

### LEARNING OBJECTIVES

After studying this chapter you will be able to :

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

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

### SECTION I

#### 2.1 Meaning of Debentures

*Debenture:* The word 'debenture' has been derived from a Latin word 'debere' which means to borrow. Debenture is a written instrument acknowledging a debt under the common seal of the company. It contains a contract for repayment of principal after a specified period or at intervals or at the option of the company and for payment of interest at a fixed rate payable usually either half-yearly or yearly on fixed dates. According to section 2(12) of The Companies Act, 1956 'Debenture' includes Debenture 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' represent ownership of the company whereas a debenture is only acknowledgement of. 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.

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

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

*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 given any undertaking for the repayment of money borrowed by issuing such debentures. These debentures are repayable on the on winding-up of a company or on the expiry of a long period.

### **2.3.3 From the Point of view of Convertibility**

- (a) *Convertible Debentures:* Debentures which are convertible into equity shares or in any other security either at the option of the company or the debentureholders are called convertible debentures. These debentures are either fully convertible or partly convertible.
- (b) *Non-Convertible Debentures :* The debentures which cannot be converted into shares or in any other securities are called non-convertible debentures. Most debentures issued by companies fell in this category.

### **2.3.4 From Coupon Rate Point of view**

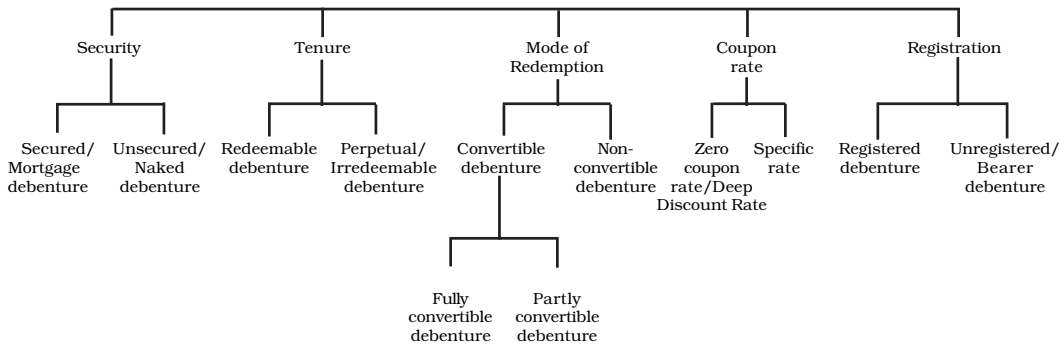
- (a) *Specific Coupon Rate Debentures:* These debentures are issued with a specified rate of interest, which is called the coupon rate. The specified rate may either be fixed or floating. The floating interest rate is usually tagged with the bank rate.

- (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

**Types of Debenture/Bond**



record of the debentureholders. Interest on debentures is paid to a person who produces the interest coupon attached to such debentures.

**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 Ltd. 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 relevant 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.	31 <sup>st</sup> March 2014 (Rs.)
<b>I. Equity and Liabilities</b>		
Non-current liabilities and Long-term borrowings	1	<b>9,00,000</b>
<b>II. Assets</b>		
Current assets		
Cash and cash equivalents	2	<b>9,00,000</b>

\* Relevant data only

## Notes to Accounts

Particulars	31st March 2014 (Rs.)
1. Long-term borrowings 9,000, 12% Debentures of Rs. 100 each	<b>9,00,000</b>
2. Cash and cash equivalents Cash at bank	<b>9,00,000</b>

### 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 over a period of 3 to 5 years or is charged to "Securities Premium Account" as per the guidelines issued by ICAI. The discount on issue of debentures can be written-off either by debiting it to profit and loss.

The Companies Act, 1956 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. To 12% Debenture Application A/c (Receipt of application money @ Rs. 30 per debenture)		4,00,000	4,00,000
	12% Debenture Application A/c Dr. To 12% Debenture A/c (Transfer of application money to debenture account)		4,00,000	4,00,000
	12% Debenture Allotment A/c Dr. Discount on Issue of Debentures A/c To 12% Debenture A/c (Allotment money due on debentures)		5,50,000 50,000	6,00,000
	Bank A/c Dr. To 12% Debenture Allotment A/c (Receipt of allotment money on debentures)		5,50,000	5,50,000

**TV Components Limited**  
**Balance Sheet as at.....**

Particulars	Note No.	Amount (Rs.)
<b>I. Equity and Liabilities</b>		
1. Non-current Liabilities		
Long-term borrowings	1	<b>10,00,000</b>
<b>II. Assets</b>		
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
		<b>10,00,000</b>

## 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.
- 2 Relevant data only.

**2.4.3 Debentures issued at Premium**

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

**Illustration 3**

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

On application	Rs.50
On allotment	Rs.60



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

**Solution:**

**Books of XYZ Industries Limited  
Journal**

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Bank A/c Dr. To 10% Debenture Application A/c (application money on 10% debentures received)		1,00,000	1,00,000
	10% Debenture Application A/c Dr. To 10% Debentures A/c (Transfer of application money on allotment)		1,00,000	1,00,000
	10% Debenture Allotment A/c Dr. To 10% Debentures A/c To Securities Premium A/c (Allotment money due on debentures including the premium)		1,20,000	1,00,000 20,000
	Bank A/c Dr. To 10% Debenture Allotment A/c (Allotment money received)		1,20,000	1,20,000

**XYZ Industries Limited  
Balance Sheet as at ———**

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

## Notes to Accounts

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

**Illustration 4**

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

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

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

**Solution:**

**Books of A Limited  
Journal**

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

Bank A/c	Dr.	2,25,000	
To 10% Debenture Allotment A/c (Allotment money received)			2,25,000
10% Debenture First & Final Call A/c	Dr.	2,00,000	
To 10% Debentures A/c (First and final call money due on debentures)			2,00,000
Bank A/c	Dr.	2,00,000	
To 10% Debenture A/c (First and final call money received)			2,00,000

### A Limited

#### Balance Sheet as at \_\_\_\_\_

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

#### Notes to Accounts

Particulars	Amount (Rs.)
1. Reserve and surplus	
Securities premium	<b>50,000</b>
2. Long-term borrowings	
Secured	
5,000, 10% debentures of Rs. 100 each	<b>5,00,000</b>

## 2.5 Over Subscription

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

**Illustration 5**

X Ltd. Issued 10,000, 12% debentures of Rs.100 each payable Rs.40 on application and Rs.60 on allotment. The public applied for Rs. 14,000 debentures. Applications 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. To 12% Debenture Application A/c (Receipt of application money on 14,000 debentures)		5,60,000	5,60,000
	12% Debenture Application A/c Dr. To 12% Debentures A/c (Transfer of application money on 10,000 debentures on allotment)		4,00,000	4,00,000
	12% Debenture Application A/c Dr. To Bank A/c (Application money on rejected applications refunded)		1,20,000	1,20,000
	12% Debenture Allotment A/c Dr. To 12% Debentures A/c (Amount due on allotment on 10,000 debentures)		6,00,000	6,00,000
	Bank A/c Dr. Debenture Application A/c Dr. To Debenture Allotment A/c (Surplus application money on 1,000 debentures transferred to debenture allotment account and the balance due was received)		5,60,000 40,000	6,00,000

## 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 A/c	

(c) *At a discount*

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

### Illustration 6

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

Record the necessary journal entries.

