# Company Accounts and Analysis of Financial Statements Chapter 2 <br> Issue and Redemption of Debentures 

## Short answers long answers : Solutions of Questions on Page Number : 144

Q1 :

## What is meant by a Debenture?


#### Abstract

Answer :

The word Debenture is derived from a Latin word 'debere' which means to borrow. A debenture is issued in the form of a certificate under the seal of a company and containing a contract for the repayment of the principal sum after a fixed period of time and payment of interest at regular intervals, generally half yearly. Debentures are issued by a company for acquiring long-term borrowings.


## Q2 :

What is meant by a debenture? Explain the different types of debentures?


#### Abstract

Answer :

The word Debenture is derived from a Latin word 'debere' which means to borrow. A debenture is issued in the form of a certificate under the seal of a company and containing a contract for the repayment of the principal sum after a fixed period of time and payment of interest at regular intervals, generally half yearly. Debentures are issued by a company for acquiring long-term borrowings.


The debentures can be classified on the following basis.

1. On the basis of Security
a. Secured Debentures- Mortgaged Debentures are those debentures that are secured against asset/s of a company. These are also known as secured debentures. In case the
company fails to pay back the principal amount of debenture or fails to meet its interest obligations on the due date, then the debenture holders have the right to sell the mortgaged asset in order to realise their amount due to the company.
b. Unsecured Debentures- These debentures are treated as unsecured creditors. They do not have any security. These are uncommon now days.

## 2. On the basis of Tenure

a. Redeemable Debenture- These debentures are payable after the expiry of a specific period. These debentures can be redeemed at par or premium either in lump sum or in installment. Generally all debentures are redeemable.
b. Irredeemable Debenture- Irredeemable Debentures are those debentures that cannot be repayable or redeemable by a company during its life time. These are repayable only at the time of winding up of the company. These are also known as Perpetual Debentures that means debentures having indefinite life. In India, now days, no company can issue irredeemable debentures.

## 3. On the basis of Mode of Redemption

a. Convertible Debentures- Convertible Debentures are those debentures that can be converted into equity shares after a specified period of time. These are of following two types:
i. Fully Convertible Debentures: When the whole amount of a debenture is convertible into equity shares of equivalent amount, then these debentures are called Fully Convertible Debentures. There is no need to maintain Debenture Redemption Reserves for such debentures.
ii. Partly Convertible Debentures: When only a part of the amount of a debenture is convertible into equity shares, then these debentures are called Partly Convertible Debentures. In this regards, the Debenture Redemption Reserve is maintained only for the non-convertible part of the debenture.
b. Non-Convertible Debenture- These debentures cannot be converted into shares. Generally debentures are non convertible.

## 4. On the basis of Coupon Rate

a. Zero Coupon Rate- These debentures do not contain a specific rate of interest and can be issued at discount. The excess of the face value of the debenture over its issue price is considered as interest amount.
b. Specific Rate- These debentures carry a specific rate of interest which may be fixed or floating.

## 5. On the basis of Registration

a. Registered Debenture- While issuing such debentures, the company maintains a record regarding name, address and number of holding of debentures in the Register of Debenture Holders of the company.
b. Bearer Debentures- When a company does not maintain any record of the debenture holders and the debenture is transferable mere by delivery, then the type of the debenture held by the holders is termed as Bearer Debenture. Interests on such debentures are paid to the persons who produce the interest coupons that are attached with these debentures in a specified bank.

Q3 :

## What does a Bearer Debenture mean?

## Answer :

When a company does not maintain any record of the debenture holders and the debenture is transferable mere by delivery, then the type of the debenture held by the holders is termed as Bearer Debenture. Interests on such debentures are paid to the persons who produce the interest coupons that are attached with these debentures in a specified bank.

Q4 :
Distinguish between a debenture and a share. Why is debenture known as loan capital? Explain.

## Answer :

| Basis of Difference | Shares | Debenture |
| :---: | :---: | :---: |
| 1. Owner or Creditor | Share holders are the owners since shares forms a are part of owned capital | Debenture holder are Creditors since debentures are a part of loan |
| 2. Voting Rights | Share holders have the voting rights | Debenture holders do not have any voting rights. |
| 3. Returns | Share holders are entitled for returns in the form of dividend. | Debenture holders are entitled for returns in the form of interest. |
| 4. Rate of Return | The rate of dividend is not fixed and varies from year to year. | The rate of interest is fixed and do not vary from year to year. |
| 5. Obligations of Return | Dividend is appropriation of profit. Dividend will not be paid if losses are incurred by the company | Interest is charged against profit, interest is payable even if there is no profit. |
| 6. Repayment of Amount | The amount of share is not returned during the life time of the company | The amount of debenture is returned according to the term of issue. |
| 7. Issue | The issue of shares at discount need adherence to the restrictions imposed by the Section 79 of the Company Act. | There are no such restrictions for issuing debentures on discount. |
| 8. Conversion | Shares cannot be converted into debentures. | Debentures can be converted into shares. |
| 9. Risk | Shares are more risky than debenture as these are unsecured. | If debentures are secured against asset, the risk involved is the minimal. |
| 10. Repayment Priority | Payment to the share holders is made after settlement of all external liabilities, i.e. after debenture holders. | Payment to the debenture holders is made before the share holders. |

Issue of debentures implies incurring long-term indebtedness. Generally, a company issues debentures for acquiring long-term borrowings to achieve its long-run targets and growth. Like the owner's capital, interest is also payable on the principal amount of the debenture. The interest paid is regarded as an expense for the company and is deductible under Income Tax Act. Therefore, debentures are also known as loan capital because they are redeemable after a long period of time.

## Q5 :

## State the meaning of 'Debentures issued as a Collateral Security'.


#### Abstract

Answer : The term collateral security means additional or secondary security in addition to the primary security. Sometimes, when a company takes loan from a financial institution, then besides the primary security, the company may issue debenture for additional security (as collateral security). The lender who receives debenture as collateral security is not entitled for interest on these debentures. If any default is made by the company in paying back the principal amount (i.e. the loan amount) or interest on the loan, then the lender has the full right to recover his/her dues from the sale of primary security. But, if the primary security is not sufficient to recover the amount of the debt, then the debentures issued as collateral may be used for recovery of the remaining amount.


