,000
b) Trade receivables	9,00,000
c) Cash and cash equivalents	2,28,000
d) Short-term loans and advances	72,000
Total	**69,00,000**

Calculate Current Ratio and Liquid Ratio.

(**Ans:** Current Ratio 0.8 : 1, Liquid Ratio 0.4 : 1)

3. Current Ratio is 3.5 : 1. Working Capital is Rs. 90,000. 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 inventory is 36,000, calculate Current Liabilities and Current Assets.

   (**Ans:** Current Assets 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 Inventory.

   (**Ans:** Current Assets Rs. 3,00,000, Liquid Assets Rs. 75,000 and Inventory Rs. 2,25,000)

6. Handa Ltd. has inventory 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:
   Inventory is Rs. 6,00,000; Liquid Assets Rs. 24,00,000; Quick Ratio 2 : 1.
   (**Ans:** Current Ratio 2.5 : 1)
9. Compute Inventory Turnover Ratio from the following information:

Net Revenue from Operations	Rs.	2,00,000
Gross Profit	Rs.	50,000
Inventory at the end	Rs.	60,000
Excess of inventory at the end over inventory in the beginning	Rs.	20,000

   (**Ans:** Inventory Turnover Ratio 3 times)
10. Calculate following ratios from the following information:
   (i) Current ratio (ii) Liquid ratio (iii) Operating Ratio (iv) Gross profit ratio

Current Assets	Rs. 35,000
Current Liabilities	Rs. 17,500
Inventory	Rs. 15,000
Operating Expenses	Rs. 20,000
Revenue from Operations	Rs. 60,000
Cost of Revenue from operation	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:

Revenue from Operations	Rs.	25,20,000
Net Profit	Rs.	3,60,000
Cost of Revenue from Operations	Rs.	19,20,000
Long-term Debts	Rs.	9,00,000
Trade Payables	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 Share Capital	Rs. 5,00,000
Current Assets	Rs. 4,00,000
Revenue from Operations	Rs. 10,00,000
13% Debentures	Rs. 2,00,000
Current Liabilities	Rs. 2,80,000
Cost of Revenue from Operations	Rs. 6,00,000

(**Ans:** Gross Profit Ratio 40%; Working Capital Ratio 8.33 times; Debt–Equity Ratio 0.4 : 1; Proprietary Ratio 0.51 : 1)

13. Calculate Inventory Turnover Ratio if:

Inventory in the beginning is Rs. 76,250, Inventory at the end is 98,500, Gross Revenue from Operations is Rs. 5,20,000, Sales Return is Rs. 20,000, Purchases is Rs. 3,22,250.

(**Ans:** Inventory Turnover Ratio 3.43 times)

14. Calculate Inventory Turnover Ratio from the data given below:

Inventory in the beginning of the year	Rs. 10,000
Inventory at the end of the year	Rs. 5,000
Carriage	Rs. 2,500
Revenue from Operations	Rs. 50,000
Purchases	Rs. 25,000

(**Ans:** Inventory Turnover Ratio 4.33 times)

15. A trading firm's average inventory is Rs. 20,000 (cost). If the inventory turnover ratio is 8 times and the firm sells goods at a profit of 20% on sales, 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:

	2015-16	*2016-17*
Trade receivables on Apr. 01	Rs. 4,00,000	Rs. 5,00,000
Trade receivables on Mar. 31		Rs. 5,60,000
Stock in trade on Mar. 31	Rs. 6,00,000	Rs. 9,00,000
Revenue from operations (at gross profit of 25%)	Rs. 3,00,000	Rs. 24,00,000

Calculate Inventory Turnover Ratio and Trade Receivables Turnover Ratio

(**Ans:** Inventory Turnover Ratio 2.4 times, Trade Receivables Turnover Ratio 4.53 times)

17. From the following Balance Sheet and other information, calculate following ratios:

(i) Debt-Equity Ratio (ii) Working Capital Turnover Ratio (iii) Trade Receivables Turnover Ratio

Balance Sheet as at March 31, 2017

Particulars	Note No.	Rs.
I. Equity and Liabilities:		
1. Shareholders' funds		
a) Share capital		10,00,000
b) Reserves and surplus		9,00,000
2. Non-current Liabilities		
Long-term borrowings		12,00,000
3. Current Liabilities		
Trade payables		5,00,000
Total		**36,00,000**
II. Assets		
1. Non-current Assets		
Fixed assets		
– Tangible assets		18,00,000
2. Current Assets		
a) Inventories		4,00,000
b) Trade Receivables		9,00,000
c) Cash and cash equivalents		5,00,000
Total		**36,00,000**

Additional Information: Revenue from Operations Rs. 18,00,000

(**Ans:** Debt-Equity Ratio 0.63 : 1; Working Capital Turnover Ratio 1.39 times; Trade Receivables Turnover Ratio 2 times)

18. From the following information, calculate the following ratios:

i) Liquid Ratio

ii) Inventory turnover ratio

iii) Return on investment

	Rs.
Inventory in the beginning	50,000
Inventory at the end	60,000

Revenue from operations	4,00,000
Gross Profit	1,94,000
Cash and Cash Equivalents	40,000
Trade Receivables	1,00,000
Trade Payables	1,90,000
Other Current Liabilities	70,000
Share Capital	2,00,000
Reserves and Surplus	1,40,000
(Balance in the Statement of Profit & Loss A/c)	

(**Ans:** Liquid Ratio 0.54 : 1; Inventory 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. 45,000
Balance in the Statement of Profit & Loss	Rs. 30,000
Debentures	Rs. 75,000
Trade Payables	Rs. 40,000
Outstanding Expenses	Rs. 10,000

(**Ans:** Debt-Equity Ratio 0.43 : 1; Total Assets to Debt Ratio 4 : 1; Proprietary Ratio 0.58 : 1)

20. Cost of Revenue from Operations is Rs. 1,50,000. Operating expenses are Rs. 60,000. Revenue from Operations is Rs. 2,50,000. Calculate Operating Ratio.

(**Ans:** Operating Ratio 84%)

21. Calculate the following ratio on the basis of following information:

(i) Gross Profit Ratio (ii) Current Ratio (iii) Acid Test Ratio (iv) Inventory Turnover Ratio (v) Fixed Assets Turnover Ratio

	Rs.
Gross Profit	50,000
Revenue from Operations	1,00,000
Inventory	15,000
Trade Receivables	27,500
Cash and Cash Equivalents	17,500
Current Liablilites	40,000
Land & Building	50,000
Plant & Machinery	30,000
Furniture	20,000

(**Ans:** (i) Gross Profit Ratio 50%; (ii) Current Ratio 1.5:1; (iii) Liquid Ratio 1.125 : 1, Inventory Turnover Ratio 3.33 times; (iv) Fixed Assets Turnover Ratio 1 : 1)

22. From the following information calculate Gross Profit Ratio, Inventory Turnover Ratio and Trade Receivable Turnover Ratio.