### Solution:

#### Books of Aashirwad Company Limited Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Sundry Assets A/c <span style="float: right;">Dr.</span> To Vendors (Assets purchased from vendors)		2,00,000	2,00,000
	Vendors <span style="float: right;">Dr.</span> 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. To Vendors (Assets purchased from vendors)		2,20,000	2,20,000
	Vendors Dr. To 10% Debentures A/c To Securities Premium A/c (Allotment of 2,000 debentures of Rs. 100 each at a premium of 10% as purchase consideration)		2,20,000	2,00,000 20,000

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

**Illustration 9**

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

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

Record necessary journal entries.

**Solution:**

**Books of G.S.Rai Company Limited  
Journal**

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

Sometimes a company may purchase the assets as well as take over its liabilities of another concern. It happens usually 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 and assets - liabilities) taken over, and if the whole amount of the consideration is paid by issue of debentures, the journal entry will be:

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

**Illustration 10**

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

**Solution:**
**Books of Romi Ltd.  
Journal**

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Sundry Assets A/c <span style="float: right;">Dr.</span> To Kapil Enterprises To Sundry Creditors A/c (The purchase of business)		20,00,000	18,00,000 2,00,000
	Vendors <span style="float: right;">Dr.</span> To 8% Debentures A/c (The issue of 18,000, 8% debentures of Rs. 100 each)		18,00,000	18,00,000

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

**Illustration 11**

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



**Solution:**

**Books of Blue Prints Limited  
Journal**

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

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

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

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

**Illustration 12**

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

**Solution:**

**Books of A Limited  
Journal**

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Sundry Assets A/c Dr.		3,00,000	
	To Sundry Liabilities A/c			10,000
	To B & Co. Ltd.			2,70,000
	To Capital Reserve			20,000
	(Purchase of assets and liabilities from B Ltd.)			

	B & Co. Ltd.	Dr.	2,70,000	
	To 15% Debentures A/c			2,25,000
	To Securities Premium A/c			45,000
	(Issue of 2250 debentures of Rs.100 each at a premium of 20%)			

**Do it Yourself**

1. Amrit Company Limited purchased assets of the value of Rs.2,20,000 from another company and agreed to make the payment of purchase consideration by issuing 2,000, 10% debentures of Rs.100 each at a premium of 10%. Record necessary journal entries.
2. A company purchased assets of the value of Rs. 1,90,000 from another company and agreed to make the payment of purchase consideration by issuing 2,000, 10% debentures of Rs.100 each at a discount of 5%. Record necessary journal entries.
3. Rose Bond Limited purchased a business for Rs. 22,00,000. Purchase Price was paid by 6% debentures. Debentures of Rs. 20,00,000 were issued at a premium of 10% for the purpose. Record necessary journal entries.
4. Nikhil and Ashwin Limited bought business of Agarwal Limited consisting sundry assts of Rs. 3,60,000, sundry creditors Rs. 1,00,000 for a consideration of Rs. 3,07,200. It issued 14% debentures of Rs. 100 each fully paid at a discount of 4% in satisfaction of purchase consideration. Record necessary journal entries.

**Illustration 13**

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

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

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

**Solution:**

**Books of Suvidha Ltd.  
Journal**

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	Machinery A/c	Dr.	1,98,000	
	To Suppliers Ltd.			1,98,000
	(Machinery purchased)			

Case(i)	When debentures are issued at par:			
	Suppliers Ltd. Dr.		1,98,000	
	To 12% Debentures A/c			1,98,000
	(12% Debentures issued to Suppliers Ltd.)			
Case(ii)	When debentures are issued at 10% discount:			
	Suppliers Ltd. Dr.		1,98,000	
	Discount on Issue of Debentures A/c Dr.		22,000	
	To 12% Debentures A/c			2,20,000
	(12% Debentures issued to Suppliers Ltd. at 10% discount)			
Case(iii)	When debentures are issued at 10% premium:			
	Suppliers Ltd. Dr.		1,98,000	
	To 12% Debentures A/c			1,80,000
	To Premium on Issue of Debentures A/c			18,000
	(12% Debentures issued to Suppliers Ltd. at 10% premium)			

Workings:

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

	(Rs.)
Face value	100
Less: Discount 10%	<u>10</u>
Value at which issued	<u>90</u>
$\frac{\text{Rs. 1,98,000}}{90}$	= 2,200 Debentures

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

	(Rs.)
Face value	100
Add: Premium 10%	<u>10</u>
Value at which issued	<u>110</u>
$\frac{\text{Rs. 1,98,000}}{110}$	= 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 with in two ways in the books of the company:

### **First Method**

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

#### **X Company Balance Sheet as at \_\_\_\_\_**

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

#### Notes to Accounts

Particulars	Amount (Rs.)
1. Long-term borrowings	
Secured	
Bank Loan	<b>10,00,000</b>
(Secured by issue of 12,000, 10% debentures of Rs.10 each as Collateral Security)	

### **Second Method**

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

*Journal Entries*

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

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

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

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

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

**Balance Sheet of X Co. \_\_\_\_\_ (Extract)**

Particulars	Note No.	Amount (Rs.)
<b>I. Equity and Liabilities</b>		
1. Non-current Liabilities		
Long term borrowings	1	<b>1,00,000</b>

## Notes to Accounts

Particulars	Note No.	Amount (Rs.)
1. Long-term borrowings		
Secured		10,00,000
Bank loan		
10,000, 9% debentures of Rs. 100 each	10,00,000	
Less: Debenture suspense	10,00,000	-
		<b>10,00,000</b>

**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.)
<b>I. Equity and Liabilities</b>		
1. Non-current Liabilities		
Long-term borrowings	1	<b>10,00,000</b>

Notes to Accounts

Particulars	Note No.	Amount (Rs.)
1. Long-term borrowings		
Secured Bank loan		<b>10,00,000</b>
(Secured by issue of 12,000, 10% debentures of Rs. 10 each as Collateral Security)		

Second Method:

**Journal Entries**

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

**Balance Sheet (Extract)**

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

Notes to Accounts

Particulars	Note No.	Amount (Rs.)
1. Long-term borrowings		
Secured		10,00,000
Loan from PNB		
12,000, 10% debentures	12,00,000	
Less: Debenture Suspense	<u>12,00,000</u>	-
		<b>10,00,000</b>

**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. Creditor for Rs. 2,00,000 capital expenditure in satisfaction of his claim	2,00,000
3. Bankers as Collateral Security for a bank loan worth Rs. 20,00,000 for which principal security is Business Premises worth Rs. 22,50,000.	2,50,000

The issue (1) and (2) are redeemable at the end of 10 years at par. State how the debenture inventory 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 lakhs. Company again took a loan of Rs. 80,000 after two months from a bank and deposited 1,000, 8% debentures of Rs. 100 each as collateral security. Record necessary journal entries and prepare 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 debentureholders. Debentures can be redeemed either at par or at a premium.