## Q6 :

## Describe the meaning of 'Debenture Issued as Collateral Securities'. What accounting treatment is given to the issue of debentures in the books of accounts?


#### Abstract

Answer :

The term collateral security means additional or secondary security in addition to the primary security. Sometimes, when a company takes loan from a financial institution, then besides the primary security, the company may issue debenture for additional security (as collateral security). The lender who receives debenture as collateral security is not entitled for interest on these debentures. If any default is made by the company in paying back the principal amount (i.e. the loan amount) or interest on the loan, then the lender has the full right to recover his/her dues from the sale of primary security. But, if the primary security is not sufficient to recover the


amount of debt, then the debentures issued as collateral may be used for recovery of the remaining amount.

## Accounting Treatment

There are two ways to record issue of debentures as collateral security:

## 1. No Entry

As no liability has been created so no Journal entry is recorded in the books of account. As per the Revised Schedule-VI of the Companies Act, the issue of debenture as collateral security is shown as a Long-Term Borrowings under the heading of Non-Current Liabilities on the Equity and Liabilities side of the Balance Sheet. In the Notes to Accounts of Long-Term Borrowings, the Loan so taken is shown. And in the Notes to Accounts of Cash and Cash Equivalents, the amount of loan so received (in cash) is shown. This can be better understood with the help of the below explained example.

Example- Suppose Best Bus Ltd. issued 4,000 9\% Debentures of Rs 100 each as collateral security to NBP bank for a loan of Rs $3,00,000$.

| Best Bus Ltd. <br> Balance Sheet |  |  |  |
| :---: | :---: | :---: | :---: |
| Particulars Note No. Amount <br> (Rs) <br> I. Equity and Liabilities <br> 1. Shareholders' Funds <br> 2. Non-Current Liabilities <br> a. Long-Term <br> Borrowings <br> 3. Current Liabilities 1 $3,00,000$ <br> Total  $\mathbf{3 , 0 0 , 0 0 0}$ <br> II. Assets   <br> 1. Non-Current Assets   <br> 2. Current Assets   <br> a. Cash and Cash 2 $3,00,000$ <br> Equivalents   |  | $\mathbf{3 , 0 0 , 0 0 0}$ |  |
| Total |  |  |  |
|  |  |  |  |

NOTES TO ACCOUNTS

| Note No. | Particulars | Amount (Rs) |
| :--- | :---: | :---: |


| 1 | Long-Term Borrowings <br> Loan (Secured by issue of 9\% <br> Debentures of Rs 4,00,000 as Collateral <br> Security) | $3,00,000$ |
| :---: | :--- | ---: |
| 2 | Cash and Cash Equivalents <br> Cash at Bank | $3,00,000$ |

## 2. By Making Entry

In order to record the issue of debentures as collateral security, the following necessary Journal entries are made in the books of account.

## At the time of Issue of Debentures as Collateral Security

Debenture Suspense A/c Dr.
To Debenture A/c
(Debentures issued as collateral security)

In this case, as per the Revised Schedule VI of the Companies Act, Debentures so issued as collateral security will be shown as Long-Term Borrowings under the head of Non-Current Liabilities of the Equity and Liabilities side of the Company's Balance Sheet. Unlike Method-1, in this method, Debentures Suspense Account is deducted from the Debentures Account in the Notes to Accounts of Long-Term Borrowings.

## Best Bus Ltd.

Balance Sheet

| Particulars | Note No. | Amount <br> (Rs) |
| :---: | :---: | :---: |
| I. Equity and Liabilities <br> 1. Shareholders' Funds <br> 2. Non-Current Liabilities <br> a. Long-Term Borrowings <br> 3. Current Liabilities |  |  |
| Total | 1 | $3,00,000$ |
| II. Assets <br> 1. Non-Current Assets <br> 2. Current Assets <br> a. Cash and Cash Equivalents |  | $\mathbf{3 , 0 0 , 0 0 0}$ |


| Total |  | $\mathbf{3 , 0 0 , 0 0 0}$ |
| ---: | ---: | ---: |
|  |  |  |

NOTES TO ACCOUNTS

| Note No. | Particulars | Amount <br> (Rs) |
| :---: | :---: | :---: |
| 1 | Long-Term Borrowings <br> Secured: <br> Loan (Secured by issue of 9\% Debentures of <br> Rs 4,00,000 as Collateral Security) <br> 9\% Debentures (Issued as <br> Collateral Security to Bank <br> against loan) <br> Less: Debenture Suspense <br> Account | $4,00,000$ |

## Q7 :

## What is meant by 'Issue of debentures for Consideration other than Cash'?

## Answer :

If a company purchases assets from its suppliers or vendors, then instead of paying them in cash the company issues debentures to them. This is known as issue of debenture for consideration other than cash. The issue of debenture for consideration other than cash serves the purpose of both the vendor as well as of the purchaser (company). From the purchaser's point of view, purchasing an asset against the issue of debentures requires no additional cost for raising loans or arranging funds immediately. On the other hand, the vendor gets interest on the amount of debentures received. In this case, payment is deferred by issue of debentures and interest is paid for time lag payment. Debentures may be issued at par, premium or discount to the vendor.

## 1. For purchase of Assets:

Assets A/c
Dr.
To Vendor A/c
(Asset Purchased)

## 2. For Issue of Debentures

## a. If debentures are issued at Par:

Vendor A/c Dr.<br>To Debentures A/c<br>(Debenture issued to Vendor at par )

## b. If debentures are issued at Premium

Vendor A/c Dr.
To Debentures A/c

To Securities Premium A/c
(Debenture issued to Vendor at premium)
c) If debentures are issued at Discount

Vendor A/c Dr.
Discount on Issue of Debentures Dr.
To Debentures A/c
(Debenture issued to Vendor at discount )

## Q8 :

## What is meant by 'Issue of debenture at discount and redeemable at premium?

## Answer :

When debentures are issued below its par value (or the face value) but are redeemed at price higher than its par value, then it is termed as issue of debenture at discount and redeemable at premium. The difference between the issue price and the redemption price is treated as loss on issue of debenture.