Revenue from Operations	Rs. 3,00,000
Cost of Revenue from Operations	Rs. 2,40,000
Inventory at the end	Rs. 62,000
Gross Profit	Rs. 60,000
Inventory in the beginning	Rs. 58,000
Trade Receivables	Rs. 32,000

(**Ans:** Gross Profit Ratio 20%; Inventory Turnover Ratio 4 times; Trade Receivables Turnover Ratio 9.4 times)

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) D, (iii) B, (iv) A, (v) B, (vi) D

Test your Understanding – III

(i) C, (ii) B, (iii) B, (iv) C, (v) C, (vi) C

Cash Flow Statement

6

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.*

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 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. This chapter discusses this technique and explains the method of preparing a cash flow statement for an accounting period.

6.1 Objectives 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.
- It also helps in balancing its cash inflow and cash outflow, keeping in response to changing condition. 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. An investment normally qualifies as cash equivalents 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 and is liquidable immediately without considerable change in value.

6.4 Cash Flows

'Cash Flows' implies movement of cash in and out due to some 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 trade receivables, payment to trade payables, payment to employees, receipt of dividend, interest payments, etc.

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 also on its cash and cash equivalents.

6.5.1 Cash from Operating Activities

Operating activities are the activities that constitute the primary or main activities of an enterprise. For example, for a company manufacturing garments, operating activities are procurement of raw material, incurrence of manufacturing expenses, sale of garments, etc. These are the principal revenue generating activities (or the main activities) of the enterprise and these activities are not investing or financing activities. The amount of cash from operations' indicates 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.

Cash flows from operating activities are primarily derived from the main activities of the enterprise. 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 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.

An enterprise may hold securities and loans for dealing or for trading purposes. In either case they represent Inventory specifically held 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

As per AS-3, investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents. 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.

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 those 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 except those 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, repayment 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 (equity or/and preference).
- Cash proceeds from issuing debentures, loans, bonds and other short/ long-term borrowings.

Cash Outflows from financing activities

- Cash repayments of amounts borrowed.
- Interest paid on debentures and long-term loans 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.

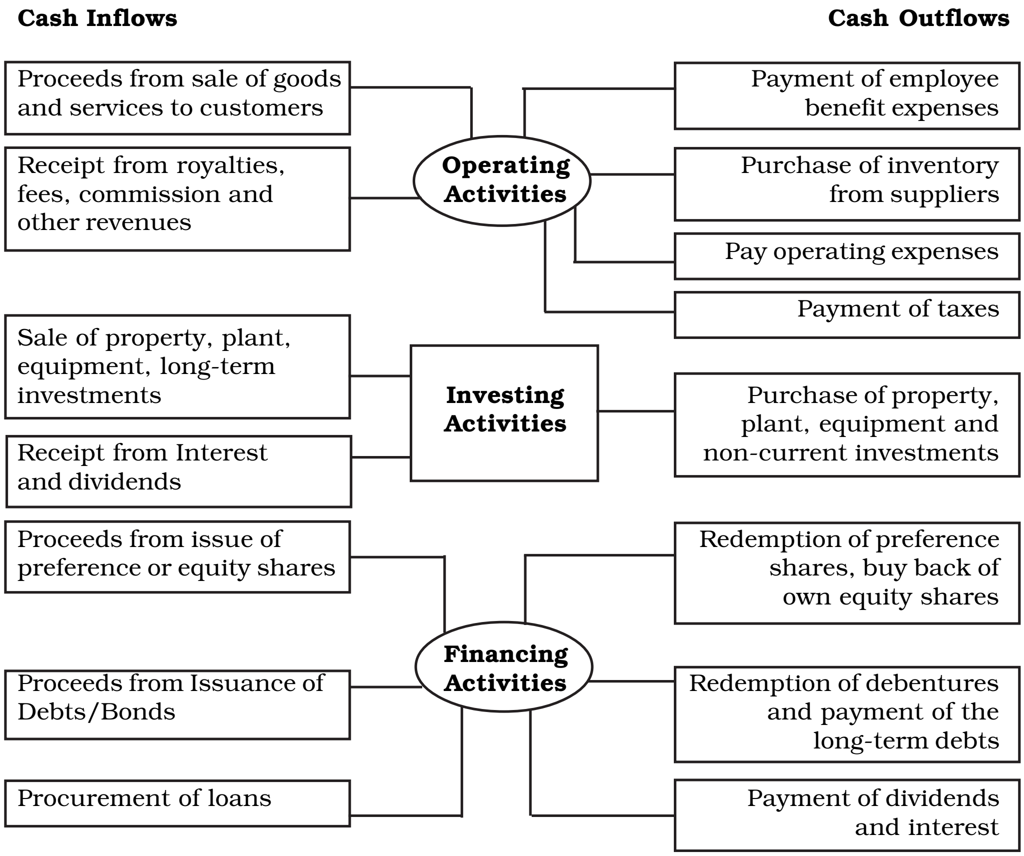


Exhibit 6.1: *Classification of Cash inflows and Cash Outflows Activities*

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 a financing activity.

In case of a non-financial enterprise, as per AS-3, it is considered more appropriate that payment of interest and dividends 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 on normal profit), capital gains tax (tax on capital profits), dividend tax (tax on the amount distributed as dividend to shareholders). 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, assets acquired by issue of shares are not disclosed in cash flow statement due to non-cash nature of the transaction.

With these three classifications, Cash Flow Statement is shown in Exhibit 6.2.

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

Exhibit 6.2 : *Sharing Specimen Cash Flow Statement*

Test your Understanding - I

Classify the following activities into operating activities, investing activities, financing activities, cash equivalents.