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

- (i) Issued at par and redeemable at par
- (ii) Issued at discount and redeemable at par
- (iii) Issued at a premium and redeemable at par
- (iv) Issued at par and redeemable at a premium
- (v) Issued at a discount and redeemable at a premium
- (vi) Issued at a premium and redeemable at a premium

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

1. *Issue at par and redeemable at par*
  - (a) Bank A/c Dr.  
 To Debenture Application & Allotment A/c  
 (Receipt of application money)
  - (b) Debenture Application & Allotment A/c Dr.  
 To Debentures A/c  
 (Allotment of debentures)
  
2. *Issue at a discount and redeemable at par*
  - (a) Bank A/c Dr.  
 To Debenture Application & Allotment A/c  
 (Receipt of application money)
  - (b) Debenture Application & Allotment A/c Dr.  
 Discount on Issue of Debentures A/c Dr.  
 To Debentures A/c  
 (Allotment of debentures at a discount)
  
3. *Issue at premium and redemption at par*
  - (a) Bank A/c Dr.  
 To Debenture Application & Allotment A/c  
 (Receipt of application money)
  - (b) Debenture Application & Allotment A/c Dr.  
 To Debentures A/c  
 To Securities Premium A/c  
 (Allotment of debentures at a premium)
  
4. *Issue at par and redeemable at premium*
  - (a) Bank A/c Dr.  
 To Debenture Application & Allotment A/c  
 (Receipt of application money)
  - (b) Debenture Application & Allotment A/c Dr.  
 Loss on Issue of Debentures A/c Dr. (with premium on redemption)  
 To Debentures A/c (with nominal value of debenture)  
 To Premium on Redemption (with premium on redemption)  
 of Debenture A/c  
 (Allotment of debentures at par and  
 redeemed at a premium)



## 5. Issue at discount and redemption at premium

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

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

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

- Notes:*
1. When debentures are redeemable at a premium, a provision has to be made right at the time of the issue by debiting the amount to 'Loss on Issue of Debentures A/c'. It may be noted that when debentures are issued at a discount and are redeemable at a premium, the amount of discount 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 Borrowing's 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 1,00,000, 9% debentures of Rs. 100 each and redeemable at par.

2. Issue of 1,00,000, 9% debentures of Rs. 100 each at premium of 5% but redeemable at par.
3. Issue of 1,00,000, 9% debentures of Rs. 100 each at discount of 5% repayable at par.
4. Issue of 1,00,000, 9% debentures of Rs. 100 each at par but repayable at a premium of 5%.
5. Issue of 1,00,000, 9% debentures of Rs. 100 each at discount of 5% but redeemable at premium of 5%.
6. Issue of 1,00,000, 9% debentures of Rs. 100 each at premium of 5% and redeemable at premium of 5%.

**Solution:****Journal**

<i>Date</i>	<i>Particulars</i>	<i>L.F.</i>	<i>Debit Amount (Rs.)</i>	<i>Credit Amount (Rs.)</i>
1	Bank A/c Dr. To 9% Debenture Application & Allotment A/c (Debentures Application money received)		1,00,000	1,00,000
	Debenture Application & Allotment A/c Dr. To 9% Debentures A/c (Application money transferred to Debentures Account)		1,00,000	1,00,000
2	Bank A/c Dr. To 9% Debenture Application & Allotment A/c (Debentures application money received)		1,05,000	1,05,000
	Debenture Application & Allotment A/c Dr. To 9% Debentures A/c To Securities Premium A/c (Debentures application money transferred to Debentures & Securities Premium account)		1,05,000	1,00,000 5,000
3	Bank A/c Dr. To 9% Debenture Application & Allotment A/c (Debentures application money received)		95,000	95,000
	9% Debenture Application & Allotment A/c Dr. Discount on Issue of Debentures A/c Dr. To 9% Debentures A/c (Debentures application money transferred to Debentures account)		95,000 5,000	1,00,000

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

**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:

- 120, 8% debentures of Rs. 1,000 each are issued at 5% discount and repayable at par.
- 150, 7% debentures of Rs. 1,000 each are issued at 5% discount and repayable at premium of 10%.

- (c) 80, 9% debentures of Rs.1,000 each are issued at 5% premium.  
 (d) Another 400, 8% debentures of Rs.100 each are issued as collateral security against a loan of Rs.40,000.

**Solution:****Books of X Ltd.****(a) Journal**

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

**Books of X Ltd.****Balance Sheet as at \_\_\_\_\_**

Particulars	Note No.	Amount (Rs.)
<b>I. Equity and Liabilities</b>		
1. Non-current Liabilities		
Long-term borrowings	1	1,20,000
		<b>1,20,000</b>
<b>II. Assets</b>		
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
		<b>1,20,000</b>

## Notes to Accounts

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

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

(b) **Books of X Ltd.**  
**Journal**

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

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

**Books of X Ltd.**  
**Balance Sheet as at \_\_\_\_\_**

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

Notes to Accounts

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

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

(c) **Books of X Ltd.  
Journal**

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

**X Ltd.  
Balance Sheet as at .....**

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

Notes to Accounts

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

(d) **Books of X Ltd.  
Journal**

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

**X Ltd.****Balance Sheet as at \_\_\_\_\_ (Extract)**

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

## 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	<u>40,000</u>	-
		<b>40,000</b>

**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*  
 Profit and Loss A/c Dr.  
     To Debenture Interest A/c  
 (Debenture interest transferred to profit and loss A/c)
4. *On payment of tax deducted at source to Government*  
 Income Tax Payable A/c Dr.  
     To Bank A/c  
 (Payment of tax deducted at source on interest on debentures)

### **Illustration 17**

A Ltd. issued 2,000, 10% debentures of Rs.100 each on January 01, 2013 at a discount of 10% redeemable at a premium of 10%.

Give journal entries relating to the issue of debentures and debenture interest for the period ending December 31, 2013 assuming that interest was paid half yearly on June 30 and December 31 and tax deducted at source is 10%. A Ltd. follows calendar year as its accounting year.



**Solution:**

**Book of A Ltd.  
Journal**

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
2013 Jan.01	Bank A/c Dr. To 10% Debenture Application & Allotment A/c (Application money received on 2,000, 10% debentures)		1,80,000	1,80,000
	10% Debentures Application & Allotment A/c Dr. Loss on Issue of Debenture A/c Dr. To 10% Debentures A/c To Premium on Redemption of Debentures A/c (Allotment of debentures at a discount of 10% and redeemable at a premium of 10%)		1,80,000 40,000	2,00,000 20,000
Jun.30	10% Debenture Interest A/c Dr. To Debentureholders A/c To Income Tax Payable A/c (Interest due for 6 months and tax deducted at source)		10,000	9,000 1,000
	10% Debentureholders A/c Dr. To Bank A/c (Payment of interest)		9,000	9,000
Dec.31	10% Debenture interest A/c Dr. To Debentureholders A/c To Income Tax Payable A/c (Interest due for 6 months and tax deducted at source)		10,000	9,000 1,000
	10% Debentureholders A/c Dr. To Bank A/c (Payment of interest)		9,000	9,000
Dec.31	Income Tax Payable A/c Dr. To Bank A/c (Paid tax deducted at source to the government)		2,000	2,000

	Statement of profit and loss To Debenture Interest A/c (Debenture interest transferred to profit and loss account)	Dr.	20,000	20,000
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**Do it Yourself**

1. Diwakar enterprises Ltd. Issued 10,00,000, 6% debentures on April 1, 2012. Interest is paid on September 30, 2012 and March 31, 2013.  
Record necessary journal entries assuming that income tax is deducted @30% of the amount of interest.  
(Amount of tax Rs. 18,000 for the year ending March 31, 2003)
2. Laser India Ltd. Issued 7,00,000, 8% debentures of Rs. 100 each at par. Company deducts income tax from the interest of these debentures at source. Interest is to be paid on these debentures half-yearly on September 30 and March 31, every year. Amount of income tax deducted half-yearly is Rs. 2,80,000.