## Example:

A $10 \%$ debenture of Rs 1,000 is issued at $5 \%$ discount and is redeemed at $10 \%$ premium.

| Bank A/c Dr. $\quad 950$ |  |  |  |
| :--- | :--- | :--- | :--- |
| Discount on Issue of Debenture A/c | Dr. | 50 |  |
| Loss on Issue of Debenture A/c $\quad$ Dr. | 100 |  |  |
| To Debenture A/c 1,000 |  |  |  |
| To Debenture Redemption Premium A/c |  | 100 (Debenture |  |
| issued) |  |  |  |

Total loss $=$ Payment made at redemption - Amount received on issue of debenture 1,100

- $950=$ Rs 150

Q9 :

## What is 'Capital Reserve'?

## Answer :

Capital Reserve is a reserve that is created out of capital profits i.e. gains or profits arising from other than the normal activities of business operations i.e. activities other than sale or purchase of goods and services. This reserve is utilised to meet future capital losses, if any, and to issue
bonus shares. It cannot be distributed as dividend among the share holders. The Capital Reserve is generated out of the following activities:
i. Premium on issue of shares.
ii. Premium on issue of debentures.
iii. Profit on redemption of debentures.
iv. Profit on sale of fixed assets.
v. Profit on reissue of forfeited shares.
vi. Profit prior to incorporation, etc.

Q10 :

## What is meant by an 'Irredeemable Debenture'?

## Answer :

Irredeemable Debentures are those debentures that are not repayable or redeemable by a company during its life time. These are repayable only at the time of winding up of the company. These are also known as Perpetual Debentures that means debentures having indefinite life. In India, now days, no company can issue irredeemable debentures.

## Q11 :

What is a 'Convertible Debenture'?

## Answer :

Convertible Debentures are those debentures that can be converted into equity shares after a specified period of time. These are of following two types:
i. Fully Convertible Debentures: When the whole amount of a debenture is convertible into equity shares worth of equivalent amount, then these debentures are called Fully Convertible Debentures. There is no need to maintain Debenture Redemption Reserves for such debentures.
ii. Partly Convertible Debentures: When only a part of the amount of a debenture is convertible into equity share, then these debentures are called Partly Convertible Debentures. In this regards, the Debenture Redemption Reserve is maintained only for the non-convertible part of the debenture.

Q12 :
What is meant by 'Mortgaged Debentures'?

## Answer :

Mortgaged Debentures are those debentures that are secured against asset/s of a company. These are also known as secured debentures. If the debentures are secured against a particular asset, then it is called fixed charge whereas, if the debentures are secured against all the assets of a company, then it is called floating charge. In case the company fails to pay back the principal amount of debenture or fails to meet its interest obligations on the due date, then the debenture holders have the right to sell the mortgage asset in order to realise their amount due to the company.

Q13 :

## What is discount on issue of debentures?


#### Abstract

Answer : When the debentures are issued at a price below its par value or face value, then it is said that the debentures are issued at discount. The difference between the issue price and the face value of the debenture is regarded as a capital loss. As per the Revised Schedule VI of the Companies Act, Discount on Issue of Debentures is shown in the Notes to Accounts of Other Non-Current Assets. The final balance is shown on the Assets side of the Company's Balance Sheet under the main head of Non-Current Assets.


## Q14 :

What is meant by 'Premium on Redemption of Debentures'?


#### Abstract

Answer :

When the debentures are redeemed at a price more than its face value or the par value, then it is said that the debentures are redeemed at premium. The difference between the redeemed price and the par value is regarded as a capital loss and this loss is written off till the redemption of the debentures. The Premium on Redemption of Debenture is shown in the Notes to Accounts under the sub-head of 'Other Long-term Liabilities'. The final balance is shown under the main head of 'Non-Current Liabilities' on the Equity and Liabilities side of the Company's Balance Sheet. Accounting Treatment for Premium on Redemption on Debentures:

\section*{1. At the time of the Issue of Debenture:}

Bank/Debenture Allotment A/c Dr. Loss on Issue of<br>Debenture A/c Dr.<br>To Debenture A/c<br>To Premium on Redemption<br>(Debenture issued with the term of redemption at premium)


## 2. At the time of Redemption of Debentures:

Debenture A/c Dr.
Premium on Redemption A/c Dr. To
Debentureholder A/c
(Amount of debentures due to debentureholders)

## Q15 :

How are debentures different from shares? Give two points.

## Answer :

| Basis of <br> Comparisons | Debentures | Shares |
| :--- | :--- | :--- |


| 1. Meaning | Debentures are a part of loan, <br> therefore, the debenture holders <br> are the creditors of a company. | Shares form a part of capital, <br> hence, share holders are the <br> owner of a company. |
| :--- | :--- | :--- |
| 2. Voting Rights | These do not carry any voting <br> rights for their holders. | These carry voting rights for their <br> holders. |

## Q16 :

Name the head under which 'discount on issue of debentures' appears in the Balance Sheet of a company.

## Answer :

Discount on Issue of Debentures is regarded as a capital loss. As per the Revised Schedule VI of the Companies Act, Discount on Issue of Debentures is shown in the Notes to Accounts of Other Non-Current Assets. The final balance is shown on the Assets side of the Company's Balance Sheet under the main head of Non-Current Assets.

## Q17 :

## What is meant by redemption of debentures?


#### Abstract

Answer :

Redemption of debenture means repayment of debentures by the company to the debenture holders. In other words, it implies the discharge of liabilities by repaying the amount due to the debenture holders as per the terms and conditions determined at the time of issue of debentures. Debentures may be redeemable at par, premium or discount, but, nowa days, these are mostly redeemable at par or premium. The redemption can be done out of profits or from the fresh issue of debentures or shares. Redemption of debentures may be done by the following methods:


1. In lump sum at the time of maturity,
2. In installments by draw of lots at the end of each year,
3. By purchase in open market whenever price is below its face value,
4. By converting debentures into shares or new debentures.

## Q18 :

Can the company purchase its own debentures?

## Answer :

Yes, a company can purchase its own debentures provided it is authorised by its Article of Association. As per the Company Act, if a company is authorised by its Article of Association, only then it may purchase its own debentures from the open market. The main purposes of such purchase are as follows:

1. For immediate cancellation of debenture liability, if the interest rate on its debenture is higher than the market rate of interest.
2. A company may also purchase its own debentures with the motive of investment and sell them at higher price in future and thereby earn profit.