1.	Purchase of machinery.	2.	Proceeds from issuance of equity share capital.
3.	Cash revenue from operations.	4.	Proceeds from long-term borrowings.
5.	Proceeds from sale of old machinery.	6.	Cash receipt from trade receivables.
7.	Trading commission received.	8.	Purchase of non-current investment.
9.	Redemption of preference shares.	10.	Cash purchases.
11.	Proceeds from sale of non-current investment.	12.	Purchase of goodwill.
13.	Cash paid to supplier.	14.	Interim dividend paid on equity shares.
15.	Employee benefits expenses paid.	16.	Proceeds from sale of patents.
17.	Interest received on debentures held as investments.	18.	Interest paid on long-term borrowings.
19.	Office and administrative expenses paid.	20.	Manufacturing overheads 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.	Under-writing commission paid.
27.	Rent paid.	28.	Brokerage paid on purchase of non-current 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. 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 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 Statement of Profit and Loss 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 trade receivables, employee benefits expenses paid, etc.) are considered.

It is important to note here that items are recorded on accrual basis in statement of profit and loss. Hence, certain adjustments are made to convert them into cash basis such as the following :

1. Cash receipts from customers = Revenue from operations + Trade receivables in the beginning – Trade receivables in the end.
2. Cash payments to suppliers = Purchases + Trade Payables in the beginning – Trade Payables in the end.
3. Purchases = Cost of Revenue from Operations – Opening Inventory + Closing Inventory.
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 revenue from operation, cost of revenue from operations and other items in the statement of profit or loss for the following:
  - changes during the period in inventories and trade receivables and payables;
  - other non-cash items; and
  - other items for which cash effects are investing or financing cash flows.

Exhibit 6.3 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**

Exhibit 6.3 : *Proforma of Cash Flows from Operating Activities*

Illustration 1

From the following information, calculate cash flow from operating activities using direct method.

Statement of Profit and Loss
for the year ended on March 31, 2017

Particulars	*Note*	*Figures for Current reporting period*
i) Revenue from operations		2,20,000
ii) Other Income		—
iii) Total revenue (i+ii)		2,20,000
iv) Expenses		
Cost of materials consumed		1,20,000
Employees benefits expenses		30,000
Depreciation		20,000
Other expenses		
Insurance Premium		8,000
Total expenses		1,78,000
v) Profit before tax (iii-iv)		42,000
Less Income tax		(10,000)
vi) Profit after tax		32,000

Additional information:

Particulars	*April 01, 2016* Rs	*March 31, 2017* Rs
Trade receivables	33,000	36,000
Trade payables	17,000	15,000
Inventory	22,000	27,000
Outstanding employees benefits expenses	2,000	3,000
Prepaid insurance	5,000	5,500
Income tax outstanding	3,000	2,000

Solution:

Cash Flows from Operating Activities

Particulars	*(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 = Revenue from Operations + Trade Receivables in the beginning – Trade Receivables in the end
   = Rs 2,20,000 + Rs 33,000 – Rs 36,000
   = Rs 2,17,000
2. Purchases = Cost of Revenue from Operations – Opening Inventory + Closing Inventory
   = Rs 1,20,000 – Rs 22,000 + Rs 27,000
   = Rs 1,25,000
3. Cash payment to suppliers = Purchases + Trade Payables in the beginning – Trade Payables 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

Indirect method of ascertaining cash flow from operating activities begins with the amount of net profit/loss. This is so because statement of profit and loss incorporates the effects of all operating activities of an enterprise. However, Statement of Profit and Loss 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 Statement of Profit and Loss for arriving at cash flows from operating activities. Let us look at the example :

Statement of Profit and Loss Account
for the year ended March 31, 2017

	Particulars	*Note*	*Figures in Rs*
i)	Revenue from Operations		1,00,000
ii)	Other Income	1	2,000
iii)	Total Revenues (i+ii)		1,02,000
iv)	Expenses		
	Cost of Materials Consumed		30,000
	Purchases of stock-in-trade		10,000
	Employees Benefits Expenses		10,000
	Finance Costs		5,000
	Depreciation		5,000
	Other Expenses		12,000
			72,000
v)	Profit before Tax (iii-iv)		30,000

Note: Other income includes profit on sale of land.

The above Statement of Profit and Loss shows the amount of net profit of Rs 30,000. 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 5,000 charged as depreciation does not result in any cash flow. Therefore, this amount must be added back to the net profit.
2. *Finance costs* of Rs 5,000 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 finance cost will be shown as an outflow under the head of financing activities.
3. *Other income includes profit on sale of land:* It 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 deducted from the operating profit, and the decrease in current assets and increase in current liabilities are added to the operating 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 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 depends 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, finance cost which is a financing cash outflow is to be added back while other income such as interest received 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.

Exhibit 6.4 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 Statement of Profit and Loss on account of Non-cash items such as Depreciation, Goodwill to be Written-off.	xxx
+	Deductions already made in Statement of Profit and Loss on Account of Non-operating items such as Interest.	xxx
–	Additions (incomes) made in Statement of Profit and Loss on Account of Non-operating items such as Dividend received, Profit on sale of Fixed Assets.	xxx 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	xxx
– Income Tax Paid	xxx
+/– Effects of Extraordinary Items	xxx
Net Cash from Operating Activities	**xxx**

Exhibit 6.4: *Proforma of Cash Flows from Operating Activities (Indirect Method)*

As stated earlier, 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 Statement of Profit and Loss'. Income tax paid is deducted 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

Particulars	*(Rs)*
(Net Profit before Taxation and Extraordinary Items (Note 1)	42,000
Adjustments for–	
+ Depreciation	20,000
= Operating Profit before working capital changes	62,000
– Increase in Trade Receivables	(3,000)
– Increase in Inventories	(5,000)
– Increase in Prepaid Insurance	(500)
– Decrease in Trade Payables	(2,000)
+ Increase in Outstanding Employees Benefits Expenses	+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:

Net Profit	=	Rs 32,000
+ Income Tax	=	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.

Statement of Profit and Loss for the year ended March 31, 2017

Particulars	*Note No.*	*Amount Rs*
i) Revenue from Operations		50,000
ii) Other Income	1	5,000
iii) Total Revenue (i+ii)		55,000
iv) Expenses		
Cost of Materials Consumed		15,000
Employees Benefits Expenses		10,000
Depreciation and Amortisation Expenses	2	7,000
Other Expenses	3	21,000
		53,000
v) Profit before Tax (iii-iv)		2,000

Working Notes:

1. Other Income = Profit on Sale of Machinery (Rs 2,000) + Income Tax Refund (Rs 3,000)
   = Rs 5,000
2. Depreciation and Amortisation Expenses = Depreciation (Rs 5,000) + Goodwill Amortised (Rs 2,000)
   = Rs 7,000
3. Other Expenses = Rent (Rs 10,000) + Loss on Sale of Equipment (Rs 3,000) + Provision for Taxation (Rs 8,000)
   = Rs 21,000

