



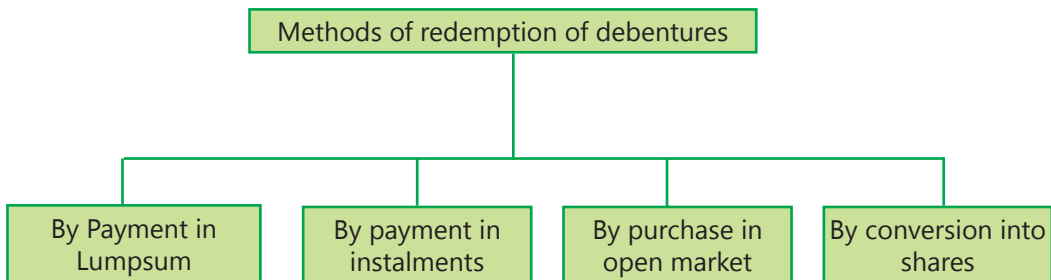
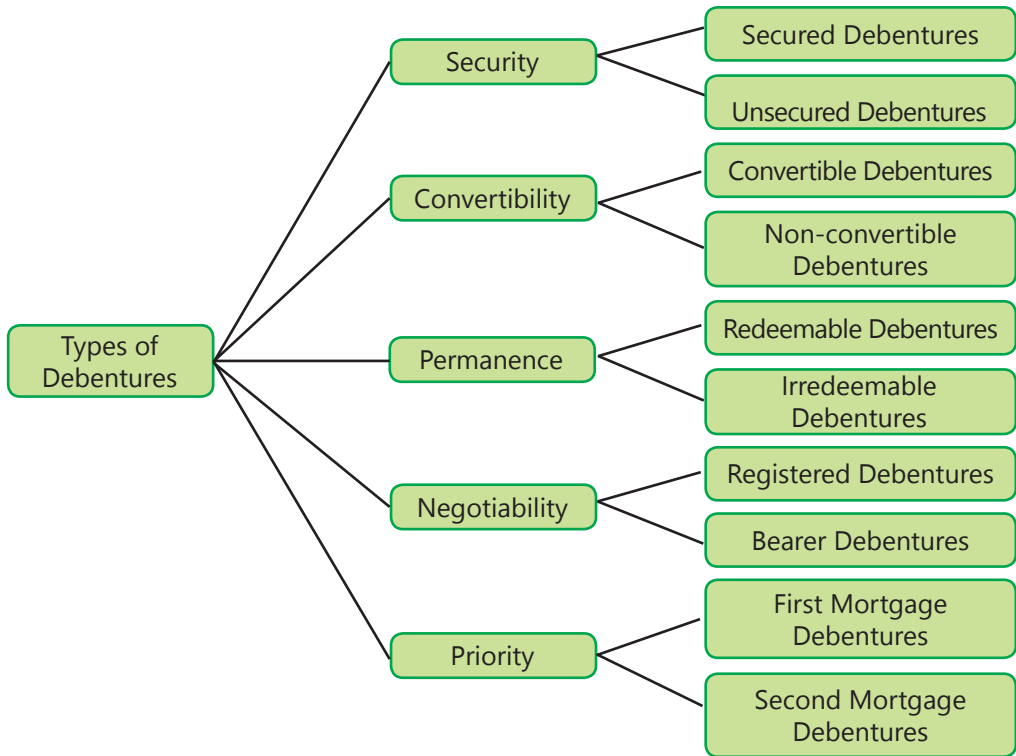
REDEMPTION OF DEBENTURES



LEARNING OUTCOMES

After studying this chapter, you will be able to :

- Understand the requirement of Debenture Redemption Reserve for the redemption of debentures.
- Deal with purchase of own debentures in the open market and conversion of debentures.
- Solve problems based on redemption of debentures.

CHAPTER OVERVIEW 



1. INTRODUCTION

A debenture is an instrument issued by a company under its seal, acknowledging a debt and containing provisions as regards repayment of the principal and interest.

Under Section 71 (1) of the Companies Act, 2013, a company may issue debentures with an option to convert such debentures into shares, either wholly or partly at the time of redemption. Provided that the issue of debentures with an option to convert such debentures into shares, wholly or partly, should be approved by a special resolution passed at a duly convened general meeting. Section 71 (2) further provides that no company can issue any debentures which carry any voting rights. Section 71 (4) provides that where debentures are issued by a company, the company should create a debenture redemption reserve account out of the profits of the company available for payment of dividend and the amount credited to such account should not be utilised by the company for any purpose other than the redemption of debentures.

Basic provisions

If a charge has been created on any or the entire asset of the company,

- the nature of the charge
 - the assets charged
- are described therein.
- Since the charge is not valid unless registered with the Registrar, his certificate registering the charge is printed on the bond.
 - It is also customary to create a trusteeship in favor of one or more persons in the case of mortgage debentures. The trustees of debenture holders have all powers of a mortgage of a property and can act in whatever way they think necessary to safeguard the interest of debenture holders.

Note: Issue of debentures has already been discussed in detail at Foundation level. Students are advised to refer the Foundation study material for understanding of the requirements relating to issue of debentures.



2. REDEMPTION OF DEBENTURES

Debentures are usually redeemable, but a company may also issue irredeemable debentures.

Redeemable debentures may be redeemed

- after a **fixed number** of years or
- any time after a **certain number of years** has elapsed since their issue,
- on giving a **specified notice**, or by **annual drawing**.

A company may also purchase its debentures, as and when convenient in the open market and when debentures are quoted at a discount on the Stock Exchange, it may be profitable for the company to purchase and cancel them



3. DEBENTURE REDEMPTION RESERVE

A company issuing debentures is required to create a debenture redemption reserve account out of the profits available for distribution of dividend and amounts credited to such account cannot be utilised by the company except for redemption of debentures. Such an arrangement would ensure that the company will have sufficient liquid funds for the redemption of debentures at the time they should fall due for payment.

An appropriate amount is transferred from profits every year to Debenture Redemption Reserve and its investment is termed as Debenture Redemption Reserve Investment. These investment earn certain amount of income i.e. 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 Reserve 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 investments is also transferred to Debenture Redemption Reserve Account.

3.1 Liability of the Company to Create Debenture Redemption Reserve

Section 71 of the Companies Act 2013 covers the requirement of creating a debenture redemption reserve account. Section 71 states as follows:

- (1) Where a company issues debentures under this section, it should create a debenture redemption reserve account out of its profits which are available for distribution of dividend every year until such debentures are redeemed.
- (2) The amounts credited to the debenture redemption reserve should not be utilised by the company except for the purpose aforesaid.
- (3) The company should pay interest and redeem the debentures in accordance with the terms and conditions of their issue.
- (4) Where a company fails to redeem the debentures on the date of maturity or fails to pay the interest on debentures when they fall due, the Tribunal may, on the application of any or all the holders of debentures or debenture trustee and, after hearing the parties concerned, direct, by order, the company to redeem the debentures forthwith by the payment of principal and interest due thereon.

3.2 Journal Entries

The necessary journal entries passed in the books of a company are given below:

1. At the end of First Year

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

| | |
|-------------------------------------|-----|
| Profit and Loss A/c | Dr. |
| To Debenture Redemption Reserve A/c | |

- (b) For investing the amount set aside for redemption

| | |
|---|-----|
| Debenture Redemption Reserve 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 Reserve Investments

| | |
|--|-----|
| Bank A/c | Dr. |
| To Interest on Debenture Redemption Reserve Investment A/c | |

- (b) For transfer of Interest on Debenture Redemption Reserve Investment (DRRI) to Debenture Redemption Reserve Account

| | |
|---|-----|
| Interest on Debenture Redemption Reserve Investment A/c | Dr. |
| To Debenture Redemption Reserve A/c | |

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

| | |
|-------------------------------------|-----|
| Profit and Loss A/c | Dr. |
| To Debenture Redemption Reserve A/c | |

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

| | |
|---|-----|
| Debenture Redemption Reserve 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 Reserve Investment A/c | |

- (b) For transfer of interest on Debenture Redemption Reserve Investment to Debenture Redemption Reserve Investment A/c

| | |
|---|-----|
| Interest on Debenture Redemption Reserve Investment A/c | Dr. |
| To Debenture Redemption Reserve A/c | |

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

| | |
|---------------------|-----|
| Profit and Loss A/c | Dr. |
|---------------------|-----|

- To Debenture Redemption Reserve A/c
- (d) For encashment of Debenture Redemption Reserve Investments
- | | |
|--|-----|
| Bank A/c | Dr. |
| To Debenture Redemption Reserve Investment A/c | |
- (e) For the transfer of profit/loss on realisation of Debenture Redemption Reserve Investments
- (i) In case of Profit
- | | |
|---|-----|
| Debenture Redemption Reserve Investment A/c | Dr. |
| To Debenture Redemption Reserve A/c | |
- Or
- (ii) In case of Loss
- | | |
|--|-----|
| Debenture Redemption Reserve A/c | Dr. |
| To Debenture Redemption Reserve Investment A/c | |
- (f) For amount due to debentureholders on redemption
- | | |
|------------------------|-----|
| Debenture A/c | Dr. |
| To Debentureholder A/c | |
- (g) For payment to debentureholders
- | | |
|----------------------|-----|
| Debentureholders A/c | Dr. |
| To Bank A/c | |

3.3 Balance in Debenture Redemption Reserve (DRR)

The balance to the credit of Debenture Redemption Reserve, may in certain circumstances may either be more or less as compared to the amount of debentures which are proposed to be redeemed.