### 2.10 Writing-off Discount/Loss on Issue of Debentures

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

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

**Do it Yourself**

1. X Ltd. Issued 2,000, 10% debentures of Rs.100 each at a discount of 8% on April, 2013 which are redeemable at par by annual drawings in 4 years commencing from March 31<sup>st</sup>, 2014 as per the following redemption plan:  
1<sup>st</sup> Draw 10%, 2<sup>nd</sup> Draw 20%, 3<sup>rd</sup> Draw 30%, and 4<sup>th</sup> 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 1.1.2012. The debentures are to be redeemed every year draw of lots – 1,000 debentures to be redeemed every year starting on 31.12.2012. Record the necessary journal entries including the payment of interest and writing off the discount on issue of debentures. The interest is payable on June 30<sup>th</sup> and 31<sup>st</sup> December. Z Ltd. Closes its books of accounts on December 31<sup>st</sup> every year.
4. M Ltd. issued 10,000, 8% debentures of Rs.100 each at a premium of 10% on 1.1.2014. It purchased sundry assets of the value of Rs,2,50,000 and took over the liabilities of Rs,1,90,000 and issued 8% debentures at a discount of 5% to the vendor. On the same date it took loan from the Bank for Rs.1,00,000 and issued 8% debentures as Collateral Security. Record the relevant journal entries in the books of M Ltd. and prepare the extract of balance sheet on 31.12.2012. Ignore interest.
5. On 1.1.2013 Fast Computers Ltd. issued 20,00,000, 6% debentures of Rs.100 each at a discount of 4%, redeemable at a premium of 5% after three years. The amount was payable as follows:

On application Rs.50 per debenture,  
Balance on allotment,

Record the necessary journal entries for issue of debentures.
6. D Ltd. Purchased machinery worth Rs.2,00,000 from E Ltd. on 1.1.2011. 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.
7. X Ltd. decides to redeem 8,000, 10% debentures of Rs.100 each on January 1, 2013 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<sup>st</sup> every year. What journal entries the company will be recording to redeem the above debentures ?
8. G Ltd. issued 5,00,000, 12% debentures of Rs.100 each on April 1, 2010 redeemable at par on July 1, 2014. 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.

**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**

<i>Dr.</i>			<i>Cr.</i>		
<i>Date</i>	<i>Particulars</i>	<i>Amount (Rs.)</i>	<i>Date</i>	<i>Particulars</i>	<i>Amount (Rs.)</i>
Ist year	Debenture	6,000	Ist year	Profit & Loss Balance c/d	2,000
		<b>6,000</b>			4,000
IInd year	Balance b/d	4,000	IInd year	Profit & Loss Balance c/d	1,600
		<b>4,000</b>			2,400
IIIrd year	Balance b/d	2,400	IIIrd year	Profit & Loss Balance c/d	1,200
		<b>2,400</b>			1,200
IVth year	Balance b/d	1,200	IVth year	Profit & Loss Balance c/d	800
		<b>1,200</b>			400
Vth year	Balance b/d	400	Vth year	Profit & Loss	400
		<b>400</b>			<b>400</b>

**Workings Notes:**

Total discount on the issue of debentures

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

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

#### Test your Understanding - I

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

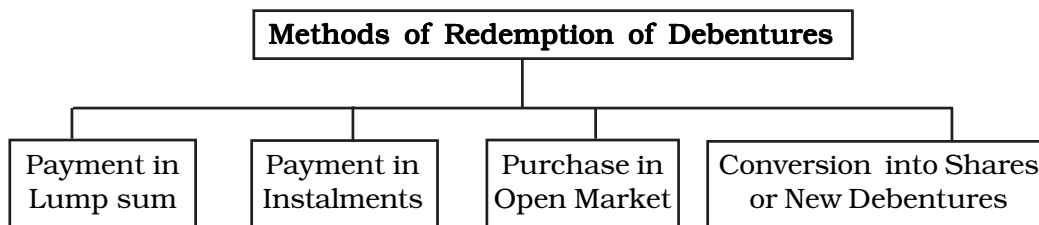
1. Debenture is written instrument acknowledging a debt under the common seal of the company.
2. Debenture is a part of owned capital.
3. The payment of interest on debentures is a charge on the profits of the company.
4. The debentures cannot be issued at a discount of more than 10% of the face value.
5. Redeemable debentures are those debentures, which are payable on the expiry of the specific period.
6. Perpetual debentures are also known as irredeemable debentures.
7. Debentures cannot be converted into shares.
8. Debentures cannot be issued at a premium.
9. A collateral security is a subsidiary security.
10. Debentures cannot be issued at a premium and redeemable at par.
11. Loss on issue of debentures account is a revenue loss.
12. Premium on redemption of debentures account is shown under the 'Securities Premium' in the balance sheet.

## SECTION II

### 2.11 Redemption of Debentures

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

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



*Payment in lump sum* : The company redeems the debentures by paying the 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 last and the actual debentures redeemable are identified by means of drawing the requisite number of lots from out of the debentures outstanding for payment.

*Purchase in open market*: When a company purchases its own debentures 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.

### 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 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**

<i>Date</i>	<i>Particulars</i>	<i>L.F.</i>	<i>Debit Amount (Rs.)</i>	<i>Credit Amount (Rs.)</i>
1.	9% Debentures A/c Dr. To Debentureholders A/c (Amount due on redemption debentures)		5,00,000	5,00,000
	Debentureholders A/c Dr. To Bank A/c (Payment made to debentureholders)		5,00,000	5,00,000
2.	12% Debentures A/c Dr. Premium on Redemption of Debentures A/c Dr. To Debentureholders (Amount due on redemption of debentures)		1,00,000 10,000	1,10,000
	Debentureholders A/c Dr. To Bank A/c (Payment made to debentureholders)		1,10,000	1,10,000
3.	12% Debentures A/c Dr. To Debentureholders A/c (Amount due on redemption)		1,00,000	1,00,000
	Debentureholders A/c Dr. To Bank A/c (Payment made to debentureholders)		1,00,000	1,00,000
4.	12% Debentures A/c Dr. Premium on Redemption of Debentures A/c Dr. To Debentureholders A/c (Amount due on redemption of debentures)		1,00,000 5,000	1,05,000
	Debentureholders A/c Dr. To Bank A/c (Payment made to debentureholders)		1,05,000	1,05,000



As per the provisions of the Companies Act 1956, 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 :

As per provisions of - Section 117C of the Companies Act, 1956 (as amended in 2000).