Additional Information:

	April 01, 2016 Rs	March 31, 2017 Rs
Provision for Taxation	10,000	13,000
Rent Payable	2,000	2,500
Trade Payables	21,000	25,000
Trade Receivables	15,000	21,000
Inventories	25,000	22,000

Solution:

Cash Flows from Operating Activities

Particulars	*(Rs)*
Net profit before taxation, and extraordinary items	7,000
Adjustments for:	
+ Depreciation	5,000
+ Loss on sale of equipment	3,000
+ Goodwill amortised	2,000

– Profit on sale of machinery	(2,000)
Operating Profit before Working capital changes	15,000
– Increase in Trade receivables	(6,000)
+ Decrease in Inventories	3,000
+ Increase in Trade payables	4,000
+ Increase in Rent payable	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 3,000
= Rs 7,000
2. Income tax paid during the year has been ascertained by preparing provision for taxation 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 amortised was Rs 7,000 and gain on sale of machinery was Rs 3,000. Other information available to you (changes in the value of current assets and current liabilities) are trade receivables showed an increase of Rs 3,000; trade payables an increase of Rs 6,000; prepaid expenses an increase of Rs 200; and outstanding expenses a decrease of Rs 2,000. Ascertain cash flow from operating activities.

Solution:

Cash Flows from Operating Activities

Particulars	*(Rs)*
Net Profit before Taxation	1,30,000
Adjustment for Non-cash and Non-operating Items :	
+ Depreciation	20,000
+ Goodwill amortised	7,000
– Gain on sale of machinery	(3,000)
Operating profit before working capital	**1,54,000**
Adjustment for working capital charges :	
– Increase in Trade receivables	(3,000)
+ Increase in Trade payables	6,000
– Increase in Prepaid expenses	(200)
– Decrease in Outstanding expenses	(2,000)
= Net Cash from Operating Activities	**1,54,800**

Working Notes :

Calculation of Net Profit before Taxation and Extraordinary items:

(1) Net Profit	= Rs 1,00,000
+ Transfer to General reserve	= Rs 30,000
	= Rs 1,30,000

Do it Yourself

Statement of Profit and Loss
for the year ending 31 March, 2017

Particulars	*Note*	*Figures in Rs*
i) Revenue from Operations	1	40,00,000
ii) Other Income	2	21,00,000
iii) Total Revenues (i+ii)		**61,00,000**
iv) Expenses		
Cost of Materials Consumed	3	20,00,000
Changes in inventories of finished goods	4	1,00,000
Depreciation and Amortisation expenses	5	3,80,000
Other expenses	6	20,40,000
Total expenses		**45,20,000**
v) Profit before Tax (iii-iv)		15,80,000

Working Notes:

			Rs
1.	Cash revenue from operations		8,00,000
	Credit revenue from operations		34,00,000
	Less: Returns		(2,00,000)
	Net Revenue from Operations		**40,00,000**
2.	Trading commission		20,40,000
	Discount received from suppliers		60,000
	Other income		**21,00,000**
3.	Cost of materials consumed paid in cash	4,00,000	
	Cost of materials consumed bought on credit	17,00,000	
	Less: Returns	(1,00,000)	
	Cost of materials consumed (Net)	**20,00,000**	

4. Changes in Inventories of finished goods = Opening inventory – Closing inventory
= Rs 2,00,000 – Rs 1,00,000
= Rs 1,00,000

5. Depreciation and Amortisation expenses = Depreciation + Amortisation expenses
= Rs 3,80,000 + 0
= Rs 3,80,000

6. Other expenses = 10,20,000 (Administrative expenses) +1,20,000 (Discount allowed to customers) + 1,00,000 (Bad debts) + 8,00,000 (Provision for tax)
= Rs 20,40,000

Additional Information:

	(Rs)	*(Rs)*
Trade Receivables	20,00,000	40,00,000
Trade Payables	20,00,000	10,00,000
Other Expenses payable (administrative)	10,000	20,000
Prepaid Administrative Expenses	20,000	10,000
Outstanding 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 amortised 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, indicate whether the following items will be added or subtracted from the net profit- if not to be considered, write NC

Items:	*Treatment*
(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 inventory	

(f) Increase in share capital
(g) Increase in the value of trade receivables
(h) Increase in the amount of outstanding expenses
(i) Conversion of debentures into shares
(j) Decrease in the value of trade payables
(k) Increase in the value of trade receivables
(l) Decrease in the amount of accrued income.

Sometimes, neither the amount of net profit is specified nor the Statement of profit and loss is given. In such a situation, the amount of net profit can be worked out by comparing the balances of Statement of Profit and Loss 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 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, 2016	50,000
Machinery as on March 31, 2017	60,000
Accumulated Depreciation on April 01, 2016	25,000
Accumulated Depreciation on March 31, 2017	15,000

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
Statement of 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	Statement of 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:

	April 1, 2016 *(Rs)*	March 31, 2017 *(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:

Particulars	*2016*	*2017*
Machine at cost	5,00,000	9,00,000
Accumulated Depreciation	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 2017, machine costing Rs 2,00,000 was sold at a profit of Rs 1,50,000, Depreciation charged on machine during the year 2015 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 to this change are classified into operating, investing and financing. 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 Exhibit 6.2. However, while preparing a cash flow statement, full details of inflows and outflows are given under these heads including the net cash flow (or use). 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 Exhibit 6.2. This figure will be the same as the total amount of cash in hand, cash at bank 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 practice.

Illustration 7

From the following information, prepare Cash Flow Statement for Pioneer Ltd.

Balance Sheet of Pioneer Ltd., as on March 31, 2017

Particulars	*Note No.*	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital	1	7,00,000	5,00,000
b) Reserve and surplus	2	3,50,000	2,00,000
2. Non-current Liabilities			
Long-term borrowings: Bank Loan		50,000	1,00,000
3. Current Liabilities			
a) Trade payables		45,000	50,000
b) Other current liabilities: outstanding rent		7,000	5,000
c) Short-term provisions	3	1,20,000	80,000
Total		**12,72,000**	**9,35,000**
II. Assets			
1. Non-current assets			
a) Fixed assets			
(i) Tangible assets	4	5,00,000	5,00,000
(ii) Intangible assets	5	95,000	1,00,000
b) Non-current investments		1,00,000	-
2. Current assets			
a) Inventories		1,30,000	50,000
b) Trade receivables		1,20,000	80,000
c) Cash and cash equivalents	6	3,27,000	2,05,000
Total		**12,72,000**	**9,35,000**

Notes to Accounts:

Particulars	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
1. Equity Share Capital	**7,00,000**	**5,00,000**
2. Reserve and Surplus Surplus: i.e., Balance in Statement of Profit and Loss	**3,50,000**	**2,00,000**

3. Short-term Provision:		
Proposed Dividend	70,000	50,000
Provision for Taxation	50,000	30,000
	1,20,000	**80,000**
4. Fixed Assets		
– Tangible assets		
– Equipments	2,30,000	2,00,000
– Furniture	2,70,000	3,00,000
	5,00,000	**5,00,000**
5. Intangible Assets		
Patents	**95,000**	**1,00,000**
6. Cash and cash equivalents		
i) Cash	27,000	5,000
ii) Bank balance	3,00,000	2,00,000
	3,27,000	**2,05,000**

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 charged on equipments and furniture.