- If it is in excess, the amount is transferred to the Capital Reserve, on the assumption that it is a capital profit received on the appreciation in the value of investments or settlement of liability for a lesser amount than what was usually payable.
- On the other hand, if it is short, the deficit is made up by the transfer from Profit and Loss Account. The balance in the account, equal to the amount of debentures redeemed is subsequently transferred to General Reserve.

Debentures sometimes are redeemable at a premium. In such a case, the appropriation to the Redemption Reserve should be sufficient to pay both the amount of debentures and the premium on redemption. When the company decides to establish the Debenture Redemption Reserve Account at the end of the first year, the amount indicated by the Debenture Redemption Reserves tables is credited to the Debenture Redemption Reserve account and debited to profit and loss account. That shows the intention of

the company to set aside regular sums of money to build up a fund for redeeming debentures. Immediately, the company should also purchase outside investments. The entry for the purpose naturally will be to debit Debenture Redemption Reserve investments and credit bank

In the subsequent years, when interest is received on investments, the bank account will be debited and interest on Debenture Redemption Reserve investments account will be credited. The balance in the latter account will be transferred to the Debenture Redemption Reserve account; the annual instalment will be debited to the profit and loss account and credited to the Debenture Redemption Reserve account. The investments every year will be of an amount equal to the annual instalment plus the interest which may have been received in the year concerned. Thus, the Debenture Redemption Reserve will go on accumulating each year. [Note: Infact, a notional entry of transfer of interest (and also profit or loss on realisation of Debenture Redemption Reserve investments) to the profit and loss account and then again to Debenture Redemption Reserve will meet strict requirement of law and AS 13 as well.]

Note: It may be stated that the Debenture Redemption Reserve is sometimes non-cumulative. In that case, interest received on Debenture Redemption Reserve investments will not be credited to Debenture Redemption Reserve nor it will be invested; the amount of the interest will be credited to the profit and loss account.

In the last year, the Debenture Redemption Reserve investments will be realised; the amount will be debited to the bank account and credited to the Debenture Redemption Reserve investments account. If there is any loss or profit, it will be transferred to the Debenture Redemption Reserve account, with the corresponding entry in the Debenture Redemption Reserve investment account. Thus, the amount available by sale of investments will be utilised to pay off the debentures; debentures account will be debited and the bank account credited. The Debenture Redemption Reserve account will still show a big credit balance almost equal to the amount of the debentures. This will be transferred to the general reserve.

Note: Investments may be realised from time to time and debentures may be purchased either for immediate cancellation or as investment as the company pleases. In that case, also the profit or loss on the sale of investments should be transferred to the Debenture Redemption Reserve investment; the interest saved on such debentures should be debited to the debenture interest account and credited to the interest on Debenture Redemption Reserve account directly.

From the accounting point of view, the purchase of debentures involves two problems first, adjustment of the premium or discount, if any paid on their purchase and second, adjustment of interest payable on them. Where a Debenture Redemption Reserve is

kept the amount of premium or discount is adjusted therein on cancellation so that at the date of redemption, the balance of the Debenture Investments Account, is equal to the Debenture Account. But, if there is none, debenture investments are treated like other investments.

As regards interest, where there is a Debenture Redemption Reserve, the interest on debentures held as an investment made out of the fund is credited to the Debenture Redemption Reserve in exactly the same way as the debentures are outside investments. But where there is no Debenture Redemption Reserve, since the adjustment of interest on debentures held as investments would merely involve crediting and debiting the Profit and Loss Account by the same amount, often it is not made. However, on their purchase or cancellation an amount equal to the nominal value of debentures is transferred to General Reserve from the Profit & Loss Account on the consideration that to such an extent the profits will not be available for distribution.

If the debentures are purchased within the interest period, the price would be inclusive of interest provided these are purchased "cum interest"; but if purchased "ex Interest", the interest to the date of purchase would be payable to the seller in addition. In order to adjust the effect thereof the amount of interest accrued till the date of purchase, if paid, is debited to the Interest Account against which the interest for the whole period will be credited. Thus, in result, a balance in the Account would be left, equal to the interest for the period the debentures were held by the company.

3.4 Investment of Debenture Redemption Reserve (DRR) Amount

Every company required to create DRR should before the 30th day of April of each year, deposit or invest, as the case may be, a sum which should not be less than 15% of the amount of its debentures maturing during the year ending on the 31st day of March next following in any one or more of the following methods, namely:

- (a) in deposits with any scheduled bank, free from charge or lien;
- (b) in unencumbered securities of the Central Government or of any State Government;
- (c) in unencumbered securities mentioned in clauses (a) to (d) and (ee) of Section 20 of the Indian Trusts Act, 1882;
- (d) in unencumbered bonds issued by any other company which is notified under clause (f) of Section 20 of the Indian Trusts Act, 1882;

The amount deposited or invested, as the case may be, above should not be utilised for any purpose other than for the repayment of debentures maturing during the year referred to above, provided that the amount remaining deposited or invested, as the case may be, should not at any time fall below 15% of the amount of debentures maturing during the 31st day of March of that year.

3.5 Adequacy of Debenture Redemption Reserve (DRR)

Ministry of Corporate Affairs has made the following clarification on adequacy of Debenture Redemption Reserve (DRR) vide Circular no. 04/2013 dated 11 February, 2013:-

| | | Adequacy of Debenture Redemption Reserve (DRR) |
|-------|---|---|
| (i) | For debentures issued by All India Financial Institutions (AIFIs) regulated by Reserve Bank of India and Banking Companies for both public as well as privately placed debentures | No DRR is required |
| (ii) | For other Financial Institutions (FIs) | DRR will be as applicable to NBFCs registered with RBI (as per (iii) below) |
| (iii) | For debentures issued by NBFCs registered with RBI and for housing finance companies registered with National Housing Bank | 25% of the value of outstanding debentures issued through public issue. No DRR is required in the case of privately placed debentures. |
| (iv) | For debentures issued by other companies including manufacturing and infrastructure companies | 25% of the value of outstanding debentures issued through public issue. Also 25% DRR is required in the case of privately placed debentures by listed companies. For unlisted companies issuing debentures on private placement basis, the DRR will be 25% of the value of outstanding debentures. |



4. METHODS OF REDEMPTION OF DEBENTURES

Redemption of debentures must be done according to the terms of issue of debentures and any deviation there from will be treated as a default by the company.

Redemption by paying off the debt on account of debentures issued can be done in one of the three methods viz :

4.1 By payment in lumpsum

Under payment in lumpsum method, at maturity or at the expiry of a specified period of debenture the payment of entire debenture is made in one lot or even before the expiry of the specified period.

4.2 By payment in Instalments

Under payment in installments method, the payment of specified portion of debenture is made in installments at specified intervals.

4.3 Purchase of Debentures in Open Market

Debentures sometimes are purchased in open market; where there is a Debenture Redemption Reserve out of the reserve and, if there is none, as a general investment; the Debenture Investment Account or Own Debenture Account is debited.

Suppose a company has issued 8% debentures for ₹ 10,00,000, interest being payable on 31st March and 30th September. The company purchases ₹ 50,000 debentures at ₹ 96 on 1st August 20X1. This means that the company will have to pay ₹ 48,000 as principal plus ₹ 1,333 as interest for 4 months.

| Entry | | ₹ | ₹ |
|---------------------------------------|-----|--------|--------|
| Own Debentures (50,000 x 96/ 100) | Dr. | 48,000 | |
| Interest Account (50,000 x 8% x 4/12) | Dr. | 1,333 | |
| To Bank | | | 49,333 |

It should be noted that even though ₹ 50,000 debentures have been purchased for ₹ 48,000 there is no profit. On purchase of anything, profit does not arise; only on sale, and in this case on cancellation of debentures, profit could arise.

On 30th September, the company will have to pay ₹ 38,000 as interest to outsiders, i.e. 8% on ₹ 9,50,000 for six months. But since the company is keeping the debentures alive, it means, it has saved interest for two months. Therefore, ₹ 667 should be debited to Debentures Interest Account and credited to the Profit and Loss Account. If this entry is passed, it will be noted that the debenture interest account will be debited by the full amount of ₹ 40,000 which is interest for six months on ₹ 10 lakhs. This should be so since in the balance sheet it will be a liability of ₹ 10,00,000. ₹ 50,000 own debentures will be shown on the assets side of the Balance Sheet. However, in the amount column only ₹ 48,000 will be entered.