- (a) Where a company issued debentures after the commencement of this Act, it shall create a Debenture Redemption Reserve for the redemption of such debentures, to which adequate amount shall be credited, from out of its profit every year until such debentures are redeemed.
- (b) The amount credited to the Debenture Redemption Reserve shall not be utilised by the company except for the purpose of redemption of debentures.

#### *SEBI's Guidelines*

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

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

SEBI guidelines would not apply under the following situations:

- (a) Infrastructure company (a company wholly engaged in the business of developing, maintaining and operating infrastructure facilities); and
- (b) A company issuing debentures with a maturity period of not more than 18 months.

#### **2.12.1 Clarifications regarding creation of Debenture Redemption Reserve**

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

- (a) No DRR is required for debentures issued by All India Financial Institutions, regulated by RBI and Banking Companies for both public as well as privately placed debentures.
- (b) No DRR is required in case of privately placed debentures.
- (c) Section 117C apply to debentures issued and pending to be redeemed and, therefore, DRR will also be created for debentures issued prior to 13.12.2000 and pending redemption.
- (d) Section 117C will apply to non-convertible portion of debentures issued whether they are fully or partly paid.

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

### **Illustration 20**

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

### **Solution:**

#### **Books of XYZ Ltd. Journal**

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
2002 Jan.01	Bank A/c <span style="float: right;">Dr.</span> Loss on Issue of Debenture A/c <span style="float: right;">Dr.</span> To 15% Debentures A/c To Premium on Redemption of Debenture A/c (Issue of debentures at 10% discount and redeemable at 10% premium)		18,000 4,000	20,000 2,000
Dec.31	Statement of profit and loss <span style="float: right;">Dr.</span> To Debenture Redemption Reserve A/c (Transfer of profits to DRR as per Section 117(C) and SEBI)		10,000	10,000

2004 Dec.31	15% Debentures A/c	Dr.		20,000	
	Debenture Redemption Premium A/c	Dr.		2,000	
	To Debentureholders A/c (Amount due on redemption )				22,000
	Debentureholders A/c	Dr.		22,000	
	To Bank A/c (Amount paid to debentures holders)				22,000
	Debenture Redemption Reserve A/c	Dr.		10,000	
	To General Reserve A/c (Transfer of DRR to General Reserve after total redemption)				10,000

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

### 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 January 1, 2012. Interest on these debentures is payable annually on December 31<sup>st</sup> 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.)
2012 Dec.31	Balance c/d		3,00,000	2012 Jan.01	Debenture Application A/c		2,85,000
				Dec.31	Discount on Issue of Debentures A/c		15,000
			<b>3,00,000</b>				<b>3,00,000</b>
2013 Dec.31	Balance c/d		3,00,000	2013 Jan.01	Balance b/d		3,00,000
			<b>3,00,000</b>				<b>3,00,000</b>
2014 Dec.31	Bank A/c		1,00,000	2014 Jan.01	Balance b/d		3,00,000
Dec.31	Balance c/d		2,00,000				<b>3,00,000</b>
			<b>3,00,000</b>				
2015 Dec.31	Bank A/c		1,00,000	2015 Jan.01	Balance b/d		2,00,000
Dec.31	Balance c/d		1,00,000				<b>2,00,000</b>
			<b>2,00,000</b>				
2016 Dec.31	Balance c/d		1,00,000	2016 Jan.01	Balance b/d		1,00,000
			<b>1,00,000</b>				<b>1,00,000</b>

**Debentures Interest Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2012 Dec.31	Bank		<b>42,000</b>	2012 Dec.31	Profit and Loss		<b>42,000</b>

2013 Dec.31	Bank		<b>42,000</b>	2013 Dec.31	Profit and Loss		<b>42,000</b>
2014 Dec.31	Bank		<b>42,000</b>	2014 Dec.31	Profit and Loss		<b>42,000</b>
2015 Dec.31	Bank		<b>28,000</b>	2015 Dec.31	Profit and Loss		<b>28,000</b>
2016 Dec.31	Bank		<b>14,000</b>	2016 Dec. 31	Profit and Loss		<b>14,000</b>

### Discount on Issue Debentures Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2012 Jan.01	Balance c/d		15,000	2012 Dec.31	Profit and Loss		3,750
			<b>15,000</b>	Dec.31	Balance c/d		11,250
2013 Jan.01	Balance c/d		11,250				<b>15,000</b>
			<b>11,250</b>	2013 Dec. 31	Profit and Loss		3,750
2014 Jan.01	Balance c/d		7,500	Dec. 31	Balance c/d		7,500
			<b>7,500</b>				<b>11,250</b>
2015 Jan.01	Balance c/d		3,750	2014 Dec. 31	Profit and Loss		3,750
			<b>3,750</b>	Dec. 31	Balance c/d		3,750
2016 Jan.01	Balance c/d		1,250				<b>7,500</b>
			<b>1,250</b>	2015 Dec. 31	Profit and Loss		2,500
				Dec. 31	Balance c/d		1,250
							<b>3,750</b>
				2016 Dec. 31	Profit and Loss		1,250
							<b>1,250</b>

**Working Notes:**

1. Debenture interest is calculated @ 14% on the amount of debentures outstanding in the beginning of each year. The amount of debentures outstanding on January 1, each year is:

<b>December,</b>	<b>Debenture Outstanding Rs.</b>
Beginning of 2012	3,00,000
Beginning of 2013	3,00,000
Beginning of 2014	3,00,000
Beginning of 2015	2,00,000
Beginning of 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

<b>Year</b>		<b>Amount Rs.</b>
2012	$\text{Rs. } 15,000 \times \frac{3}{12}$	3,750
2013	$\text{Rs. } 15,000 \times \frac{3}{12}$	3,750
2014	$\text{Rs. } 15,000 \times \frac{3}{12}$	3,750
2015	$\text{Rs. } 15,000 \times \frac{2}{12}$	2,500
2016	$\text{Rs. } 15,000 \times \frac{1}{12}$	1,250

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

### 2.13 Redemption by Purchase in Open Market

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

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

- On purchase of our debentures for immediate cancellation*  

Debentures A/c	Dr.
To Bank A/c	
To Profit on Redemption of Debentures A/c	
- 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 <span style="float: right;">Dr.</span> To Bank A/c To Profit on Redemption of Debentures A/c (Own debentures purchased at Rs.92 from the market)		20,000	18,400 1,600
	Profit on Redemption of Debenture A/c <span style="float: right;">Dr.</span> To Capital Reserve (Transfer of profit on cancellation of debentures to capital reserve)		1,600	1,600
	Statement of profit and loss <span style="float: right;">Dr.</span> To Debenture Redemption Reserve A/c (Transfer of profits to Debenture Redemption Reserve)		20,000	20,000