Solution:

Cash Flow Statement

	Particulars	*(Rs)*
I.	**Cash flows from Operating Activities :**	
	Net profit before taxation & extraordinary items	2,70,000
	Provision for :	
	Depreciation on equipment	15,000
	Depreciation on furniture	30,000
	Patents written-off	5,000
	Loss on sale of equipment	5,000
	Operating Profit before Working capital Changes	3,25,000
	– Decrease in Trade payables	(5,000)
	+ Increase in Outstanding rent	2,000
	– Increase in Trade receivables	(40,000)
	– Increase in inventories	(80,000)
	Cash 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
			Statement of 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 2015-2016 has been paid during the year 2016-17. 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
	+ Proposed dividend	70,000
	Net Profit before taxation & extraordinary Items	**2,70,000**

Illustration 8

From the following Balance Sheets of Xerox Ltd., prepare cash flow statement.

Particulars	*Note No.*	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital		15,00,000	10,00,000
b) Reserve and surplus (Balance in Statement of Profit and Loss)		7,50,000	6,00,000
2. Non-current Liabilities			
Long-term borrowings	1	1,00,000	2,00,000
3. Current Liabilities			
a) Trade payables		1,00,000	1,10,000
b) Short-term provisions (Provision for taxation)		95,000	80,000
Total		**25,45,000**	**19,90,000**
II. Assets			
1. Non-current assets			
a) Fixed assets			
(i) Tangible assets	2	10,10,000	12,00,000
(ii) Intangible assets (Goodwill)		1,80,000	2,00,000
b) Non-current investment		6,00,000	-
2. Current assets			
a) Inventories		1,80,000	1,00,000
b) Trade Receivables		2,00,000	1,50,000
c) Cash and cash equivalents	3	3,75,000	3,40,000
Total		**25,45,000**	**19,90,000**

Notes to Accounts:

Particulars	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
1. Long-term borrowings:		
i) Debentures	—	2,00,000
ii) Bank loan	1,00,000	—
	1,00,000	**2,00,000**
2. Tangible Assets		
i) Land and building	6,50,000	8,00,000
ii) Plant and machinery	3,60,000	4,00,000
	10,10,000	**12,00,000**
3. Cash and cash equivalents		
i) Cash in hand	70,000	50,000
ii) Bank balance	3,05,000	2,90,000
	3,75,000	**3,40,000**

Additional information:

1. Dividend proposed and paid during the year Rs 1,50,000.
2. Income tax paid during the year includes Rs 15,000 on account of dividend tax.
3. Land and building book value Rs 1,50,000 was sold at a profit of 10%.
4. The rate of depreciation on plant and machinery is 10%.

Solution:

Cash Flow Statement

Particulars	*(Rs)*
I. Cash flows from Operating Activities	
Net Profit before Taxation and Extraordinary Items	3,95,000
Adjustment for –	
+ Depreciation	40,000
+ Goodwill written-off	20,000
– Profit on Sale of Land	(15,000)
= Operating Profit before working capital changes	4,40,000
– Decrease in Trade Payables	(10,000)
– Increase in Trade Receivables	(50,000)
– Increase in Inventories	(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 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
= Net profit earned during the year after tax and dividend + Provision for tax made + Proposed Dividend
= Rs 1,50,000 + Rs 95,000 (See provision for taxation account)+ Rs 1,50,000
= Rs 3,95,000

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
			Statement of Profit and Loss (Provision made during		95,000
Balance c/d		95,000	the year)		
		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
Statement of 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	Surplus		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
			Balance c/d		3,60,000
		4,00,000			**4,00,000**

Illustration 9

From the following information of Oswal Mills Ltd., prepare cash flow statement:

Balance Sheet of Oswal Mills
as on 31st March, 2016 and 2017

(Rupees in Lakhs)

Particulars	*Note No.*	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital	1	1,300	1,400
b) Reserve and surplus (Surplus)		4,700	4,000
2. Current Liabilities			
a) Short-term borrowings		200	600
b) Trade payables		500	400
Total		**6,700**	**6,400**
II. Assets			
1. Non-current assets			
a) Fixed assets	2	2,400	2.400
b) Non-current investments		300	200
2. Current assets			
a) Inventories		1,200	1,300
b) Trade receivables		800	900
c) Cash and cash equivalents		1,200	800
d) Short-term loans and advances		800	800
Total		**6,700**	**6,400**

Notes to Accounts: (Rs in Lakhs)

Particulars	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
1. Share capital		
Equity share capital	1,000	1,000
10% preference share capital	300	400
	1,300	**1,400**
2. Fixed assets		
Tangible assets	3,600	3,400
Less: Accumlated depreciation	(1,200)	(1,000)
	2,400	**2,400**

Statement of Profit and Loss
for the year ended 31st March, 2017

(Rupees in Lakhs)

Particulars	*Note No.*	*31stMarch 2017 (Rs)*	-
I. Revenue from operation		2,800	-
II. Other income (dividend income)		1,000	-
III. Total Revenue		3,800	-
IV. Expenses			-
Cost of material consumed		400	-
Employees benefit expenses		200	-
Finance cost (interest paid)		200	-
Depreciation		200	-
Loss due to earthquake		1,100	-
		2,100	
V. Profit before tax		1,700	-
VI. Tax paid		1,000	-
Profit after tax		700	-

Additional information:
1. No dividend paid by the company during the current financial year.
2. Out of fixed assets, land worth Rs 1,000 Lakhs having no accumulated depreciation was sold at no profit or no loss.