Suppose out of those debentures ₹ 30,000 is sold at ₹ 98 cum interest on 1st March, 20X2 and the remaining ₹ 20,000 is cancelled on 31st March, 20X2. The journal entries to be passed will be the following:

| | | ₹ | ₹ |
|--|-----|--------|--------|
| <i>1st March, 20X2</i> | Dr. | 29,400 | |
| (1) Bank (30,000 x 98/ 100) | | | 28,400 |
| To Own Debentures A/c | | | 1,000 |
| To Interest A/c (30,000 x 8% x 5/12) | | | |
| (Sale of ₹ 30,000 Debenture @ ₹ 98 cum interest for 5 months credited to Interest A/c, the balance being the own debentures A/c) | | | |
| (2) Profit and Loss A/c | Dr. | 400 | |
| To Own Debentures A/c | | | 400 |
| (The loss on ₹ 30,000 Own Debentures whose purchase price was ₹ 28,800 @ 96) | | | |
| <i>31st March, 20X2</i> | | | |
| 8% Debentures A/c | Dr. | 20,000 | |
| To Own Debentures A/c | | | 19,200 |
| To Capital Reserve A/c | | | 800 |
| (Cancellation of ₹ 20,000 Debentures) | | | |

It should be noted that the profit on cancellation or redemption of debentures should be treated as a capital profit and, therefore, credited to the capital reserve.

ILLUSTRATION 1

On January 1, Rama Ltd., had 500 Debentures of ₹ 100 each outstanding in its books carrying interest at 6% per annum. In accordance with the powers in the deed, the directors acquired debentures from the open market for immediate cancellation as follows:

| | |
|---------|-------------------------------------|
| March 1 | ₹ 5,000 at ₹ 98.00 (cum interest) |
| Aug. 1 | ₹ 10,000 at ₹ 100.25 (cum interest) |
| Dec. 15 | ₹ 2,500 at ₹ 98.50 (ex-interest) |

Debenture interest is payable half-yearly, on 30th June and 31st Dec.

Show ledger accounts of Debentures, Debenture interest and profit or loss on cancellation, ignoring income-tax.

Solution

6% Debentures Account

1st Half Year

| | | ₹ | ₹ | | | ₹ |
|---------|---|-------|--------|--------|----------------|--------|
| Mar. 1 | To Bank-Debentures | | | Jan. 1 | By Balance b/d | 50,000 |
| | Purchased [(5,000 x 98/100) – 50] | 4,850 | | | | |
| | To Profit & Loss on cancellation of debenture A/c (5,000 – 4,850) | 150 | 5,000 | | | |
| June 30 | To Balance c/d | | 45,000 | | | |
| | | | 50,000 | | | 50,000 |

Profit & Loss on Cancellation of Debentures

| | | | | | |
|---------|-------------------------------|-------|--------|----------------------|-------|
| June 30 | To Capital Reserve (transfer) | ₹ 150 | Mar. 1 | By Debenture Account | ₹ 150 |
|---------|-------------------------------|-------|--------|----------------------|-------|

Debenture Interest Account

| | | ₹ | | | ₹ |
|---------|--|-------|---------|----------------------|-------|
| Mar. 1 | To Bank-Interest for 2 months on ₹ 5,000 Debentures @ 6% | 50 | June 30 | By Profit & Loss A/c | 1,400 |
| June 30 | To Debenture-holders (Interest) A/c (45,000 x 6% x 6/12) | 1,350 | | | |
| | | 1,400 | | | 1,400 |

Debenture-holders (Interest) Account

| | | ₹ | | | ₹ |
|---------|---------|-------|---------|--|-------|
| June 30 | To Cash | 1,350 | June 30 | By Debenture interest Account (Interest on ₹ 45,000 @ 6% upto 30th June) | 1,350 |

2nd Half Year

6% Debentures Account

| | | ₹ | ₹ | | | ₹ |
|---------|---|--------------|--------|--------|----------------|--------|
| Aug. 1 | To Bank-Debenture Purchased [(10,000 x 100.25/ 100) – 50] | | 9,975 | July 1 | By Balance b/d | 45,000 |
| | To P & L A/c on Cancellation (10,000 – 9,975) | | 25 | | | |
| Dec. 15 | To Bank-Deb. (2,500 x 98.50/ 100) Purchased | 2,462.50 | | | | |
| | To Profit & Loss on Cancellation of Debentures (2,500 – 2,462.50) | <u>37.50</u> | 2,500 | | | |
| Dec. 31 | To Balance c/d | | 32,500 | | | |
| | | | 45,000 | | | 45,000 |

Profit & Loss on Cancellation of Debentures Account

| | | ₹ | | | ₹ |
|---------|-------------------------------|--------------|---------|------------------|-------|
| Dec. 31 | To Capital Reserve — Transfer | 62.50 | Aug. 1 | By Debenture A/c | 25.00 |
| | | <u>62.50</u> | Dec. 15 | By Debenture A/c | 37.50 |
| | | | | | 62.50 |

Debenture Interest Account

| | | ₹ | | | ₹ |
|---------|---|-----------------|------|------------------|----------|
| Aug. 1 | To Bank - Interest for one month on ₹ 10,000 @ 6% | 50.00 | Dec. | By P & L Account | 1,093.75 |
| Dec. 15 | To Bank (2,500 x 6% x 5.5/ 12) | 68.75 | | | |
| Dec. 31 | To Debenture holders (32,500 x 6% x 6/12) | 975.00 | | | |
| | | <u>1,093.75</u> | | | 1,093.75 |

Debenture-holders (Interest) Account

| | | ₹ | | | ₹ |
|---------|---------|--------|---------|--|--------|
| Dec. 31 | To Bank | 975.00 | Dec. 31 | By Debenture Interest (on ₹ 32,500 @ 6% for 6 months) | 975.00 |

Tutorial Notes :

- (i) Profit or loss on redemption of debenture arises only on sale or cancellation; if debentures are purchased but not cancelled the total amount paid (minus the interest to the date of purchase, if the transaction is cum-interest) should be debited to Own Debentures Account and shown as investment in the Balance Sheet. On cancellation, the account will be credited and Debenture Account debited: the difference between the nominal value of the debentures cancelled and the amount standing to the debit on Own Debentures Account will be profit or loss on redemption of debentures.
- (ii) If debentures are straightway cancelled on purchase, the profit or loss on redemption of debentures will be ascertained by comparing (i) the nominal value of debentures cancelled, and (ii) the price paid less interest to the date of purchase (if the transaction is cum-interest).
- (iii) In case the transaction is ex-interest, the interest to the date of transaction will be paid in addition to the settled price and hence profit on redemption will be nominal value minus the settled price.

ILLUSTRATION 2

The following balances appeared in the books of a company as on December 31, 20X1: 6% Mortgage 10,000 debentures of ₹ 100 each; Debenture Redemption Reserve (for redemption of debentures) ₹ 10, 42,000; Investment ₹ 5,28,000, 4% Government Loan purchased at par and ₹ 5,60,000, 3-1/2% Government paper purchased for ₹ 5,42,000.

The Interest on debentures had been paid up to December 31, 20X1.

On February 28, 20X2, the investments were sold at ₹ 90 and ₹ 87 respectively and the debentures were paid off at 101, together with accrued interest.

Write up the ledger accounts concerned. The Debenture Redemption Reserve is non cumulative.

Solution

6% Mortgage Debentures Account

| 20X2 | | ₹ | 20X2 | | ₹ |
|---------|--------------------------|-----------|--------|----------------|-----------|
| Feb. 28 | To Debenture-holders A/c | 10,00,000 | Jan. 1 | By Balance b/d | 10,00,000 |

Premium on Redemption of Debentures Account

| 20X2 | | ₹ | 20X2 | | ₹ |
|---------|--------------------------|--------|---------|---------------|--------|
| Feb. 28 | To Debenture-holders A/c | 10,000 | Feb. 28 | By D.R.R. A/c | 10,000 |

Debentures Redemption Reserve Investment Account

| 20X2 | | ₹ | 20X2 | | ₹ |
|--------|--------------------------------------|-----------|---------|--|-----------|
| Jan. 1 | To Balance b/d (5,28,000 + 5,42,000) | 10,70,000 | Feb. 28 | By Bank ₹ 5,28,000 Govt. Loan @ ₹ 90 | 4,75,200 |
| | | | | By Bank ₹ 5,60,000 Govt. Paper @ ₹ 87 | 4,87,200 |
| | | | | By D.R.R. (Loss) | 1,07,600 |
| | | 10,70,000 | | | 10,70,000 |

Debenture Interest Account

| 20X2 | | ₹ | 20X2 | | ₹ |
|---------|------------------------------------|--------|---------|----------------------|--------|
| Feb. 28 | To Cash (10,000 x 100 x 6% x 2/12) | 10,000 | Feb. 28 | By Profit & Loss A/c | 10,000 |

Cash Account

| 20X2 | | ₹ | 20X2 | | ₹ |
|------|---|----------|---------|-------------------------------------|-----------|
| Feb. | To Balance b/d | ? | Feb. 28 | By Debenture-holders (10,000 x 101) | 10,10,000 |
| | To Debentures Redemption Reserve investment A/c (4,75,200 + 4,87,200) | 9,62,400 | | By Deb. Interest A/c | 10,000 |
| | | | | By Balance c/d | ? |

Debenture Redemption Reserve Account

| 20X2 | | ₹ | 20X2 | | ₹ |
|------|--|-----------|--------|-------------------------|-----------|
| Feb. | To D.R.R. Investment Account (Loss) | 1,07,600 | Jan. 1 | By Balance b/d | 10,42,000 |
| | To Premium on Redemption of Debentures A/c | 10,000 | | By Profit & Loss (b.f.) | 75,600 |
| | To General Reserve | 10,00,000 | | | |
| | | 11,17,600 | | | 11,17,600 |

ILLUSTRATION 3

Sencom Limited issued ₹ 1,50,000 5% Debentures on which interest is payable half yearly on 31st March and 30th September. The company has power to purchase debentures in the open market for cancellation thereof. The following purchases were made during the year ended 31st December, 20X1 and the cancellation were made on the following 31st March :

1st March ₹ 25,000 nominal value purchased for ₹ 24,725 ex-interest.