### **Illustration 23**

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

**Solution:**

**Books of X Ltd.  
Journal**

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	12% Debentures A/c Dr. To Bank A/c To Profit on Redemption of Debentures A/c (Purchase of 200 debentures @ Rs.98.50 plus Rs.100 for expenses )		20,000	19,800 200
	12% Debentures A/c Dr. To Bank A/c (Redemption of Rs.5,000 debentures)		5,000	5,000
	Profit on Redemption of Debenture A/c Dr. To Capital Reserve (Transfer of profits on Redemption of debentures to Capital Reserve A/c)		200	200
	Statement of profit and loss Dr. To Debenture Redemption Reserve A/c (Transfer of profit to Debenture Redemption Reserve)		25,000	25,000

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

**Illustration 24**

On January 01, 2012, a company made an issue of 1,000, 6% debentures of Rs.1,000 each at Rs.960 per debenture. The terms of issue provided for the redemption of 200 debentures every year starting from the end of 2013 either by purchase or by draw of lot at par at the company's option. Rs.10,000 was written-off the debenture discount account in years 2012 and 2013. On 31.12.2013, 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:**

<i>Date</i>	<i>Particulars</i>	<i>L.F.</i>	<i>Debit Amount (Rs.)</i>	<i>Credit Amount (Rs.)</i>
2012 Jan.01	Bank A/c Dr. To 6% Debentures Application & Allotment A/c (Debentures application money received)		9,60,000	9,60,000
	6% Debenture 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
Dec.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
2013 Dec.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
Dec.31	6% Debentures A/c Dr. To Bank A/c To Profit on Redemption of Debentures A/c (Redemption of 120 debentures @ Rs.900 by purchasing in open market)		1,20,000	1,08,000 12,000
Dec.31	Profit on Redemption of Debentures A/c Dr. To Capital Reserve A/c (Transfer of profits on cancellation of debentures to Capital Reserve A/c)		16,000	16,000
Dec.31	Statement of profit and loss Dr. To Debenture Redemption Reserve A/c (Transfer of profit to Debenture Redemption Reserve)		2,00,000	2,00,000
Dec.31	Statement of profit and loss Dr. To Discount on Issue of Debentures A/c (Discount on debentures written-off)		10,000	10,000

### 2.14 Redemption by Conversion

As stated earlier the debentures can also be 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 Limited Journal

Date	Particulars	L.F.	Debit Amount (Rs.)	Credit Amount (Rs.)
	15% Debentures A/c <span style="float: right;">Dr.</span> To Debentureholders (Amount due to debentureholders)		1,00,000	1,00,000
	Debentureholders A/c <span style="float: right;">Dr.</span> To Equity Shares Capital A/c To Securities Premium A/c (Issue of 800 equity shares at a premium of Rs.2.50 per share)		1,00,000	80,000 20,000
	Debentures A/c <span style="float: right;">Dr.</span> To Debentureholders A/c (Amount due to debentureholders)		50,000	50,000
	Debentureholders <span style="float: right;">Dr.</span> To Bank A/c (Payment to debentureholders)		50,000	50,000
	Statement of profit and loss <span style="float: right;">Dr.</span> To Debenture Redemption Reserve A/c (Transfer of profit to Debenture Redemption Reserve)		50,000	50,000

### **2.15 Sinking Fund Method**

Sufficient funds are required to redeem debentures at the end of a specified period. To meet this requirement, the company may decide to create a sinking fund and invest adequate amount in marketable securities or bonds of other business entities. Normally, a company ensures that an equal amount is set aside every year to arrange the necessary funds at the time of redemption. This is called Sinking Fund method according to which the company makes necessary arrangements and 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 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 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  
 In case of Profit  
     Debenture Redemption Fund Investment A/c Dr.  
     To Debenture Redemption Fund A/c  
 In case of Loss  
     Debenture Redemption Fund A/c Dr.  
     To Debenture Redemption Fund Investment A/c
- (f) For amount due to debentureholders on redemption  
 Debenture A/c Dr.  
     To Debentureholders A/c
- (g) For payment to debentureholders  
 Debentureholders A/c Dr.  
     To Bank A/c
- (h) For transfer of Debenture Redemption Fund Account balance to  
 General Reserve  
 Debenture Redemption Fund A/c Dr.  
     To General Reserve A/c

**Illustration 26**

X Ltd. issued Rs.10,00,000 debentures on January 01, 2011. These were to be redeemed on December 31, 2013. 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 December 31, 2013, 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.)
2011 Jan. 1,	Bank A/c <span style="float: right;">Dr.</span> To Debentures A/c (Issue of debentures of Rs. 10,00,000)		10,00,000	10,00,000
Dec.31,	Statement of profit and loss <span style="float: right;">Dr.</span> 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
2012 Dec.31,	Bank A/c <span style="float: right;">Dr.</span> To Interest on DRFI A/c (Interest received @ 5% on investment )		15,860	15,860
	Interest on DRFI A/c <span style="float: right;">Dr.</span> To Debenture Redemption Fund Investment A/c (Interest on DRFI transferred to Debenture Redemption Fund)		15,860	15,860

2013 Dec.31,	Statement of profit and loss	Dr.	3,17,208	
	To Debenture Redemption Fund A/c (Annual instalment debited to Profit and Loss Appropriation Account)			3,17,208
	Debenture Redemption Fund Investment A/c	Dr.	3,33,100	
	To Bank A/c (Investment purchased for annual instalment plus interest)			3,33,100
	Bank A/c	Dr.	32,516	
	To Interest on DRFI A/c (Interest received @ 5% on investment)			32,516
	Interest on DRFI A/c	Dr.	32,516	
	To Debenture Redemption Fund A/c (Interest on DRFI transferred to Debenture Redemption Fund)			32,516
	Statement of profit and loss	Dr.	3,17,208	
To Debenture Redemption Fund A/c (Annual instalment debited to Profit & Loss Appropriation Account)			3,17,208	
Bank A/c	Dr.	6,56,000		
To Debenture Redemption Fund Investment A/c (Sale proceeds of DRFI)			6,56,000	
Debenture Redemption Fund Investment A/c	Dr.	5,700		
To Debenture Redemption Fund A/c (Transfer of profit on sale of investments to Debenture Redemption Fund)			5,700	
Debentures A/c	Dr.	10,00,000		
To Debentureholders A/c (Debentures amount transferred to debentureholders)			10,00,000	
Debentureholders A/c	Dr.	10,00,000		
To Bank A/c (Debentures holders paid the money)			10,00,000	

	Debenture Redemption Fund A/c To General Reserve A/c (Transfer of credit balance of Debenture Redemption Fund General Reserve)	Dr.	10,05,700	10,05,700
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### Debentures Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2011 Dec.31	Balance c/d		10,00,000	2011 Jan.01	Bank		10,00,000
			<b>10,00,000</b>				<b>10,00,000</b>
2012 Dec.31	Balance c/d		10,00,000	2012 Jan.01	Balance b/d		10,00,000
			<b>10,00,000</b>				<b>10,00,000</b>
2013 Dec.31	Bank		10,00,000	2013 Jan.01	Balance b/d		10,00,000
			<b>10,00,000</b>				<b>10,00,000</b>