Solution:

Cash Flow Statement

(Rupees in Lakhs)

Particulars	*Rs*
Cash Flows from Operating Activities	
Net Profit before Tax and Extraordinary Items (1)	2,800
Adjustment for Non-cash and Non-operating Items	
+ Interest paid	200
+ Depreciation	200
Operating profit before working capital changes	3,200
Adjustment for :	
+ Decrease in Inventories	100
+ Decrease in Trade Receivables	100

	+ Increase in Trade Payables	100
Cash generated from operations		3,500
	(–) Income Tax paid	(1,000)
Cash Flow before Extraordinary items		2,500
	(–) Loss due to earthquake	(1,100)
A.	Net cash from Operating Activities	1,400
Cash flows from Investing Activities		
	Sale of Land	1,000
	Purchase of fixed assets (2)	(1,200)
	Purchase of Investments	(100)
B.	Net cash from Investing Activities	(300)
Cash flows from Financing Activities		
	Payment of short-term loans	(400)
	Interest Paid	(200)
	Redemption of 10% preference share capital	(100)
C.	Net Cash used in Financing Activities	(700)
	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 Lakhs)

(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
			Statement of Profit and Loss		200
		1,200			**1,200**

Illustration 10

From the following information of Banjara Ltd., prepare a cash flow statement:

(Rupees in Lakhs)

Particulars	*Note No.*	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital		1,500	1,250
b) Reserve and surplus (surplus)		3,410	1,380
2. Non-current Liabilities			
Long-term borrowings (Long-term loan)		1,110	1,040
3. Current Liabilities			
a) Trade payables		150	1,890
b) Other current liabilities	1	630	1,100
Total		**6,800**	**6,660**
II. Assets			
1. Non-current assets			
a) Fixed assets	2	730	850
b) Non-current investments		2,500	2,500
2. Current assets			
a) Current investments (Marketable)		670	135
b) Inventories		900	1,950
c) Trade Receivables		1,700	1,200
d) Cash and cash equivalents		200	25
e) Other current assets (Interest receivables)		100	—
Total		**6,800**	**6,660**

Notes to Accounts:

Particulars	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
1. Other Current Liabilities		
i) Interest payable	230	100
ii) Income tax payable	400	1,000
	630	**1,100**

2. Fixed Assets:		
Tangible	2,180	1,910
Less: Accumlated depreciation	(1,450)	(1,060)
	730	**850**

Statement of Profit and Loss for the year ended 31 March, 2017

(Rupees in Lakhs)

Particulars	*Note No.*	*2017 March 31 (Rs)*
I. Revenue from operation		30,650
II. Other income	1	640
III. Total Revenue		**31,290**
IV. Expenses		
Cost of material consumed		26,000
Finance cost (interest expenses)		400
Depreciation		450
Other expenses (Admn. and selling expenses)		910
Total expenses		**27,760**
Profit before tax		3,530
Less: Tax		(300)
Profit after tax		**3,230**

Notes to Accounts:

Particulars	*Rs*
1. Other Income during the year 2016-17	
i) Interest Income	300
ii) Dividend Income	200
iii) Insurance Proceeds from earthquake disaster Settlement	140
	640

Additional Information:

(Rs '000)

(i) An amount of Rs 250 was raised from the issue of share capital and a further Rs 250 was raised from long-term borrowings.

(ii) 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.

(iii) Dividends paid were Rs 1,200.

(iv) Tax deducted at source on dividends received (included in the tax expense of Rs 300 for the year) amounted to Rs 40.

(v) During the period, the enterprise acquired Fixed Assets for Rs 350. The payment was made in cash.

(vi) Plant with original cost of Rs 80 and accumulated depreciation of Rs 60 was sold for Rs 20.

(vii) Trade Receivables and Trade Payables include amounts relating to credit sales and credit purchases only.

Cash Flow Statement
(Direct Method)

(Rs '000)

Particulars	*Rs,*	*Rs*
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)

Particulars	*Rs*
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 changes	3,740
Increase in Trade Receivables	(500)
Decrease in Inventories	1,050
Decrease in Trade Payables	(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 in hand and balances with banks, and investments in money-market instruments. Cash and Cash Equivalents included in the Cash Flow Statement comprise of the following balance sheet amounts.

(Rs '000)

	2017 (Rs)	2016 (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: Trade Receivables at the beginning of the year	1,200
	31,850
Less : Trade Receivables at the end of the year	(1,700)
	30,150

(3) *Cash paid to Suppliers and Employees*

Cost of Revenue from operations		26,000
Administrative and Selling Expenses		910
		26,910
Add: Trade Payables at the beginning of the year	1,890	
Inventories at the end of the year	900	2,790
		29,700
Less : Trade Payables 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)*

Income Tax expense for the year (including tax deducted at source from dividends received)	300
Add : Income Tax liability at the beginning of the year	1,000
	1,300
Less : Income tax payable 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 Equivalents
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 helps in ascertaining the liquidity of an enterprise. Cash Flow Statement is to be prepared and reported by Indian companies 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 company.

Questions for Practice

Short Answer Questions

1. What is a Cash flow statement?
2. How are the various activities 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. State the meaning of the terms: (i) Cash Equivalents, (ii) Cash flows.
6. Prepare a format of cash flow from operating activities under indirect method.
7. State clearly what would constitute the operating activities for each of the following enterprises:
   (i) Hotel
   (ii) Film production house
   (iii) Financial enterprise
   (iv) Media enterprise
   (v) Steel manufacturing unit
   (vi) Software development 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.

Long Answer Questions

1. Describe the procedure to prepare Cash Flow Statement.
2. Describe "Indirect" method of ascertaining Cash Flow from operating activities.
3. Explain the major Cash Inflows 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, 2017. Depreciation for the year was Rs 2,00,000. There was a profit of Rs 50,000 on assets sold which was transferred to Statement of Profit and Loss account. Trade Receivables increased during the year Rs 40,000 and Trade Payables also increased by Rs 60,000. Compute the cash flow from operating activities by the indirect approach.

   [**Ans.:** Rs 6,70,000]

2. From the information given below you are required to calculate the cash paid for the inventory:

Particulars	*(Rs)*
Inventory in the beginning	40,000
Credit Purchases	1,60,000
Inventory in the end	38,000
Trade payables in the beginning	14,000
Trade payables 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% by cheque 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.:** (a) Rs (50,000) investing activity (outflow); (b) Rs (2,00,000) investing activity (outflow); (c) Rs 60,000 investing activity (inflow).