Q19 :

## What is meant by redemption of debentures by conversion?


#### Abstract

Answer :

When a debenture holder can convert his/her debentures into shares or new debentures after the expiry of a specified period of time, then it is known as redemption of debentures by conversion. As the company do not need to pay any funds for the redemption, so there is no need to maintain the Debenture Redemption Reserve (DRR). The new shares or debentures may be issued at par, premium or at discount.


Q20 :
How would you deal with 'Premium on Redemption of Debentures'?

Answer :

When the debentures are redeemed at a price more than its face value or the par value, then it is said that the debentures are redeemed at premium. The difference between the redeemed price and the par value is regarded as a capital loss and this loss is written off till the redemption of the debentures. The Premium on Redemption of Debenture is shown in the Notes to Accounts under the sub-head of 'Other Long-term Liabilities'. The final balance is shown under the main head of 'Non-Current Liabilities' on the Equity and Liabilities side of the Company's Balance Sheet.
Accounting Treatment for Premium on Redemption on Debentures:

## 1. At the time of the Issue of Debenture:

Bank/Debenture Allotment A/c Dr. Loss on issue of<br>Debenture A/c Dr.<br>To Debenture A/c<br>To Premium on Redemption (Debenture issued with

the term of redemption at premium)

## 2. At the time of Redemption of Debentures:

Debenture A/c Dr.
Premium on Redemption A/c Dr.
To Debenture Holder A/c
(Amount of debentures due to debenture holders)

## Q21 :

## What is meant by 'Redemption out of Capital?


#### Abstract

Answer : When debentures are redeemed out of capital and no profits are utilised for redemption, then such redemption is termed as redemption out of capital. In such a situation, no profits are transferred to the Debenture Redemption Reserve.

As per the guideline laid down by Securities and Exchange Board of India (SEBI) and the Section 117C of Company Act of 1956, the creation of Debenture Redemption Reserve is


mandatory (DRR). Therefore, it is not possible to redeem debentures purely out of capital, as it reduces the value of assets. The following companies are exempted from the creation of DRR.

1. Infrastructure companies (i.e. those companies that are engaged in the business of developing, maintaining and operating infrastructure facilities)
2. A Company that issues debentures with a maturity up to 18 months

The following are the necessary Journal entries that need to be passed, in case the debentures are redeemed out of capital.
a. If debentures are redeemed out of capital at Par

Debenture A/c Dr.
To Debenture holder A/c
(Amount of debentures due to debenture holders)

Debenture holder A/c Dr.
To Bank A/c
(Amount of debentures paid to debenture holders)

## b. If debentures are redeemed out of capital at Premium

Debenture A/c Dr.
Premium on Redemption A/c Dr.
To Debenture holder A/c
(Amount of debentures due to debenture holders)

Debenture holder A/c Dr.
To Bank A/c
(Amount of debentures paid to debenture holders)

## Q22 :

## What is meant by redemption of debentures by 'Purchase in the Open Market'?


#### Abstract

Answer :

According to the Company Act, if a company is authorised by its Article of Association, only then it may purchase its own debentures from the open market. The main purpose of such purchase is as follows: 1. For immediate cancellation of debenture liability, if the interest rate on its debenture is higher than the market rate of interest. 2. A company may also purchase its own debentures with the motive of investment and sell them at higher price in future and thereby earn profit.


## Q23 :

## Under which head is the 'Debenture Redemption Reserve' shown in the Balance Sheet?

## Answer :

As per the Revised Schedule VI, Debenture Redemption Reserve (DRR) is shown in the Notes to Accounts of Reserve and Surplus. The final balance after adding DRR, is shown as the subhead 'Reserves and Surplus' under the main head of Shareholders' Funds on the Equity and Liabilities side of the Company's Balance Sheet.

## Numerical questionslong answers : Solutions of Questions on Page Number : 145

Q1 :
G.Ltd. issued 75,00,000, $6 \%$ Debenture of Rs 50 each at par payable Rs 15 on application and Rs 35 on allotment, redeemable at par after 7 years from the date of issue of debenture. Record necessary entries in the books of Company.

## Answer :

Book of G. Ltd.

## Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c Dr. <br> To 6\% Debenture Application A/c (Application money @ Rs 15 each received for 75,00,000 debentures) |  | 11,25,00,000 | 11,25,00,000 |
|  | 6\% Debenture Application A/c Dr. <br> To 6\% Debenture A/c <br> (Application money of $75,00,000$ debentures transferred to 6\% Debentures Account) |  | 11,25,00,000 | $11,25,00,000$ |
|  | 6\% Debenture Allotment A/c Dr. <br> To 6\% Debenture A/c <br> (Allotment money @ Rs 35 each due for 75,00,000 debentures ) |  | 26,25,00,000 | 26,25,00,000 |
|  | Bank A/c Dr. To 6\% Debenture Allotment A/c (Allotment money received @ Rs 35 each on $75,00,000$ debentures) |  | 26,25,00,000 | 26,25,00,000 |

## Q2 :

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.

Answer :

| Books of Y Ltd. <br> Journal |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
|  |  |  | $\begin{array}{r} \hline 50,000 \\ 50,000 \\ 1,00,000 \\ \\ 1,00,000 \end{array}$ | $50,000$ $50,000$ $1,00,000$ |


| To 6\% Debenture Allotment A/c <br> (Allotment money for 2,000 6\% Debentures received) | 50,000 | $1,00,000$$50,000$ |
| :---: | :---: | :---: |
| 6\% Debenture First and Final Call A/c Dr. To 6\% Debenture A/c (Debenture First and Final Call @ 25 each due on 2,000 6\% Debentures) |  |  |
| Bank A/c Dr. <br> To 6\% Debenture First and Final Call A/c <br> (First and Final Call for 2,000 6\% Debentures received) | $\begin{gathered} 50,000 \\ 50,000 \end{gathered}$ |  |

Q3 :
A.Ltd. issued $\mathbf{1 0 , 0 0 0}, \mathbf{1 0 \%}$ Debentures of Rs 100 each at a premium of $\mathbf{5 \%}$ 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.

Answer :

Books of A. Ltd.

## Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c Dr. To 10\% Debentures Application A/c (Application money received for 10,000, 10\% Debenture Application @ Rs 10 each) |  | 1,00,000 | 1,00,000 |
|  | $10 \%$ Debentures Application A/c Dr. <br> To 10\% Debenture A/c  <br> (Application money @ Rs 10 each transferred to  <br> $10 \%$ Debenture Account)  |  | 1,00,000 | 1,00,000 |
|  | $10 \%$ Debenture Allotment A/c Dr. <br> To 10\% Debentures A/c  <br> To Securities Premium A/c  <br> (Allotment due @ Rs 25 each including premium Rs 5 on  <br>   <br> $10,000,10 \%$ Debentures)  |  | 2,50,000 | $\begin{array}{r} 2,00,000 \\ 50,000 \end{array}$ |
|  | Bank A/c Dr. <br> To 10\% Debenture Allotment A/c <br> (Allotment money received on allotment @ Rs 25 each for <br> 10,000 10\% Debentures) |  | 2,50,000 | $2,50,000$ |
|  | 10\% Debenture First and Final Call A/c Dr. <br> To $10 \%$ Debenture A/c <br> (First and Final Call @ Rs 70 each on 10,000 <br> $10 \%$ Debentures due) |  | 7,00,000 | 7,00,000 |
|  | Bank A/c Dr. <br> To 10\% Debenture First and Final Call A/c (Debenture First and Final Call received @ Rs 70 each for <br> 10,000 10\% Debentures) |  | 7,00,000 | 7,00,000 |

Q4 :
A. Ltd. issued $\mathbf{9 0 , 0 0 , 0 0 0}, \mathbf{9 \%}$ Debenture of Rs 50 each at a discount of $\mathbf{8 \%}$, redeemable at par any time after 9 years. Record necessary entries in the books of $A$. Ltd.

## Answer :

Books of A. Ltd.

## Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Amount |
| :--- | :--- | :---: | :---: | :---: |
|  | Rank A/c Dr. <br> Discount on Issue of Debenture A/c Dr. <br> To 9\% Debenture A/c (Money received <br> for 90,00,000 9\% Debentures <br> @ Rs 50 each at discount of 8\%) |  | $41,40,00,000$ |  |

Alternative Method:

|  | Bank A/c $\quad$ Dr. |  | $41,40,00,000$ |
| :--- | :--- | :--- | :--- | :--- |



Q5 :
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 installments?

## Answer :

When the debentures are issued at a price below its par value or face value, then it is said that the debentures are issued at discount. The difference between the issue price and the face value of the debenture is regarded as a capital loss. As per the Revised Schedule VI of the Companies Act, Discount on Issue of Debentures is sown in the Notes to Accounts of Other Non-Current Assets. The final balance is shown on the Assets side of the Company's Balance Sheet under the main head of Non-Current Assets.

The following are the two methods of writing-off discount on issue of debentures, when debentures are redeemable in installments.
(Students must note that this portion is not in the syllabus as prescribed by CBSE)

1. Fixed Installment Method/Equal Installment Method- Under this method, the total amount of discount (loss) is written off in equal installments over the life of the debenture. It is
used when debentures are redeemable in lump sum after a specified period of time. The formula for calculating amount of discount written off every year is given by:

$$
\text { Amount of Discount written off Each Year }=\frac{\text { Total Discount }}{\text { Life of the Debenture in Years }}
$$

2. Fluctuating Installment Method/Variable Installment Method/Proportion MethodThis method is used when the debentures are redeemed in installments. The discount on issue of debentures is written off in proportion to the debentures outstanding at the end of each year. For example, if a company has issued $10 \%$ debentures of Rs 6,00,000 at 5\% discount redeemable annually by Rs $2,00,000$ each year. The total amount of discount on Rs $6,00,000$ debentures @ $5 \%$ is Rs 30,000 , i.e. $(6,00,000 \times 5 / 100=$ Rs 30,000$)$. The amount of discount to be written off every year is calculated as:

| Year | Amount of Debenture used up during the Year | Ratio | Amount of Discount to be written off Each Year |
| :---: | :---: | :---: | :---: |
| First Year | 6,00,000 | 3 | $30,000 \times 3 / 6=15,000$ |
| Second Year | 4,00,000 | 2 | $30,000 \times 2 / 6=10,000$ |
| Third Year | 2,00,000 | 1 | $30,000 \times 1 / 6=5,000$ |
|  |  | 6 |  |
| Total amount of Discount on 6,00,000 debentures @ 5\% p.a. |  |  | Rs 30,000 |

Hence, the amount of the total discount of Rs 30,000 will be written off in the ratio of $3: 2: 1$, i.e. Rs 15,000 , Rs 10,000 and Rs 5,000 respectively.

## Q6 :

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.

## Answer :

## Books of A Ltd.

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c Dr. <br> To 9\% Debenture Application A/c  <br> (9\% Debenture Application money received on 4,800  <br> Debentures  <br> @ 20 each)  |  | 96,000 | 96,000 |
|  | 9\% Debenture Application A/c Dr. To $9 \%$ Debenture A/c To $9 \%$ Debenture Allotment A/c To Bank A/c (9\% Debenture Application money of 4000 debentures transferred to Debentures Account, 400 debentures rejected returned and remaining amount adjusted on allotment) |  | 96,000 | $\begin{array}{r} 80,000 \\ 8,000 \\ 8,000 \end{array}$ |
|  | 9\% Debenture Allotment A/c Dr. To 9\% Debenture A/c (9\% Debenture Allotment due on 4,000 Debentures @ Rs 20 each) |  | 80,000 | 80,000 |
|  | Bank A/c Dr. To 9\% Debenture Allotment A/c (9\% Debenture Allotment money received) |  | 72,000 | 72,000 |
|  | 9\% Debenture First Call A/c Dr. <br> To 9\% Debenture A/c (9\% Debenture First Call due on 4000 debentures @ Rs |  | 1,20,000 | 1,20,000 |


| 30 each) | 1,20,000 | 1,20,000 |
| :---: | :---: | :---: |
| Bank A/c Dr. To Debenture First Call A/c (9\% Debenture first call received for 4000 debentures @ Rs 30 each) |  |  |
| 9\% Debenture Final Call A/c Dr. To 9\% Debenture A/c (9\% Debenture Final Call due on 4000 debentures @ Rs 30 each ) | 1,20,000 | 1,20,000 |
| Bank A/c Dr. <br> To 9\% Debenture Final Call A/c <br> (9\% Debenture Final Call received on 4000 debentures <br> @ Rs 30 each) | 1,20,000 | 1,20,000 |

Q7 :
Explain the different terms for the issue of debentures with reference to their redemption.