### Debentures Redemption Fund Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2011 Dec.31	Balance c/d		3,17,208	2011 Jan.01	Statement of profit and loss		3,17,208
			<b>3,17,208</b>				<b>3,17,208</b>
2012 Dec.31	Balance c/d		6,50,276	2012 Jan.01	Balance b/d		3,17,208
					Interest on DRFI		15,860
					Statement of profit and loss		3,17,208
			<b>6,50,276</b>				<b>6,50,276</b>



2013 Dec.31	General Reserve		10,05,700	2013 Jan.01	Balance b/d		6,50,276
					Interest on DRFI		32,516
					Profit & Loss		3,17,208
					Appropriation		
					DRFI		5,700
			<b>10,05,700</b>				<b>10,05,700</b>

### Debenture Redemption Fund Investment Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2011 Dec.31	Bank		3,17,200	2011 Jan.01	Bank		3,17,200
			<b>3,17,200</b>				<b>3,17,200</b>
2012 Dec.31	Balance b/d Bank		3,17,200 3,33,100	2012 Jan.01	Balance c/d		6,50,300
			<b>6,50,300</b>				<b>6,50,300</b>
2013 Dec.31	Balance b/d DRF		6,50,300 5,700	2013 Jan.01	Bank (Sale Proceeds)		6,56,000
			<b>6,56,000</b>				<b>6,56,000</b>

### Bank Account

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2013 Dec.31	Balance b/d DRF		4,20,000 6,56,000	2013 Dec.31	Debenture Balance c/d		10,00,000 76,000
			<b>10,76,000</b>				<b>10,76,000</b>
2014 Jan.1	Balance b/d		76,000				

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

**Illustration 27**

The balance sheet of XYZ Ltd. disclosed the following information as on December, 31 2011.

	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 2012 and 2013. Debentures are due for payment on December 31, 2013. Prepare the above accounts in the books of company assuming that securities were realised on December 31, 2013 for a sum of Rs. 13,52,000 and interest on securities on December 31, was immediately invested.

**Solution:****Debentures Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2012 Dec.31	Balance c/d		15,00,000	2012 Jan.01	Balance b/d		15,00,000
			<b>15,00,000</b>				<b>15,00,000</b>
2013 Dec.31	Bank		15,00,000	2013 Jan.01	Balance b/d		15,00,000
			<b>15,00,000</b>				<b>15,00,000</b>

**Debentures Redemption Fund Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2012 Dec.31	Balance c/d		14,10,760	2012 Jan.01	Balance b/d		11,63,600
			<b>14,10,760</b>	2012 Dec.31	Interest on DRFI		1,16,360
					Statement of profit and loss		1,30,800
							<b>14,10,760</b>
2013 Dec.31	Sinking Fund Investment		58,760	2013 Jan.01	Balance b/d		14,10,760
	General Reserve		16,23,876	2013 Dec.31	Interest on DRFI		1,41,076
			<b>16,82,636</b>		Statement of profit and loss		1,30,800
							<b>16,82,636</b>

**Debenture Redemption Fund Investment Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2012 Jan.01	Balance b/d		11,63,600	2012 Dec.31	Balance c/d		14,10,760
Dec.31	Bank		2,47,160*				
			<b>14,10,760</b>				<b>14,10,760</b>
2013 Jan.01	Balance b/d		14,10,760	2013 Dec.31	Bank Debenture Redemption Reserve		13,52,000
							58,760
			<b>14,10,760</b>				<b>14,10,760</b>

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

**Illustration 28**

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

**Illustration 29**

The following balances appeared in the books of Madhu Ltd. as on April 01, 2011:

	(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<sup>st</sup> 2012, 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 2011-2012. 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.)
2012 Mar.31	Debenture Redemption Fund Investment (Loss on Sale) General Reserve (Transfer)		15,800 1,41,500	2011 April 1 2012 Mar.31	Balance b/d Interest on Debenture Redemption Fund Investment A/c (9% on Rs.1,30,000) Statement of profit and loss		1,25,000  11,700  20,600
			<b>1,57,300</b>				<b>1,57,300</b>

**Debenture Redemption Fund Investment Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2012 April,01	Balance b/d (Face value Rs. 1,30,000)		1,25,000	2011 Mar.31	Bank (84% of Rs. 1,30,000) Loss transferred to Debenture Redemption Fund		1,09,200 15,800
			<b>1,25,000</b>				<b>1,25,000</b>

**Bank Account**

Dr.

Cr.

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2012 Mar.31	Balance b/d		40,000	2011 Mar.31	Debenture		1,50,000
	Interest on Investment		11,700		Balance c/d		10,900
	Debenture Redemption Fund Investment (Sales Proceeds)		1,09,200				
			<b>1,60,900</b>				<b>1,60,900</b>

**12% Debentures Account**

Dr.

Cr.

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2012 Mar.31	Bank A/c		1,50,000	2011 April 31	Balance b/d		1,50,000
			<b>1,50,000</b>				<b>1,50,000</b>

*Working Notes :*

- Interest on Debenture Redemption Fund Investments of 1,30,000 at 9% will be Rs.11,700.
- 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:**

- Debentures which are transferable by mere delivery are:
  - Registered debentures,
  - First debentures,
  - Bearer debentures.
- 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:
  - 15%,
  - 5%,
  - 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) Reserves and surplus,  
(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.

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

### Do it Yourself

1. G Ltd. has 800 lakhs, 10% debentures of Rs.100 each due for redemption on March 31, 2003. Assume that Debenture Redemption Reserve has a balance of Rs. 3,40,00,00,000 on that date. Record necessary entries at the time of redemption of debentures.
2. R Ltd. issued 88,00,000, 8% debenture of Rs. 50 each at a premium of 5 % on July 1, 2000 redeemable at par by conversion of debentures into shares of

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

### **Illustration 30**

The following balances appeared in the books of a company on January 01, 2011:

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 31<sup>st</sup> December each year. On December 31<sup>st</sup>, 2011, 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 2011:

- (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.)
2011 Dec.31	Bank		4,00,000	2011 Jan.01	Balance b/d		4,00,000
			<b>4,00,000</b>				<b>4,00,000</b>

**12% Debenture Sinking Fund Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2011 Dec.31	General Reserve		4,28,000	2011 Jan.01	Balance b/d		3,00,000
				Dec.31	Statement of profit and loss		60,000
				Dec.31	Interest on Debenture Sinking Fund Investment		40,000
				Dec.31	Debenture Fund Investment		28,000
			<b>4,28,000</b>				<b>4,28,000</b>

**12% Debenture Sinking Fund Investment Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2011 Jan.01	Balance b/d		3,00,000	2011 Dec.31	Bank		3,28,000
Dec.31	Profit transferred to Debenture Sinking Fund		28,000				
			<b>3,28,000</b>				<b>3,28,000</b>

**Bank Account**

Dr.

Cr.