1st September ₹ 20,000 nominal value purchased for ₹ 20,125 cum-interest.

You are required to draw up the following accounts up to the date of cancellation :

- (i) *Debentures Account;*
- (ii) *Own Debenture Investment Account; and*
- (iii) *Debenture Interest Account.*

Ignore taxation and make calculations to the nearest rupee.

Solution

Sencom Limited Debenture Account

| 20X1 | | ₹ | 20X1 | | ₹ |
|---------|----------------------|-----------------|----------|----------------|-----------------|
| Dec. 31 | To Balance c/d | <u>1,50,000</u> | Jan. 1 | By Balance b/d | <u>1,50,000</u> |
| 20X2 | | | 20X2 | | |
| Mar. 31 | To Own Debenture A/c | 45,000 | Jan. 1 | By Balance b/d | 1,50,000 |
| | To Balance c/d | 1,05,000 | | | |
| | | 1,50,000 | | | 1,50,000 |
| | | | April. 1 | By Balance b/d | 1,05,000 |

Own Debenture Investment Account

| 20X1 | | Nominal Cost ₹ | Interest ₹ | Cost ₹ | 20X1 | | Nominal Cost ₹ | Interest ₹ | Cost ₹ |
|---------|--|----------------------|------------------|---------------------|-------------------|------------------------------|----------------------|---------------|-----------|
| Mar. 1 | To Bank | 25,000 | 521 ¹ | 24,725 | Mar. 31 | By Debenture Interest A/c | — | 625 | — |
| Sep. 1 | To Bank | 20,000 | 417 ² | 19,708 ³ | Sep. 30 | By Debenture Interest A/c | — | 1,125 | — |
| Dec. 31 | To P & L A/c (b.f.) | | 1,375 | | Dec. 31 | By Debenture Interest A/c | — | 563 | — |
| | | | | | By Balance c/d | 45,000 | — | — | 44,433 |
| | | 45,000 | 2,313 | 44,433 | | 45,000 | 2,313 | — | 44,433 |
| 20X2 | | | | | 20X2 | | | | |
| Jan. 1 | To Balance b/d | 45,000 | | 44,433 | Mar. 31 | By Debenture Interest A/c | — | 563 | — |
| Mar. 31 | To Capital Reserve (Profit on cancellation) (b.f.) | — | — | 567 | By 5% Deb. A/c | 45,000 | — | — | 45,000 |
| | To P & L A/c | — | 563 | — | | | | | |
| | | 45,000 | 563 | 45,000 | | 45,000 | 563 | — | 45,000 |

¹ $25,000 \times 5\% \times 5/12$

² $20,000 \times 5\% \times 5/12$

³ $20125 - 417$

Debenture Interest Account

| 20X1 | | ₹ | 20X1 | | ₹ |
|---------|---|-------|---------|---|-------|
| Mar. 31 | To Bank (on ₹ 1,25,000 @ 5% for 6 months) | 3,125 | Jan. 1 | By Accrued Interest (on ₹ 1,50,000 @ 5% for 3 months) | 1,875 |
| | To Interest on own Debentures (25,000 x 5% x 6/ 12) | 625 | Dec. 31 | By P & L A/c | 7,500 |
| Sep. 30 | To Bank (on ₹ 1,05,000 @ 5% for 6 months) | 2,625 | | | |
| | To Interest on own Debentures (45,000 x 5% x 6/12) | 1,125 | | | |

| | | | | | |
|---------|---|-------|---------|---------------------|-------|
| Dec. 31 | To Interest accrued (on ₹ 1,05,000 for 3 months @ 5%) | 1,312 | | | |
| | To Interest on own debentures (on ₹ 45,000 for 3 months @ 5%) | 563 | | | |
| | | 9,375 | | | 9,375 |
| 20X2 | | | 20X2 | | |
| Mar. 31 | To Bank (on ₹ 1,05,000 for 6 months @ 5%) | 2,625 | Jan. 1 | By Interest Accrued | 1,312 |
| | To Interest on own debentures (on ₹ 45,000 for 3 months) | 563 | Mar. 31 | By P & L A/c | 1,876 |
| | | 3,188 | | | 3,188 |

ILLUSTRATION 4

MM Ltd. had the following among their ledger opening balances on January 1, 20X1:

| | |
|--|-----------|
| | ₹ |
| 11% Debentures A/c (2000 issue) | 50,00,000 |
| Debenture Redemption Reserve A/c | 45,00,000 |
| 13.5% Debentures in XX Ltd. A/c (Face Value ₹ 20,00,000) | 19,50,000 |
| Own Debentures A/c (Face value ₹ 20,00,000) | 18,50,000 |

As 31st December, 20X1 was the date for redemption of the 2000 debentures, the company started buying own debentures and made the following purchases in the open market :

1-2-20X1 2,000 debentures at ₹ 98 cum-interest.

1-6-20X1 2,000 debentures at ₹ 99 ex-interest.

Half yearly interest is due on the debentures on the 30th June and 31st December in the case of both the companies.

On 31st December, 20X1, the debentures in XX Ltd. were sold for ₹ 95 each ex-interest. On that date, the outstanding debentures of MM Ltd. were redeemed by payment and by cancellation.

Show the entries in the following ledger accounts of MM Ltd. during 20X1:

- Debenture Redemption Reserve A/c
- Own Debentures A/c

The face value of a debenture was ₹ 100 (Round off calculations to the nearest rupee.)

Solution

(a) Debenture Redemption Reserve Account

| 20X1 | | ₹ | 20X1 | | ₹ |
|---------|--|-----------|---------|------------------------------------|-----------|
| Dec. 31 | To 13.5% Deb. in XX Ltd. (Loss on sale of investment) | 50,000 | Jan. 1 | By Balance b/d | 45,00,000 |
| | To General Reserve (transfer) (b.f.) | 49,73,000 | Dec. 31 | By 13.5% Deb. in XX Ltd. | 2,70,000 |
| | | 50,23,000 | | By Own Deb. A/c (Int. on own Deb.) | 2,53,000 |
| | | | | | 50,23,000 |

11% Debentures Account

| 20X1 | | ₹ | 20X1 | | ₹ |
|---------|-----------------------|-----------|--------|----------------|-----------|
| Dec. 31 | To Own Debentures A/c | 24,00,000 | Jan. 1 | By Balance b/d | 50,00,000 |
| | To Bank | 26,00,000 | | | |
| | | 50,00,000 | | | 50,00,000 |

(b) Own Debentures Account

| | | Nominal | Int. | Amt. | | Nominal | Int. | Amt. |
|---------|---|-----------|--------------------|-----------------------|---------|-----------------------------------|-----------------------|-----------|
| 20X1 | | ₹ | ₹ | ₹ | 20X1 | ₹ | ₹ | ₹ |
| Jan. 1 | To Balance b/d | 20,00,000 | - | 18,50,000 | June 30 | By Debenture | | |
| Feb. 1 | To Bank | 2,00,000 | 1,833 ¹ | 1,94,167 ² | | Int. A/c | 1,32,000 ³ | |
| June 1 | To Bank | 2,00,000 | 9,167 ⁴ | 1,98,000 ⁵ | Dec. 31 | By Debenture | | |
| Dec. 31 | To Capital Res. (profit on cancellation) (b.f.) | | | 1,57,833 | | Int. A/c | 1,32,000 ⁶ | |
| | To Deb. Redemption Reserve (b.f.) | | 2,53,000 | | | By 11% Deb Account (cancellation) | 24,00,000 | 24,00,000 |
| | | 24,00,000 | 2,64,000 | 24,00,000 | | | | |

¹2,00,000 x 11% x 1/12²2,00,000 x 11% x 5/12³(2,000 x 98) – 1,833⁵2,000 x 99³24,00,000 x 11% x 6/12⁶24,00,000 x 11% x 6/12