Answer :

The different terms for the issue of debentures with reference to their redemption can be the combinations of at par, at premium and at discount. Normally, the debentures are not redeemable at discount. The permutation and the combination of the various terms of issue and redemption of debentures give rise to following six situations:

1. Issue at Par, Redeemable at Par.
2. Issue at Premium, Redeemable at Par.
3. Issue at Discount, Redeemable at Par.
4. Issue at Par, Redeemable at Premium.
5. Issue at Premium, Redeemable at Premium.
6. Issue at Discount Redeemable at Premium.
7. Issue at Par and Redeemable at Par- When the debentures are issued and are redeemed at their face value, then the following Journal entry is passed.

| Bank A/c | Dr. (with the amount received) |
| :---: | :--- |
| To Debenture Application A/c | (with the face value) |
| (Debenture Application money received) |  |

Debenture Application A/c Dr.
To Debenture A/c
(Application money transferred to Debenture Account)
2. Issue at Premium and Redeemable at Par- When the debentures are issued at premium and are redeemable at par, then the following Journal entry is passed. As premium is a gain for a company so it is credited in the Journal entry.

Bank A/c Dr.<br>To Debenture Application A/c<br>(Debenture Application money received)

Debenture Application A/c Dr.
To Debenture A/c
To Securities Premium A/c (Debentures issued at premium
and redeemable at par)
3. Issue at Discount and Redeemable at Par- When the debentures are issued at discount and are redeemable at par, then the following Journal entry is passed. As discount is a loss for a company so it is debited in the Journal entry.

Bank A/c Dr.
To Debenture Application A/c
(Debenture Application money received)

Debenture Application A/c Dr.
Discount on Issue of Debenture A/c Dr.
To Debenture A/c
(Debentures issued at discount and redeemable at par)
4. Issue at Par and Redeemable at Premium- When debentures are issued at par and redeemable at premium, then the following Journal entry is passed. In such case, the company did not suffer any loss at the time of issue but there will be loss at the time of redemption.

Bank A/c
To Debenture Application A/c
(Debenture Application money received)

Debenture Application A/c
Loss on Issue of Debenture A/c

To Debenture A/c

Dr.
Dr. (with the amount of premium on redemption)
(with the face value of the debentures)

To Premium on Redemption of Debenture $\mathrm{A} / \mathrm{c}$ (with the amount of premium on redemption) (Debentures issued at par and redeemable at premium)
5. Issued at Premium and Redemption at Premium- When the debentures are issued and redeemable at premium, then the following Journal entry is passed.

Bank A/c Dr.<br>To Debenture Application A/c<br>(Debenture Application money received)

Debenture Application A/c Dr.
Loss on Issue of Debenture $\mathrm{A} / \mathrm{c}$

Dr. (with the amount of premium on redemption)

To Debenture A/c (with the face value of the debentures)
To Securities Premium A/c (with the amount of premium on issue)
To Premium on Redemption of Debenture (with the amount of premium on redemption) A/c (Debentures issued at premium and redeemable at premium)
6. Issue of Discount and Redemption at Premium- When the debentures are issued at discount and redeemable at premium, then the following Journal entry is passed.

| Bank A/c | Dr. |
| :--- | :--- |
| To Debenture Application A/c |  |
| (Debenture Application money received) |  |

Debenture Application A/c Dr.
Loss on Issue of Debenture A/c Dr. (with the amount of discount on issue plus amount of premium on redemption)
To Debenture A/c (with the face value of the debentures)
To Premium on Redemption of (with the amount of premium on redemption) Debenture A/c
(Debentures issued at discount and redeemable at premium)

Q8 :
T. Ltd. offered 2,00,000, $8 \%$ Debenture of Rs 500 each on June 30, 2002 at a premium of $\mathbf{1 0 \%}$ payable as Rs 200 on application (including premium) and balance on allotment, redeemable at par after 8 years. But application are received for $\mathbf{3 , 0 0 , 0 0 0}$ debenture and the allotment is made on pro-rata basis. All the money due on application and allotment is received. Record necessary entries regarding issue of debenture.

Answer :

Books of T. Ltd.
Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c Dr. To 8\% Debenture Application A/c (8\% Debenture application money received for 3,00,000 debentures @ Rs 200 each) |  | 6,00,00,000 | 6,00,00,000 |
|  | $8 \%$ Debenture Application A/c Dr. <br> To 8\% Debenture A/c  <br> To 8\% Debenture Allotment A/c  |  | 6,00,00,000 | $\begin{aligned} & 3,00,00,000 \\ & 2,00,00,000 \end{aligned}$ |



## Q9 : <br> Differentiate between redemption of debentures out of capital and out of profits.

## Answer :

## Redemption of Debentures Out of Capital

When debentures are redeemed out of capital and no profits are utilised for redemption, then such redemption is termed as redemption out of capital. In such a situation, no profits are transferred to the Debenture Redemption Reserve (DRR).

As per the guideline laid down by Securities and Exchange Board of India (SEBI) and the Section 117C of Company Act of 1956, the creation of DRR is mandatory (DRR). Therefore, it is not possible to redeem debentures purely out of capital, as it reduces the value of assets. The following companies are exempted from the creation of DRR.

1. Infrastructure companies (i.e. those companies that are engaged in the business of developing, maintaining and operating infrastructure facilities)
2. A Company that issues debentures with a maturity up to 18 months

## Redemption of Debenture Out of Profits

When debentures are redeemed out of profit then no capital is utilised for redemption. Before redeeming the debentures profits are transferred to DRR from Profit and Loss Appropriation Account. The creation of DRR is mandatory as per the guidelines laid down by Securities and Exchange Board of India (SEBI). SEBI mandates transferring amount equal to $50 \%$ of debentures issued to DRR before redeeming debentures. In this method, as profits are transferred to the DRR Account, thereby reducing the total amount of profits, therefore this method is termed as Redemption of Debentures Out of Profits. In this method, first of all, the required profits are transferred from Statement of Profit and Loss to the DRR Account. The working of which is shown in the Notes to Accounts of Reserves and Surplus (as prescribed in Revised Schedule VI). The final balance (after considering DRR) is shown as the sub-head 'Reserves and Surplus' under the main head of Shareholders' Funds on the Equity and Liabilities side of the Company's Balance Sheet. Lastly, when all the debentures are redeemed, then DRR account is closed by transferring its amount to the General Reserve.