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2011 Jan.1	Balance b/d (The balance of Rs.3,00,000 includes Rs.40,000, interest @ 10% on Rs.4,00,000 (10% Rs. 4,00,000 Secured Bonds of Govt. of India)		3,00,000	2011 Dec.31	12% Debentures Balance c/d		4,00,000 2,28,000
Dec.31	12% Debentures Sinking Fund Investment		3,28,000				
			<b>6,28,000</b>				<b>6,28,000</b>

**Illustration 31**

The following balances stood as on 31.3.2013 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.)
2013 March 31	Bank		10,00,000	2013 March 31	Balance b/d		10,00,000
			<b>10,00,000</b>				<b>10,00,000</b>

**Debenture Redemption Fund Account**

Dr.

Cr.

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2013 March 31	General Reserve		10,30,000	2013 March 31	balance b/d		10,00,360
					Debenture Redemption Fund Investment		29,640
			<b>10,30,000</b>				<b>10,30,000</b>

**Debenture Redemption Fund Investment Account**

Dr.

Cr.

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2013 March 31	Balance b/d			2013 March 31	Bank (9% Loan )		4,00,000
	9% Loan		3,80,000		Bank		6,30,000
	8% Govt.Paper		6,20,360		(8% Govt.Paper)		
	Debenture Redemption Fund		29,640				
			<b>10,30,000</b>				<b>10,30,000</b>

**Bank Account**

Dr.

Cr.

Date	Particulars	J.F.	Amount (Rs.)	Date	Particulars	J.F.	Amount (Rs.)
2013 March 31	To Debenture Redemption Fund			2013 March 31	By 12% Debentures		10,00,000
	Investment:				By Balance c/d		30,000
	9% Loan		4,00,000				
	8% Govt. Paper		6,30,000				
			<b>10,30,000</b>				<b>10,30,000</b>

The Bank Balance has not been given.

### **Terms Introduced in the Chapter**

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

### **Question for Practice**

#### **Short Answer Questions**

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

#### **Long Answer Questions**

1. 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, 2002 at a premium of 10% payable as Rs.200 on application (including premium) and balance on allotment, redeemable at par after 8 years. But application are received for 3,00,000 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, 5,000 only 40% and the remaining rejected. The surplus money on partially allotted applications is utilised towards allotment. All the sums due are duly received.

8. R.Ltd. offered 20,00,000, 10% 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.

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 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, 2000 redeemable at premium of 4% by draw of lots as under:
  - 20,00,000 debentures on March, 2002
  - 10,00,000 debentures on March, 2004
  - 20,00,000 debentures on March, 2005

Compute the amount of discount to be written-off in each year till debentures are paid. Also prepare discount/loss on issue of debenture account.
15. A company issues the following debentures:

- (i) 10,000, 12% debentures of Rs. 100 each at par but redeemable at premium of 5% after 5 years;
  - (ii) 10,000, 12% debentures of Rs. 100 each at a discount of 10% but redeemable at par after 5 years;
  - (iii) 5,000, 12% debentures of Rs. 1000 each at a premium of 5% but redeemable at par after 5 years;
  - (iv) 1,000, 12% debentures of Rs. 100 each issued to a supplier of machinery costing Rs. 95,000. The debentures are repayable after 5 years; and
  - (v) 300, 12% debentures of Rs. 100 each as a collateral security to a bank which has advanced a loan of Rs. 25,000 to the company for a period of 5 years.
- Pass the journal entries to record the: (a) issue of debentures; and (b) repayment of debentures after the given period.
16. A company issued debentures of the face value of Rs. 5,00,000 at a discount of 6% on January 01, 2011. These debentures are redeemable by annual drawings of Rs. 1,00,000 made on December 31 each year. The directors decided to write-off discount based on the debentures outstanding each year.
- Calculate the amount of discount to be written-off each year. Give journal entries also.
17. A company issued 10% Debentures of the face value of Rs. 1,20,000 at a discount of 6% on 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: 2011 Rs. 6,000; 2012 Rs. 6,800; 2013 Rs. 5,200; 2014 Rs. 3,600; 2015 Rs. 2,000; 2016 Rs. 400).
19. B. Ltd. issued 1,000, 12% debentures of Rs. 100 each on April 01, 2010 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, 2011 assuming that interest is paid half yearly on September 30 and March 31 and tax deducted at source is 10%. B.Ltd. follows calendar year as its accounting year.
20. What journal entries will be made in the following cases when company redeems debentures at the expiry of period by serving the notice: (a) when debentures were issued at par with a condition to redeem them at premium; (b) when debentures were issued at premium with a condition to redeem that at par; and (c) when debentures were issued at discount with a condition to redeem them at premium?



21. On January 01, 2011, X. Ltd. issues 5,000, 8% debentures of Rs.100 each repayable at par at the end of three years. It has been decided to set up a cumulative sinking fund for the purpose of their redemption. The investments are expected to realise 4% net. The Sinking Fund Table shows that Rs.0.320348 amounts to one rupee @4% per annum in three years. On December 31, 2013 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.

22. On April 01, 2011 a company issued 15% debentures of Rs.10,00,000 at par. The debentures were redeemable at par after three years on March 31, 2012. 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, 2014, 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, 2011 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, 2012, 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, 2011

	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, 2011, 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, 2011

	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, 2012, 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 2011.

26. What entries for the redemption of debentures will be done when : (a) debentures are redeemed by annual drawings out of profits; (b) debentures are redeemed by drawing a lot out of capital; and (c) debentures are redeemed by purchasing them in the open market when sinking fund for the redemption of debentures is not maintained – (i) when out of profit, and (ii) when out of capital?
27. A. Ltd. Company issued Rs,5,00,000 debentures at a discount of 5% repayable at par by annual drawings of Rs.1,00,000.
- Make the necessary ledger accounts in the books of the company for the first year.
28. X.Ltd. issued 5,000, 15% debentures of Rs.100 each on January 01, 2004 at a discount of 10%, redeemable at a premium of 10% in equal annual drawings in 4 years out of capital.
- Give journal entries both at the time of issue and redemption of debentures. (Ignore the treatment of loss on issue of debentures and interest.)
29. Z.Ltd. issued 2,000, 14% debentures of Rs.100 each on January 01, 2005 at a discount of 10%, redeemable at a premium of 10% in equal annual drawings in 4 years out of profits.
- Give journal entries both at the time of issue and redemption of debentures. (Ignore the treatment of loss on issue of debentures and interest)
30. A.Ltd. purchased its own debentures of the face value of Rs.2,00,000 from the open market for immediate cancellation at Rs.92. 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.

**Answers to Test your Understanding****Test your Understanding - I**

1. True, 2. False, 3. True, 4. False, 5. True, 6. True, 7. False, 8. False,  
9. True, 10. False, 11. False, 12. False.

**Test your Understanding - II**

1 (c), 2 (b), 3 (a), 4 (a), 5 (b), 6 (c), 7 (b), 8 (b), 9 (a), 10 (c),  
11 (c), 12 (b), 13 (a), 14 (c), 15 (c).

**Test your Understanding - III**

- (I) Vendors Account, (2) Profit & Loss Appropriation Account, (3) Debenture Redemption Reserve Account, (4) Own Debentures Account, (5) Profit & Loss Account.
- (II) (1) Debenture Account, (2) Sinking Fund Account, (3) General Reserve Account, (4) Debenture Redemption Reserve Account, (5) Loss on Issue of Debentures Account.