Working Note :

13.5% Debentures in XX Ltd.

| | | Interest | Amount | | | Interest | Amount |
|---------|---|----------|-----------|---------|--|----------|-----------|
| 20×1 | | ₹ | ₹ | 20×1 | | ₹ | ₹ |
| Jan. 1 | To Balance b/d (20,00,000) | | 19,50,000 | June 30 | By Bank (20,00,000 × 13.5% × 6/12) | 1,35,000 | |
| | | | | Dec. 31 | By Bank (20,00,000 × 13.5% × 6/12) | 1,35,000 | |
| Dec. 31 | To Debenture | | | | By Bank (20,00,000 × 95/ 100) | | 19,00,000 |
| | Redemption. Reserve (1,35,000 + 1,35,000) | 2,70,000 | | | By Debenture Redemption | | |
| | | | | | Reserve (Loss on sale) (19,50,000 – 19,00,000) | | 50,000 |
| | | 2,70,000 | 19,50,000 | | | 2,70,000 | 19,50,000 |

ILLUSTRATION 5

- (i) Swati Associates Ltd. has issued 10,000 12% Debentures of ₹ 100 each on 1-1-20X1. These debentures are redeemable after 3 years at a premium of ₹ 5 per debenture. Interest is payable annually.
- (ii) On October 1, 20X2, it buys 1,500 debentures from the market at ₹ 98 per debenture. These are sold away on June 30, 20X3 at ₹ 105 per debenture.
- (iii) On January 1, 20X3 it buys 1,000 debentures at ₹ 104 per debenture from the open market. These are cancelled on April 1, 20X3.
- (iv) On October 1, 20X3 it buys 2,000 debentures at ₹ 106 per debenture from the open market. These debentures along with other debentures are redeemed on 31st December, 20X3.

Prepare the relevant Ledger Accounts showing the above transactions. Workings should form part of your answer. Also show the extracts of statement of profit & loss own Debenture Account for the year 20X1, 20X2, 20X3.

Solution

Own Debentures Account

| 20×2 | | Interest ₹ | Amount ₹ | 20 × 2 | | Interest ₹ | Amount ₹ |
|---------|--|---------------|-------------|---------|--|---------------|-------------|
| Oct. 1 | To Bank (₹ 1,50,000) (refer W.N. (i)) | 13,500 | 1,47,000 | Dec. 31 | By Debenture Int. A/c (refer W.N. (ii)) | 18,000 | 1,47,000 |
| | To Profit & Loss A/c (b.f.) | 4,500 | | | By Balance c/d | | |
| | | 18,000 | 1,47,000 | | | 18,000 | 1,47,000 |
| 20X3 | | | | 20X3 | | | |
| Jan. 1 | To Balance b/d | | 1,47,000 | April 1 | By Debenture Int. A/c (W.N. (ii)) | 3,000 | |
| Jan. 1 | To Bank | | 1,04,000 | | By 12% Deb. A/c | | 1,00,000 |
| Apl. 1 | To Profit & Loss A/c | 3,000 | | | By Profit & Loss A/c (1,04,000 – 1,00,000) | | 4,000 |
| June 30 | To Profit & Loss A/c | 9,000 | 10,500* | June 30 | By Bank | 9,000 | 1,57,500** |
| Oct. 1 | To Bank (₹ 2,00,000) (W.N. (i)) | 18,000 | 2,12,000 | Dec. 31 | By Deb. Int. A/c (W.N. (ii)) | 24,000 | |
| Dec. 31 | To Profit & Loss A/c | 6,000 | | | By 12% Deb. A/c (cancelled) | | 2,00,000 |
| | | | | | By Profit & Loss A/c (2,12,000 – 2,00,000) | | 12,000 |
| | | 36,000 | 4,73,500 | | | 36,000 | 4,73,500 |

*1,57,500 – 1,47,000

**1,500 x 105

Note :

It has been assumed that all transactions are ex-interest. The amount of such interest has been calculated from the previous 1st January to the date of transaction since the interest is payable annually.

Debenture Interest Account

| 20X1 | | ₹ | 20X1 | | ₹ |
|---------|----------------------------------|----------|---------|-----------------------------|----------|
| Dec. 31 | To Bank A/c (10,000 x 100 x 12%) | 1,20,000 | Dec. 31 | By Profit & Loss A/c | 1,20,000 |
| 20X2 | To Bank A/c | 1,02,000 | 20X2 | | |
| Dec. 31 | To Int. on Own Deb. A/c | 18,000 | Dec. 31 | By Profit & Loss A/c | 1,20,000 |
| | | 1,20,000 | | | 1,20,000 |
| 20X3 | | 3,000 | 20X3 | | |
| Apr. 1 | To Int. on Own Deb. A/c | 24,000 | Dec. 31 | By Profit & Loss A/c (b.f.) | 1,11,000 |
| Dec. 31 | To Int. on Own Deb. A/c | | | | |
| | To Bank A/c | 84,000 | | | |
| | (12% on ₹ 7,00,000)* | | | | |
| | | 1,11,000 | | | 1,11,000 |

* $(10,000 - 1,000 - 2,000) \times 100$

Statement of Profit & Loss (Extracts) for the year 20X1

| Particulars | Notes | Amount |
|------------------------------|-------|----------|
| Expenses | | |
| Finance costs | XX | 1,20,000 |
| Total expenses | | |
| Notes to accounts | | |
| xx. Finance costs | | |
| Interest on debenture | | 1,20,000 |

Statement of Profit & Loss (Extracts) for the year 20X2

| Particulars | Notes | Amount |
|--|-------|----------|
| Other Income | XX | 4,500 |
| Total Revenue | | |
| Expenses | | |
| Finance costs | XXX | 1,20,000 |
| Total expenses | | |
| Notes to accounts | | |
| xx. Other Income | | |
| Int. on Own Deb. A/c (18,000 - 13,500) | | 4,500 |
| xxx. Finance costs | | |
| Interest on debenture | | 1,20,000 |

Statement of Profit & Loss (Extracts) for the year 20X3

| Particulars | Notes | Amount |
|---|-------|---------------|
| Other Income | XX | 28,500 |
| Total Revenue | | |
| Expenses | | |
| Finance costs | XXX | 51,000 |
| Total expenses | | |
| Notes to accounts | | |
| xx. Other Income | | |
| Int. on Own Deb. A/c (36,000 - 18,000) | | 18,000 |
| Profit on cancellation of debentures | | 10,500 |
| Total | | 28,500 |
| xxx. Finance costs | | |
| Loss on cancellation of debentures (4,000 + 12,000) | | 16,000 |
| Premium on redemption of debentures (₹ 7,00,000 @ 5%) | | 35,000 |
| Total | | 51,000 |

Premium on Redemption of Debentures A/c

| 20X1 | | ₹ | 20X1 | | ₹ |
|---------|---------|--------|---------|----------------------|--------|
| Dec. 31 | To Bank | 35,000 | Dec. 31 | By Profit & Loss A/c | 35,000 |

12% Debentures Account

| 20X1 | | ₹ | 20X1 | | ₹ |
|--------------|-----------------|-----------|-------------|----------------|-----------|
| Dec. 31 20X2 | To Balance c/d | 10,00,000 | Jan. 1 20X2 | By Bank | 10,00,000 |
| Dec. 31 20X3 | To Balance c/d | 10,00,000 | Jan. 1 20X3 | By Balance b/d | 10,00,000 |
| Apl. 1 | To Own Deb. A/c | 1,00,000 | Jan. 1 | By Balance b/d | 10,00,000 |
| Dec. 31 | To Own Deb. A/c | 2,00,000 | | | |
| | To Bank | 7,00,000 | | | |
| | | 10,00,000 | | | 10,00,000 |

Working Notes

(i) Interest paid on purchase of own debentures:

| Date | Nominal Amount | Period | Rate | Interest |
|-------------|----------------|----------|------|----------|
| 20X2 Oct. 1 | ₹ 1,50,000 | 9 months | 12% | 13,500 |
| 20X3 Oct. 1 | ₹ 2,00,000 | 9 months | 12% | 18,000 |

(ii) Interest credited to Interest on Own Debenture A/c

| Date | Nominal Amount | Period | Rate | Interest |
|--------------|----------------|-----------|------|----------|
| 20X2 Dec. 31 | ₹ 1,50,000 | 12 months | 12% | 18,000 |
| 20X3 April 1 | ₹ 1,00,000 | 3 months | 12% | 3,000 |
| 20X3 June 30 | ₹ 1,50,000 | 6 months | 12% | 9,000 |
| 20X3 Dec. 31 | ₹ 2,00,000 | 12 months | 12% | 24,000 |

(iii) Profit/Loss on cancellation/sales is difference between cost or nominal value and sales price.

ILLUSTRATION 6

The following balances appeared in the books of Paradise Ltd on 1-4-20X1:

- (i) 12 % Debentures ₹ 7,50,000
- (ii) Balance of DRR ₹ 6,00,000
- (iii) DRR Investment 6,00,000 represented by 10% ₹ 6,50,000 secured bonds of government of India.