4. The following is the Profit and Loss Account of Yamuna Limited:

Statement of Profit and Loss of Yamuna Ltd., for the Year ended March 31, 2017

Particulars	*Note No.*	*Amount (Rs)*
i) Revenue from Operations		10,00,000
ii) Expenses		
Cost of Materials Consumed	1	50,000
Purchases of Stock-in-trade		5,00,000
Other Expenses	2	3,00,000
Total Expenses		**8,50,000**
iii) Profit before tax (i-ii)		1,50,000

Additional information:

(i) Trade receivables decrease by Rs 30,000 during the year.
(ii) Prepaid expenses increase by Rs 5,000 during the year.
(iii) Trade payables increase by Rs 15,000 during the year.
(iv) Outstanding expenses payable increased by Rs 3,000 during the year.
(v) Other expenses included depreciation of Rs 25,000.

Compute net cash from operations for the year ended March 31, 2017 by the indirect method.

[**Ans.:** Cash from operations Rs 2,18,000].

5. Compute cash from operations from the following figures:

(i) Profit for the year 2016-17 is a sum of Rs 10,000 after providing for depreciation of Rs 2,000.

(ii) The current assets and current liabilities of the business for the year ended March 31, 2016 and 2015 are as follows:

Particulars	*March 31, 2016 (Rs)*	*March 31, 2017 (Rs)*
Trade Receivables	14,000	15,000
Provision for Doubtful Debts	1,000	1,200
Trade Payables	13,000	15,000
Inventories	5,000	8,000
Other Current Assets	10,000	12,000
Expenses payable	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].

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 Ltd., as on 31 March, 2016 and 31 March 2017

Particulars	*Note No.*	*Figures as the end of 2017 (Rs)*	*Figures as at the end of reporting 2016 (Rs)*
II) Assets			
1. Non-current Assets			
a) Fixed assets			
i) Tangible assets	1	12,40,000	10,20,000
ii) Intangible assets	2	4,60,000	3,80,000
b) Non-current investments	3	3,60,000	2,60,000

Notes: 1 Tangible assets = Machinery
2 Intangible assets = Patents

Notes to accounts:

	Figures of current year	Figures of previous year
1. Tangible Assets		
Machinery	**12,40,000**	**10,20,000**
2. Intangible Assets		
Goodwill	3,00,000	1,00,000
Patents	1,60,000	2,80,000
	4,60,000	**3,80,000**

3. Non-current Investments		
10% long term investments	1,60,000	60,000
Investment in land	1,00,000	1,00,000
Shares of Amartex Ltd.	1,00,000	1,00,000
	3,60,000	**2,60,000**

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, 2016, 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, 2017.

(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 5,24,000].

7. From the following Balance Sheet of Mohan Ltd., prepare cash flow Statement:

Balance Sheet of Mohan Ltd.,
as at 31st March 2016 and 31st March 2017

Particulars	*Note No.*	*March 31, 2017 (Rs)*	*March 31, 2016 (Rs)*
I) Equity and Liabilities			
1. Shareholders' Funds			
a) Equity share capital		3,00,000	2,00,000
b) Reserves and surplus		2,00,000	1,60,000
2. Non-current liabilities			
a) Long-term borrowings	1	80,000	1,00,000
3. Current liabilities			
Trade payables		1,20,000	1,40,000
Short-term provisions	2	70,000	60,000
Total		**7,70,000**	**6,60,000**
II) Assets			
1. Non-current assets			
Fixed assets	3	5,00,000	3,20,000
2. Current assets			
a) Inventories		1,50,000	1,30,000
b) Trade receivables	4	90,000	1,20,000
c) Cash and cash equivalents	5	30,000	90,000
Total		**7,70,000**	**6,60,000**

Notes to accounts:

		2017	2016
1.	Long-term borrowings		
	Bank Loan	**80,000**	**1,00,000**
2.	Short-term provision		
	Proposed dividend	**70,000**	**60,000**
3.	Fixed assets	6,00,000	4,00,000
	Less: Accumulated Depreciation	1,00,000	80,000
	(Net) Fixed Assets	**5,00,000**	**3,20,000**
4.	Trade receivables		
	Debtors	60,000	1,00,000
	Bills receivables	30,000	20,000
		90,000	**1,20,000**
5.	Cash and cash equivalents		
	Bank	**30,000**	**90,000**

Additional Information:

Machine Costing Rs 80,000 on which accumulated depreciation was Rs, 50,000 was sold for Rs 20,000.

		Rs
[**Ans.:**	Cash flow from Operating Activities	1,80,000
	Cash flow from Investing Activities	(2,60,000)
	Cash flow from Financing Activities	20,000.

8. From the following Balance Sheets of Tiger Super Steel Ltd., prepare Cash Flow Statement:

Balance Sheet of Tiger Super Steel Ltd.
as at 31st March 2014 and 31st March 2017

Particulars	*Note No.*	*March 31, 2017 (Rs)*	*March 31, 2016 (Rs)*
I) Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital	1	1,40,000	1,20,000
b) Reserves and surplus	2	22,800	15,200
2. Current Liabilities			
a) Trade payables	3	21,200	14,000
b) Other current liabilities	4	2,400	3,200
c) Short-term provisions	5	28,400	22,400
		2,14,800	**1,74,800**
II) Assets			
1. Non-Current Assets			
a) Fixed assets			
i) Tangible assets	6	96,400	76,000
ii) Intangible assets		18,800	24,000
b) Non-current investments		14,000	4,000
2. Current Assets			
a) Inventories		31,200	34,000
b) Trade receivables		43,200	30,000
c) Cash and Cash Equivalents		11,200	6,800
		2,14,800	**1,74,800**

Notes to accounts:

	2017	2016
1. Share Capital		
Equity share capital	1,20,000	80,000
10% Preference share capital	20,000	40,000
	1,40,000	**1,20,000**
2. Reserves and surplus		
General reserve	12,000	8,000
Balance in statement of profit and loss	10,800	7,200
	22,800	**15,200**
3. Trade payables		
Bills payable	21,200	14,000
4. Other current liabilities		
Outstanding expenses	**2,400**	**3,200**
5. Short-term provisions		
Provision for taxation	12,800	11,200
Proposed dividend	15,600	11,200
	28,400	**22,400**
6. Tangible assets		
Land and building	20,000	40,000
Plant	76,400	36,000
	96,400	**76,000**

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 56,000
Cash flow from Investing Activities Rs (60,400)
Cash flow from Financing Activities Rs 8,800].