## Q10 :

## Explain the guidelines of SEBI for creating Debenture Redemption Reserve.


#### Abstract

Answer : The following are the main points of SEBI's guidelines for creation of Debenture Redemption Reserve (DRR). 1. Every company that issues debentures with a maturity of more than 18 months shall create DRR.


2. An amount equal to $50 \%$ of debenture issued shall be transferred to DRR before starting redemption of debentures.
3. Creation of DRR is applicable only for Non-Convertible Debentures and for non-convertible part of Partly Convertible Debentures.
4. Any withdrawal from DRR is allowed only after $10 \%$ of debentures are redeemed.

Thus, as per the SEBI's guidelines, $50 \%$ of the debentures issued should be redeemed out of the profits that are transferred to DRR and the remaining $50 \%$ of the debentures issued can be redeemed either out of profits or out of capital. Hence, no company can redeem all the debentures issued purely out of the capital.

As per the SEBI's guidelines the following companies are exempted from the creation of DRR.

1. Infrastructure companies (i.e. those companies that are engaged in the business of developing, maintaining and operating infrastructure facilities)
2. A Company that issues debentures with a maturity up to 18 months

## Q11 :

## Describe the steps for creating Sinking Fund for redemption of debentures.


#### Abstract

Answer : The various steps involved in the creation of Sinking Fund for redemption of debentures can be better understood by the help of the example explained below.

A Company issued $10 \%$ Debentures of Rs 5,00,000 for 3 years. The investment is expected to earn $6 \%$ p.a. The Sinking Fund table shows that 0.31411 invested annually at $6 \%$ amount to Rs 1 in 3 years.


Step1: Calculate the amount of installment to be required every year for investment with the help of the Sinking Fund table. Like in the example Rs $1,57,055$ (i.e. $0.31411 \times 5,00,000$ ) is required every year.
Step 2: The amount of installment calculated in the above step is transferred to the Debenture Redemption Fund (Sinking Fund) by debiting from Profit and Loss Appropriation Account.

Step 3: In the first year, the above installment is invested to yield amount required for redemption of debenture by debiting Debenture Redemption Fund Investment Account. Step 4:
The interest on investment is received on half yearly or annual basis. In the example, the
interest of Rs 9,423 is received on annual basis. $\left(1,57,055 \times \frac{6}{100}=\right.$ Rs 9,423$)$
Step 5: The total amount of investment, i.e. interest plus installment is invested in the subsequent year. In the example, Rs $1,66,478$ (i.e. Rs $1,57,055+$ Rs 9,423 ) is invested in the next year.

Step 6: Repeat the Step 2, 3, 4 for each subsequent years up to the end of the life of the debenture. In the year of redemption, the installment (i.e. the last installment) will be debited to the Profit and Loss Appropriation Account but will not be invested.

Step 7: In the year of redemption, the investment is sold off.
Step 8: The profit (loss) on the sale of the investment is transferred by debiting (crediting) Debenture Redemption Fund Investment Account to the Debenture Redemption Fund Account.

Step 9: The payment to the debenture holder is made.
Step 10: The balance of Debenture Redemption Fund Account if any, is transferred to the General Reserve.

## Q12 :

## Can a company purchase its own debentures in the open market? Explain.


#### Abstract

Answer :

Yes, a company can purchase its own debentures provided it is authorised by its Article of Association. As per the Company Act, if a company is authorised by its Article of Association, only then it may purchase its own debentures from the open market. The main purposes of such purchase are as follows:


1. For immediate cancellation of debenture liability, if the interest rate on its debenture is higher than the market rate of interest.
2. A company may also purchase its own debentures with the motive of investment and sell them at higher price in future and thereby earn profit.

A company may purchase its own debentures at discount or at premium for cancellation.

## 1. If Debentures are purchased at Discount for Cancellation

When the company purchases its own debentures at discount for cancellation, then the following Journal entries are recorded.

> Own Debentures A/c To Bank A/c (Own debentures purchased)


## 2. If Debentures are Purchased at Premium for Cancellation

Own Debentures A/c
Dr.
To Bank A/c
(Own debentures purchased)

Debentures A/c Dr. (with the face value)
Loss on Redemption of Debentures A/c (with the difference between Amount paid and face value)
To Own Debentures A/c
(Own Debentures cancelled)

## Q13 :

What is meant by conversion of debentures? Describe the method of such a conversion.


#### Abstract

Answer : When a debenture holder can convert his/her debentures into shares or new debentures after the expiry of a specified period of time, then it is known as redemption of debentures by conversion. As the company does not need to pay any funds for the redemption, so there is no need to maintain Debenture Redemption Reserve (DRR). The new shares or debentures may be issued at par, premium or at discount.


If a debenture holder exercises the conversion option, then the issue price of shares must be equal to or less than the amount actually received from debentures.

## Accounting Treatment

1. For amount due to debenture holders

Debenture A/c Dr.
To Debenture holders A/c
(Debentures redeemed)
2. For discharging liability to the debenture holders

Debenture holders A/c Dr.
To Shares/Debentures (New) A/c
(Debenture holder amount discharged)

Numerical questions : Solutions of Questions on Page Number : 146
Q1 :
X.Ltd. invites application for the issue of $\mathbf{1 0 , 0 0 0}, \mathbf{1 4 \%}$ 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 $\mathbf{1 3 , 5 0 0}$ debentures, out of which applications for $\mathbf{8 , 0 0 0}$ debentures are allotted in full, 5,000 only $\mathbf{4 0 \%}$ and the remaining rejected. The surplus money on partially allotted applications is utilised towards allotment. All the sums due are duly received.

Answer :

Books of X. Ltd.

Journal

| Date | Particulars | L.F. | Debit Amount | Credit Amount |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rs | Rs |
|  | Bank A/c Dr. <br> To 14\% Debenture Application A/c (14\% Debenture application money for 13,500 debentures <br> @ 20 each received) |  | 2,70,000 | 2,70,000 |
|  | $14 \%$ Debenture Application A/c Dr. <br> To 14\% Debenture A/c <br> To $14 \%$ Debenture Allotment A/c |  | 2,70,000 | $\begin{array}{r} 2,00,000 \\ 60,000 \end{array}$ |



Q2 :
R.Ltd. offered $\mathbf{2 0 , 0 0 , 0 0 0}, \mathbf{1 0 \%}$ Debenture of Rs 200 each at a discount of $\mathbf{7 \%}$ redeemable at premium of $\mathbf{8 \%}$ after 9 years. Record necessary entries in the books of R. Ltd.