Annual contribution to the DRR was ₹ 1,20,000 made on 31st March each year. On 31-3-20X2, balance at bank was ₹ 3,00,000 before receipt of interest. The company sold the investment at 90% of cost, for redemption of debentures at a premium of 10% on the above date.

You are required to prepare the following accounts for the year ended 31st march, 20X2:

- (1) Debentures Account
- (2) DRR Account
- (3) DRR Investment Account
- (4) Bank Account
- (5) Debenture Holders Account.

Solution**1. 12% Debentures Account**

| Date | Particulars | ₹ | Date | Particulars | ₹ |
|------------------|--------------------------|----------|-----------------|----------------|----------|
| 31st March, 20X2 | To Debenture holders A/c | 7,50,000 | 1st April, 20X1 | By Balance b/d | 7,50,000 |
| | | 7,50,000 | | | 7,50,000 |

2. DRR Account

| Date | Particulars | ₹ | Date | Particulars | ₹ |
|------------------|--|----------|------------------|--|----------|
| 31st March, 20X2 | To 10% Secured Bond A/c (loss) (6,00,000 – 5,85,000) | 15,000 | 1st April, 20X1 | By Balance b/d | 6,00,000 |
| 31st March, 20X2 | To General reserve A/c (Bal.fig.) | 7,70,000 | 31st March, 20X2 | By Profit and loss A/c | 1,20,000 |
| | | | | By Interest on DRR A/c [(Interest on 10% stock (₹ 6,50,000 x 10%)] | 65,000 |
| | | 7,85,000 | | | 7,85,000 |

3. 10% Secured Bonds of Govt. (DRR Investment) A/c

| | | ₹ | | | ₹ |
|-----------------|----------------|----------|------------------|--|----------|
| 1st April, 20X1 | To Balance b/d | 6,00,000 | 31st March, 20X2 | By Bank A/c (6,50,000 x 90%) = 5,85,000) | 5,85,000 |
| | | | | By DDR A/c | 15,000 |
| | | 6,00,000 | | | 6,00,000 |

4. Bank A/c

| | | ₹ | | | ₹ |
|------------------|---------------------------------|----------|------------------|------------------|----------|
| 31st March, 20X2 | To Balance b/d | 3,00,000 | 31st March, 20X2 | By 12% Debenture | 8,25,000 |
| | To Interest (6,50,000 x 10%) | 65,000 | | By Balance c/d | 1,25,000 |
| | To DRR Investment A/c | 5,85,000 | | | |
| | | 9,50,000 | | | 9,50,000 |

5. Debenture holders A/c

| | | ₹ | | | ₹ |
|------------------|-------------|----------|------------------|--|----------|
| 31st March, 20X2 | To Bank A/c | 8,25,000 | 31st March, 20X2 | By 12% Debentures | 7,50,000 |
| | | | | By Premium on redemption of debentures @ 10% | 75,000 |
| | | 8,25,000 | | | 8,25,000 |

ILLUSTRATION 7

The Summary Balance Sheet of BEE Co. Ltd. on 31st March, 20X1 read as under :

| Liabilities | ₹ | Assets | ₹ |
|--|----------|-------------------|----------|
| Share Capital : | | Freehold property | 1,15,000 |
| Authorised: | | Stock | 1,35,000 |
| 30,000 Equity Shares of ₹ 10 each | 3,00,000 | Trade receivables | 75,000 |
| Issued and Subscribed: | | Cash | 30,000 |
| 20,000 Equity Shares of ₹ 10 each fully paid | 2,00,000 | Balance at Bank | 2,00,000 |
| Profit and Loss Account | 1,20,000 | | |
| 12% Debentures | 1,20,000 | | |
| Trade payables | 1,15,000 | | |
| | 5,55,500 | | 5,55,000 |

At the Annual General Meeting it was resolved :

- To give existing shareholders the option to purchase one ₹ 10 share at ₹ 15 for every four shares (held prior to the bonus distribution), this option being taken up by all shareholders.
- To issue one bonus share for every four shares held.

(c) To repay the debentures at a premium of 3%.

Give the necessary journal entries and the company's Balance Sheet after these transactions are completed.

Solution

Journal of BEE Co. Ltd.

| | | Dr. ₹ | Cr. ₹ |
|--|-----|----------|----------|
| Bank A/c | Dr. | 75,000 | |
| To Equity Shareholders A/c | | | 75,000 |
| (Application money received on 5,000 shares @ ₹ 15 per share to be issued as rights shares in the ratio of 1:4) | | | |
| Equity Shareholders A/c | Dr. | 75,000 | |
| To Equity Share Capital A/c | | | 50,000 |
| To Securities Premium A/c | | | 25,000 |
| (Share application money on 5,000 shares @ ₹ 10 per share transferred to Share Capital Account, and ₹ 5 per share to Securities Premium Account vide Board's Resolution dated....) | | | |
| Securities Premium A/c | Dr. | 25,000 | |
| Profit & Loss A/c | Dr. | 25,000 | |
| To Bonus to Shareholders A/c | | | 50,000 |
| (Amount transferred for issue of bonus shares to existing shareholders in the ratio of 1:4 vide General Body's resolution dated...) (refer note below) | | | |
| Bonus to Shareholders A/c | Dr. | 50,000 | |
| To Equity Share Capital A/c | | | 50,000 |
| (Issue of bonus shares in the ratio of 1 for 4 vide Board's resolution dated....) | | | |
| 12% Debentures A/c | Dr. | 1,20,000 | |
| Premium Payable on Redemption A/c @ 3% | Dr. | 3,600 | |
| To Debenture holders A/c | | | 1,23,600 |
| (Amount payable to debentures holders) | | | |
| Profit & Loss A/c | Dr. | 3,600 | |
| To Premium Payable on Redemption A/c | | | 3,600 |
| (Premium payable on redemption charged to Profit & Loss A/c) | | | |

| | | | |
|--|-----|----------|----------|
| Debenture holders A/c | Dr. | 1,23,600 | |
| To Bank A/c | | | 1,23,600 |
| (Amount paid to debenture holders on redemption) | | | |

Note :

The number of bonus shares issued has been calculated on the basis of issued capital before rights issued i.e., 20,000 shares (and not 25,000 shares after rights issue).

Balance Sheet of BEE Co. Ltd. as on..... (after completion of transactions)

| Particulars | Note No | ₹ |
|----------------------------------|----------------|-----------------|
| I. Equity and liabilities | | |
| (1) Shareholder's Funds | | |
| (a) Share Capital | 1 | 3,00,000 |
| (b) Reserves and Surplus | 2 | 91,400 |
| (2) Current Liabilities | | |
| (a) Trade payables | | 1,15,000 |
| Total | | 5,06,400 |
| II. Assets | | |
| (1) Non-current assets | | |
| (a) Fixed assets | | |
| (i) Tangible Assets | 3 | 1,15,000 |
| (2) Current assets | | |
| (a) Inventories | | 1,35,000 |
| (b) Trade receivables | | 75,000 |
| (c) Cash and bank balances | 4 | 1,81,400 |
| Total | | 5,06,400 |

Notes to Accounts

| | | ₹ |
|----|---|--------------------------------|
| 1. | Share Capital 30,000 shares of ₹ 10 each fully paid (5,000 shares of ₹ 10 each, fully paid issued as bonus shares out of securities premium and P&L Account) | 3,00,000 |
| 2. | Reserve and Surplus Profit & Loss Account (1,20,000 – 3,600) Less: Utilisation for issue of bonus shares | 1,16,400 (25,000) 91,400 |

| | | | |
|----|---|---------------|----------|
| 3. | Tangible assets | | |
| | Freehold Property | | 1,15,000 |
| 4. | Cash and bank balances | | |
| | Cash at Bank (2,00,000 + 75,000 – 1,23,600) | 1,51,400 | |
| | Cash in Hand | <u>30,000</u> | 1,81,400 |

ILLUSTRATION 8

The summarised Balance Sheet of Convertible Limited, as on 30th June, 20X1, stood as follows:

| Liabilities | ₹ |
|---|--------------------|
| Share Capital : 5,00,000 equity shares of ₹ 10 each fully paid | 50,00,000 |
| General Reserve | 75,00,000 |
| Debenture Redemption Reserve | 50,00,000 |
| 13.5% Convertible Debentures, 1,00,000 Debentures of ₹ 100 each | 1,00,00,000 |
| Other loans | 50,00,000 |
| Current Liabilities and Provisions | <u>1,25,00,000</u> |
| | <u>4,50,00,000</u> |
| Assets : | |
| Fixed Assets (at cost less depreciation) | 1,60,00,000 |
| Debenture Redemption Reserve Investments | 40,00,000 |
| Cash and bank Balances | 50,00,000 |
| Other Current Assets | <u>2,00,00,000</u> |
| | <u>4,50,00,000</u> |

The debentures are due for redemption on 1st July, 20X1. The terms of issue of debentures provided that they were redeemable at a premium 5% and also conferred option to the debenture holders to convert 20% of their holding into equity shares at a predetermined price of ₹ 15.75 per share and the payment in cash.