9. From the following information, prepare cash flow statement:

Particulars	*Note No.*	*31st March 2015 (Rs)*	*31st March 2014 (Rs)*
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital		7,00,000	5,00,000
b) Reserve and surplus		4,70,000	2,50,000
2. Non-current Liabilities (8% Debentures)		4,00,000	6,00,000
3. Current Liabilities			
Trade payables		9,00,000	6,00,000
Total		**24,70,000**	**19,50,000**

II. Assets			
1. Non-current assets			
Fixed assets			
i) Tangible		7,00,000	5,00,000
ii) Intangible–Goodwill		1,70,000	2,50,000
2. Current assets			
a) Inventories		6,00,000	5,00,000
b) Trade Receivables		6,00,000	4,00,000
c) Cash and cash equivalents		4,00,000	3,00,000
Total		**24,70,000**	**19,50,000**

Additional Information:

Depreciation Charge on Plant amount to Rs 80,000.

		Rs
[**Ans.:**	Cash inflow from Operating Activities	4,28,000
	Cash inflow from Investing Activities	(2,80,000)
	Cash inflow from Financing Activities	(48,000).

10. From the following Balance Sheet of Yogeta Ltd., prepare cash flow statement:

Particulars	*Note No.*	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital	1	4,00,000	2,00,000
b) Reserve and surplus (Surplus)		2,00,000	1,00,000
2. Non-current Liabilities			
Long-term borrowings	2	1,50,000	2,20,000
3. Current Liabilities			
a) Short-term borrowings (Bank overdraft)		1,00,000	—
b) Trade payables		70,000	50,000
c) Short-term provision (Provision for taxation)		50,000	30,000
Total		**9,70,000**	**6,00,000**
II. Assets			
1. Non-current assets			
Fixed assets			
Tangible		7,00,000	4,00,000
2. Current assets			
a) Inventories		1,70,000	1,00,000
b) Trade Receivables		1,00,000	50,000
c) Cash and cash equivalents		—	50,000
Total		**9,70,000**	**6,00,000**

Notes to Accounts:

Particulars	31st March 2017 (Rs)	31st March 2016 (Rs)
1. Share capital		
a) Equity share capital	3,00,000	2,00,000
b) Preference share capital	1,00,000	—
	4,00,000	**2,00,000**
2. Long-term borrowings		
Long-term loan	—	2,00,000
Loan from Rahul	1,50,000	20,000
	1,50,000	**2,20,000**

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 amounted to Rs 60,000.

		Rs
[**Ans.:**	Cash from Operating Activities	1,20,000
	Cash from Investing Activities	(3,50,000)
	Cash from Financing Activities	80,000

11. Following is the Financial Statement of Garima Ltd., prepare cash flow statement.

Particulars	*Note No.*	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital	1	4,40,000	2,80,000
b) Reserve and surplus (Surplus)	2	40,000	28,000
2. Current Liabilities			
a) Trade payables		1,56,000	56,000
b) Short-term provisions (Provision for taxation)		12,000	4,000
Total		**6,48,000**	**3,68,000**
II. Assets			
1. Non-current assets			
Fixed assets			
Tangible		3,64,000	2,00,000
2. Current assets			
a) Inventories		1,60,000	60,000
b) Trade receivables		80,000	20,000
c) Cash and cash equivalents		28,000	80,000
d) Other current assets		16,000	8,000
Total		**6,48,000**	**3.68,000**

Notes to Accounts:

	Particulars	31st March 2017 (Rs)	31st March 2016 (Rs)
1.	Share capital		
	a) Equity share capital	3,00,000	2,00,000
	b) Preference share capital	1,40,000	80,000
		4,40,000	**2,80,000**
2.	Reserve and surplus		
	Surplus in statement of profit and loss at the beginning of the year	28,000	
	Add: Profit of the year	16,000	
	Less: Dividend	4,000	
	Profit at the end of the year	**40,000**	

Additional Information:

1. Interest paid on Debenture Rs 600
2. Dividend paid during the year Rs 4,000
3. Depreciation charged during the year Rs 32,000

		Rs
[**Ans.:**	Cash flow from Operating Activities	(11,400)
	Cash flow from Investing Activities	(1,96,000)
	Cash flow from Financing Activities	1,55,400.

12. From the following Balance Sheet of Computer India Ltd., prepare cash flow statement.

(Rs in '000)

Particulars	*Note No.*	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital		50,000	40,000
b) Reserve and surplus–Surplus	1	3,700	3,000
2. Non-Current Liabilities			
10% Debentures		6,500	6,000
3. Current liabilities			
a) Short-term borrowings	2	6,800	12,500
b) Trade payables		11,000	12,000
c) Short-term provisions	3	10,000	8,000
Total		**88,000**	**81,500**
II. Assets			
1. Non-current assets			
a) Fixed assets	4	25,000	30,000
2. Current assets			
a) Inventories		35,000	30,000
b) Trade receivables		24,000	20,000
c) Cash and cash equivalents–cash		3,500	1,200
d) Other current assets–prepaid exp.		500	300
Total		**88,000**	**81,500**

Notes to Accounts:

	Particulars	*31st March 2017 (Rs)*	*31st March 2016 (Rs)*
1.	Reserve and surplus		
	i) Balance in statement of profit and loss	1,200	1,000
	ii) General reserve	2,500	2,000
		3,700	**3,000**
2.	Short-term borrowings		
	Bank overdraft	6,800	12,500
3.	Short-term provisions		
	i) Provision for taxation	4,200	3,000
	ii) Proposed dividend	5,800	5,000
		10,000	**8,000**
4.	Fixed Assets:		
	Fixed Assets	40,000	41,000
	Less Accumulated Depreciation	(15,000)	(11,000)
		25,000	**30,000**

Additional Information:

Interest paid on Debenture Rs 600

[**Ans.:** Net Cash from Operating Activities Rs 2,100
Net Cash from Investing 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 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 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. "Why companies must necessarily prepare and present a statement of cash flows". Discuss it in the classroom. Comment.

3. You analyse the cash flow statement for the past 3 years for a company chosen by you and find out-
   (i) Whether the net increase in cash and cash equivalents over the years is noticed.
   (ii) If net cash flow from operating activities have been negative throughout, what may be the possible reasons for the situation. What would be the possible reasons for 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
c) Financing activities - 2, 4, 9, 14, 18, 25, 26, 28, 29;
d) Cash equivalents - 30, 31, 32, 33.

Test your Understanding – II

Answers: (a) 40,000, (b) 60,000, (c) deducted from,

(d) deducted from, (e) added to, (f) added to

Answers: 1. +, 2. NC, 3. +, 4. –, 5. +, 6. NC, 7. –, 8 +, 9. NC, 10 –, 11 –, 12 +

NOTE

NOTE