Assuming that :

- (i) except for 100 debenture holders holding totally 25,000 debentures, the rest of them exercised the option for maximum conversion.
- (ii) the investments realise ₹ 44 lakhs on sale; and
- (iii) all the transactions are put through, without any lag, on 1st July, 20X1.

Redraft the balance sheet of the company as on 1st July, 20X1 after giving effect to the redemption. Show your calculations in respect of the number of equity shares to be allotted and the cash payment necessary.

Solution

Convertible Limited
Balance Sheet as on July 1, 20X1

| <i>Particulars</i> | <i>Note No</i> | <i>Figures as at the end of current reporting period</i> |
|--|----------------|--|
| | | ₹ |
| I. Equity and Liabilities | | |
| (1) Shareholder's Funds | | |
| (a) Share Capital | 1 | 60,00,000 |
| (b) Reserves and Surplus | 2 | 1,29,75,000 |
| (2) Non-Current Liabilities | | |
| (a) Long-term borrowings - Unsecured Loans | | 50,00,000 |
| (3) Current Liabilities | | |
| (a) Short-term provisions | | 1,25,00,000 |
| Total | | 3,64,75,000 |
| II. Assets | | |
| (1) Non-current assets | | |
| (a) Fixed assets | | |
| (i) Tangible assets | | 1,60,00,000 |
| (2) Current assets | | |
| (a) Cash and bank balances | | 4,75,000 |
| (b) Other current assets | | 2,00,00,000 |
| Total | | 3,64,75,000 |

Notes to Accounts

| | | | ₹ |
|----|---|--------------------|-----------|
| 1. | Share Capital 6,00,000 Equity Shares (5,00,000 + 1,00,000) of ₹ 10 each | | 60,00,000 |
| 2. | Reserves and Surplus | | |
| | General Reserve | 75,00,000 | |
| | Add : Debenture Redemption Reserve transfer | 50,00,000 | |
| | | 1,25,00,000 | |
| | Add: Profit on sale of investments (44,00,000 – 40,00,000) | 4,00,000 | |

| | | |
|--|-------------|--------------------|
| | 1,29,00,000 | |
| Less : Premium on redemption of debentures | (5,00,000) | 1,24,00,000 |
| Securities Premium Account (1,00,000 x 5.75) | | 5,75,000 |
| | | <u>1,29,75,000</u> |

Working Notes

- (i) Calculation of number of shares to be allotted :

| | |
|---|-----------------|
| Total number of debentures | 1,00,000 |
| Less : Number of debentures not opting for conversion | <u>(25,000)</u> |
| | <u>75,000</u> |
| 20% of 75,000 | <u>15,000</u> |
| Redemption value of 15,000 debentures (15,000 x 105) | ₹ 15,75,000 |

Number of Equity Shares to be allotted :

$$= \frac{15,75,000}{15.75} = 1,00,000 \text{ shares of ₹ 10 each.}$$

- (ii) Calculation of cash to be paid : ₹

| | |
|--|-----------------|
| Number of debentures | 1,00,000 |
| Less : number of debentures to be converted into equity shares | <u>(15,000)</u> |
| | <u>85,000</u> |
| Redemption value of 85,000 debentures (85,000 × ₹ 105) | ₹ 89,25,000 |

- (iii) Cash and Bank Balance :

| | |
|---------------------------------------|--------------------|
| Balance before redemption | 50,00,000 |
| Add : Proceeds of investments sold | <u>44,00,000</u> |
| | 94,00,000 |
| Less : Cash paid to debenture holders | <u>(89,25,000)</u> |
| | <u>4,75,000</u> |

Note: The premium on redemption of debentures can also be adjusted against Securities Premium Account.



SUMMARY

- ◆ Debenture creates a charge against some or all the assets of the company.
- ◆ Charge may be fixed or floating, depends upon the condition of issue.
- ◆ Debentures may be redeemed after a fixed number of years or after a certain period has elapsed.
- ◆ For redemption of Debentures a company should maintain Debenture Redemption Reserve
- ◆ Methods of Redemption: Lumpsum payment; in instalments and purchase of debentures in open market.



TEST YOUR KNOWLEDGE

MCQs

1. Which of the following statements is true?
 - (a) A debenture holder is an owner of the company
 - (b) A debenture holder can get his money back only on the liquidation of the company
 - (c) A debenture issued at a discount can be redeemed at a premium
2. Which of the following statements is false?
 - (a) Debentures can be redeemed by payment in lump sum at the end of a specified period.
 - (b) Debentures cannot be redeemed during the life time of the company.
 - (c) Debentures can be redeemed by payments in annual installments.
3. For debentures issued by other companies including manufacturing and infrastructure companies, debentures redemption reserve will be considered adequate if
 - (a) 20% of the value of debentures issued through public issue.
 - (b) 25% of the value of debentures issued through public issue.
 - (c) 30% of the value of debentures issued through public issue.

Theoretical Questions

- Q1. What is meant by redemption of debentures?
Q2. Write short note on Debenture Redemption Reserve.

Practical Questions

Question 1

A Company had issued 20,000, 13% Convertible debentures of ₹ 100 each on 1st April, 20X1. The debentures are due for redemption on 1st July, 20X2. The terms of issue of debentures provided that they were redeemable at a premium of 5% and also conferred option to the debenture holders to convert 20% of their holding into equity shares (Nominal value ₹ 10) at a price of ₹ 15 per share. Debenture holders holding 2,500 debentures did not exercise the option. Calculate the number of equity shares to be allotted to the Debenture holders exercising the option to the maximum.

Question 2

Libra Limited recently made a public issue in respect of which the following information is available:

- No. of partly convertible debentures issued- 2,00,000; face value and issue price ₹ 100 per debenture.
- Convertible portion per debenture- 60%, date of conversion- on expiry of 6 months from the date of closing of issue.
- Date of closure of subscription lists- 1.5.20X1, date of allotment- 1.6.20X1, rate of interest on debenture- 15% payable from the date of allotment, value of equity share for the purpose of conversion- ₹ 60 (Face Value ₹ 10).
- Underwriting Commission- 2%.
- No. of debentures applied for- 1,50,000.
- Interest payable on debentures half-yearly on 30th September and 31st March.

Write relevant journal entries for all transactions arising out of the above during the year ended 31st March, 20X2 (including cash and bank entries).

Question 3

On 1st April, 20X1, in MK Ltd.'s ledger 9% debentures appeared with a opening balance of ₹ 50,00,000 divided into 50,000 fully paid debentures of ₹ 100 each issued at par.

Interest on debentures was paid half-yearly on 30th of September and 31st March every year.

On 31.5.20X1, the company purchased 8,000 debentures of its own @ ₹ 98 (ex-interest) per debenture.

On 31.12.20X1 it cancelled 5,000 debentures out of 8,000 debentures acquired on 31.5.20X1.

On 31.1.20X2 it resold 2,000 of its own debentures in the market @ ₹ 101 (ex-interest) per debenture.

You are required to prepare:

- (i) Own debentures account;
- (ii) Interest on debentures account; and
- (iii) Interest on own debentures account.

Question 4

A company had 16,000, 12% debentures of ₹ 100 each outstanding as on 1st April, 20X1, redeemable on 31st March, 20X2. On that day DRR was ₹ 14,98,000 represented by 2,000 own debentures purchased at the average price of ₹ 99 and 9% stocks face value of ₹ 13,20,000. The annual instalment was ₹ 56,800.

On 31st March, 20X2 the investments were realised at ₹ 98 and the debentures were redeemed. You are required to write up the following accounts for the year ending 31st March 20X2:

- (1) 12% Debentures account
- (2) Debenture redemption reserve account.

ANSWERS/ HINTS

MCQs

1. (c)
2. (b)
3. (b)

Theoretical Questions

1. Debentures are usually redeemable, but a company may also issue irredeemable debentures. Redeemable debentures may be **redeemed** after a **fixed number** of years or after a certain number of years has elapsed since their issue or on giving a **specified notice**, or by **annual drawing**.

2. A company issuing debentures is required to create a debenture redemption reserve account out of the profits available for distribution of dividend and amounts credited to such account cannot be utilised by the company except for redemption of debentures. Such an arrangement would ensure that the company will have sufficient liquid funds for the redemption of debentures at the time they should fall due for payment. For details, refer para 3.

Practical Questions

Answer 1

Calculation of number of equity shares to be allotted

| | <i>Number of debentures</i> |
|--|-----------------------------|
| Total number of debentures | 20,000 |
| Less: Debenture holders not opted for conversion | (2,500) |
| Debenture holders opted for conversion | 17,500 |
| Option for conversion | 20% |
| Number of debentures to be converted (20% of 17,500) | 3,500 |

Redemption value of 3,500 debentures at a premium of 5%

[3,500 x (100+5)] ₹ 3,67,500

Equity shares of ₹ 10 each issued on conversion [₹ 3,67,500/ ₹ 15] 24,500 shares

Answer 2

Journal Entries in the books of Libra Ltd.

| Date | Particulars | Amount Dr. | Amount Cr. |
|----------|--|--------------------------|-------------|
| | | ₹ | ₹ |
| 1.5.20X1 | Bank A/c Dr. To Debenture Application A/c (Application money received on 1,50,000 debentures @ ₹ 100 each) | 1,50,00,000 | 1,50,00,000 |
| 1.6.20X1 | Debenture Application A/c Dr. Underwriters A/c Dr. To 15% Debentures A/c (Allotment of 1,50,000 debentures to applicants and 50,000 debentures to underwriters) | 1,50,00,000 50,00,000 | 2,00,00,000 |
| | Underwriting Commission Dr. To Underwriters A/c | 4,00,000 | 4,00,000 |

| | | | | |
|------------|--|-----|-------------|-------------|
| | (Commission payable to underwriters @ 2% on ₹ 2,00,00,000) | | | |
| | Bank A/c | Dr. | 46,00,000 | |
| | To Underwriters A/c | | | 46,00,000 |
| | (Amount received from underwriters in settlement of account) | | | |
| 30.9.20X1 | Debenture Interest A/c | Dr. | 10,00,000 | |
| | To Bank A/c | | | 10,00,000 |
| | (Interest paid on debentures for 4 months @ 15% on ₹ 2,00,00,000) | | | |
| 30.10.20X1 | 15% Debentures A/c | Dr. | 1,20,00,000 | |
| | To Equity Share Capital A/c | | | 20,00,000 |
| | To Securities Premium A/c | | | 1,00,00,000 |
| | (Conversion of 60% of debentures into shares of ₹ 60 each with a face value of ₹ 10) | | | |
| 31.3.20X2 | Debenture Interest A/c | Dr. | 7,50,000 | |
| | To Bank A/c | | | 7,50,000 |
| | (Interest paid on debentures for the half year) (refer working note below) | | | |

Working Notes

1. Calculation of Debenture Interest for the half year ended 31st March, 20X2

On ₹ 80,00,000 for 6 months @ 15% = ₹ 6,00,000

On ₹ 1,20,00,000 for 1 months @ 15% = ₹ 1,50,000

₹ 7,50,000

Answer 3

MK Ltd.'s Ledger
Own Debentures Account

(i)

| | | ₹ | | | ₹ |
|----------|--|----------|----------|---|----------|
| 31.5.X1 | To Bank | 7,84,000 | 31.12.X1 | By 9% Debentures A/c (5,000 x 100) | 5,00,000 |
| 31.12.X1 | To Capital Reserve (Profit on cancellation) (refer working note) | 10,000 | 31.1.X2 | By Bank- Resale of 2,000 debentures (2,000 x 101) | 2,02,000 |
| 31.1.X2 | To Profit and Loss A/c (Profit on resale) (refer working note) | 6,000 | 31.3.X2 | By Balance c/d | 98,000 |
| | | 8,00,000 | | | 8,00,000 |

(ii)

Interest on Debentures Account

| | | ₹ | | | ₹ |
|----------|---|----------|---------|-------------------------------|----------|
| 31.5.X1 | To Bank (Interest for 2 months on 8,000 debentures) | 12,000 | 31.3.X2 | By Profit and Loss A/c (b.f.) | 4,38,750 |
| 30.9.X1 | To Interest on own debentures (Interest for 4 months on 8,000 debentures) | 24,000 | | | |
| 30.9.X1 | To Bank (Interest for 6 months on 42,000 debentures) | 1,89,000 | | | |
| 31.12.X1 | To Interest on own debentures (Interest for 3 months on 5,000 debentures) | 11,250 | | | |
| 31.3.X2 | To Interest on own debentures (Interest for 6 months on 1,000 debentures) | 4,500 | | | |
| 31.3.X2 | To Bank (Interest for 6 months on 44,000* debentures) | 1,98,000 | | | |
| | | 4,38,750 | | | 4,38,750 |

*50,000 – 5,000 – 1,000

(iii)

Interest on Own Debentures Account

| | | ₹ | | | ₹ |
|---------|-------------------------------|--------|-----------|--|--------|
| 31.3.X2 | To Profit and Loss A/c (b.f.) | 45,750 | 30.9.X1 | By Interest on Debentures A/c | 24,000 |
| | | | 31.12.X1 | By Interest on Debentures A/c | 11,250 |
| | | | 31.01. X2 | By Bank (interest for 4 months on 2,000 debentures) | 6,000 |
| | | | 31.03. X2 | By Interest on Debentures | 4,500 |
| | | 45,750 | | | 45,750 |

Working Notes

| | | | |
|-----------|---|---|----------|
| 31.5. X1 | Acquired 8,000 Debentures @ 98 per debenture (ex-interest) | | ₹ |
| | Purchase price of debenture (8,000 × ₹ 98) | = | 7,84,000 |
| | Interest for 2 months [₹ 8,00,000 × 9% × 2/12] | = | 12,000 |
| 30.9. X1 | Interest on own debentures | | |
| | [₹ 8,00,000 × 9% × ½] less ₹12,000 | = | 24,000 |
| | Interest on other debentures ₹ 42,00,000 × 9% × ½ | = | 1,89,000 |
| 31.12.X1 | Cancellation of 5,000 own debentures | | |
| | Face value ₹ 100 less acquired at ₹ 98 = 2 × 5,000 | = | 10,000 |
| 31.1. X2 | Resale of 2,000 Debentures sold for 101 (ex-interest) acquired for ₹ 98 (ex-interest) | | |
| | 2,000 × ₹ 3 per debenture | = | 6,000 |
| 31.12. X1 | Interest on cancelled 5,000 debentures | | |
| | $5,000 \times ₹ 100 \times 9\% \times \frac{1}{4}$ | = | 11,250 |
| 31.3. X2 | Interest on 1,000 own debentures | | |
| | ₹ 1,00,000 × 9% × ½ | = | 4,500 |

Answer 4**12% Debentures Account**

| Date | Particulars | ₹ | Date | Particulars | ₹ |
|-------------------|-----------------------|------------------|------------------|----------------|------------------|
| 31st March, 20 X2 | To Own debentures A/c | 2,00,000 | 1st April, 20 X1 | By Balance b/d | 16,00,000 |
| | To Bank A/c | 14,00,000 | | | |
| | | <u>16,00,000</u> | | | <u>16,00,000</u> |

Debenture Redemption reserve Account

| Date | Particulars | ₹ | Date | Particulars | ₹ |
|-------------------|-----------------------------------|-----------|-------------------|--------------------------------|-----------|
| 31st March, 20 X2 | To 9% Stock A/c (loss) (W.N.5) | 6,400 | 1st April, 20 X1 | By Balance b/d | 14,98,000 |
| | To General reserve A/c (Bal.fig.) | 16,93,200 | 31st March, 20 X2 | By Profit and loss A/c | 56,800 |
| | | | | By Interest on DRR A/c (W.N.3) | 1,42,800 |

| | | | | |
|--|--|-----------|----------------------------------|-----------|
| | | | By Own debentures A/c (W.N.4) | 2,000 |
| | | 16,99,600 | | 16,99,600 |

Working Notes

1. Amount of stock as on 1st April, 20X1

| | |
|-----------------------------------|------------|
| | ₹ |
| DRR balance as on 1st April, 20X1 | 14,98,000 |
| Less: Own debentures (2,000 x 99) | (1,98,000) |
| | 13,00,000 |

2. Sales value of 9% stock = Face value / ₹ per stock

$$= ₹ 13,20,000 / ₹ 100 = 13,200 \text{ stock}$$

$$\text{Sales value} = ₹ 13,200 \text{ stock} \times ₹ 98 \text{ per stock}$$

$$= ₹ 12,93,600$$

3. Interest credited to DRR Fund

(i) Interest on 9% stock (₹ 13,20,000 x 9%) ₹ 1,18,800

(ii) Interest on own debentures (2,000 Debentures x ₹ 100 x 12%) ₹ 24,000

₹ 1,42,800

4. Own Debentures Account

| | | | | | |
|------------------|----------------|----------|------------------|----------------------|----------|
| | | ₹ | | | ₹ |
| 1st April, 20X1 | To Balance b/d | 1,98,000 | 31st March, 20X2 | By 12% Debenture A/c | 2,00,000 |
| 31st March, 20X2 | To DRR A/c | 2,000 | | | |
| | | 2,00,000 | | | 2,00,000 |

5. 9% Stock Account

| | | | | | |
|-----------------|--|-----------|------------------|----------------------------|-----------|
| | | ₹ | | | ₹ |
| 1st April, 20X1 | To Balance b/d (Face value ₹13,20,000) (W.N.1) | 13,00,000 | 31st March, 20X2 | By Bank account (W.N.2) | 12,93,600 |
| | | | | By DRR (loss on sales) | 6,400 |
| | | 13,00,000 | | | 13,00,000 |