Answer :

## Books of R.Ltd.

## Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c Dr. <br> To $10 \%$ Debenture Application \& Allotment <br> A/c <br> (Debenture Application and Allotment money <br> received <br> for 20,00,000 10\% Debentures @ Rs 200 each) <br> $10 \%$ Debenture Application and Allotment Dr. <br> A/c <br> Loss on Issue of Debenture A/c Dr. <br> Discount on Issue of Debentures A/c <br> To 10\% Debenture A/c <br> To Premium on Redemption of Debentures A/c <br> (Allotment of 20,00,000 debenture @ Rs 200 <br> each at $7 \%$ <br> discount with the term of $8 \%$ premium on <br> redemption) |  | 37,20,00,000 <br> 37,20,00,000 <br> 3,20,00,000 <br> 2,80,00,000 | $\begin{gathered} 37,20,00,000 \\ \\ \\ 40,00,00,000 \\ 3,20,00,000 \end{gathered}$ |

Q3 :
M.Ltd. took over assets of Rs $9,00,00,000$ and liabilities of Rs $\mathbf{7 0 , 0 0 , 0 0 0}$ of S.Ltd. and issued $\mathbf{8 \%}$ Debenture of Rs 100 each. Record necessary entries in the books of M. Ltd.

## Answer :

## Books of M. Ltd.

## Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Sundry Assets Dr. To Sundry Liabilities A/c To S.Ltd. (Assets and liabilities of S. Ltd. taken over) |  | $9,00,00,000$ | $\begin{array}{r} 70,00,000 \\ 8,30,00,000 \end{array}$ |
|  | S. Ltd. Dr. To $8 \%$ Debenture A/c (8,30,000 $8 \%$ debentures @ 100 each issued to S Ltd. in consideration of assets and liabilities) |  | 8,30,00,000 | 8,30,00,000 |

Q4 :
B.Ltd. purchased assets of the book value of Rs $4,00,000$ and took over the liability of Rs $\mathbf{5 0 , 0 0 0}$ 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.

Answer :

Case (a)
Book of B. Ltd.

## Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Sundry Assets A/c Dr. <br> Goodwill A/c Dr. <br> To Sundry Liabilities A/c  <br> To Mohan Bros.  <br> (Assets and liabilities of Mohan Bros. taken over)  |  | $\begin{array}{r} 4,00,000 \\ 30,000 \end{array}$ | $\begin{array}{r} 50,000 \\ 3,80,000 \end{array}$ |
|  | Mohan Bros. To Debenture A/c (3,800 debentures of 100 each issued to Mohan Bros. in consideration of assets and liabilities) |  | 3,80,000 | 3,80,000 |

Case (b)

| Sundry Assets A/c Dr. <br> Goodwill A/c Dr. <br> To Sundry Liabilities A/c <br> To Mohan Bros. <br> (Assets and liabilities of Mohan Bros. taken over) | $\begin{array}{r} 4,00,000 \\ 30,000 \end{array}$ | $\begin{array}{r} 50,000 \\ 3,80,000 \end{array}$ |
| :---: | :---: | :---: |
| Mohan Bros. Dr. <br> Discount on Issue of Debenture A/c Dr. <br> To Debenture A/c  <br> To Bank A/c  <br> (Issued 4,222 debentures of Rs 100 each at $10 \%$ discount  <br> and balance paid in cash)  | $\begin{array}{r} 3,80,000 \\ 42,222 \end{array}$ | $\begin{array}{r} 4,22,200 \\ 22 \end{array}$ |

## Case (c)



Q5 :
X.Ltd. purchased a Machinery from $Y$ for an agreed purchase consideration of Rs 4,40,000 to be satisfied by the issue of $\mathbf{1 2 \%}$ debentures of Rs 100 each at a premium of Rs 10 per debenture. Journalise the transactions.

Answer :

## Books of X. Ltd.

## Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Machinery A/c Dr. To Y (Machinery purchased from Y) |  | 4,40,000 | 4,40,000 |
|  | ```\(\mathrm{Y} \quad\) Dr. To 12\% Debentures A/c To Securities Premium A/c (Allotted 4,000 debentures of Rs 100 each at a premium of Rs 10 per debenture in consideration of Machinery purchased)``` |  | 4,40,000 | $\begin{array}{r} 4,00,000 \\ 40,000 \end{array}$ |

## Q6 :

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

## Answer :

(i)

## Books of X. Ltd.

Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c Dr. <br> To 10\% Debentures A/c <br> To Securities Premium A/c <br> (Issued 15,000, 10\% debentures of Rs 100 each at <br> $10 \%$ premium) |  | 16,50,000 | $\begin{array}{r} 15,00,000 \\ 1,50,000 \end{array}$ |

X Ltd.
Balance Sheet

| Particulars | Note No. | Amount <br> (Rs) |
| :---: | :---: | ---: |
| I. Equity and Liabilities 1. <br> Shareholders' Funds <br> a. Reserves and Surplus <br> 2. Non-Current Liabilities <br> a. Long-Term Borrowings <br> 3. Current Liabilities | 2 |  |
| Total | $1,50,000$ |  |
| II. Assets <br> 1. Non-Current Assets <br> 2. Current Assets <br> a. Cash and Cash <br> Equivalents | 3 | $15,00,000$ |
| Total | $\mathbf{1 6 , 5 0 , 0 0 0}$ |  |
|  |  |  |

## NOTES TO ACCOUNTS

| Note No. | Particulars | Amount <br> (Rs) |
| :---: | :--- | :---: |
| 1 | Reserves and Surplus <br> Securities Premium <br> 2 | Long-Term Borrowings <br> $10 \%$ Debentures (Secured) |
| 3 | Cash and Cash Equivalents <br> Cash at Bank | $15,00,000$ |

(ii)

|  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Bank A/c | Dr. |  | $14,25,000$ |  |
| Discount on Issue of Debentures A/c | Dr. |  | 75,000 |  |
| To 10\% Debentures |  |  |  | $15,00,000$ |
| (Issued 15,000 10\% Debenture of Rs 100 each at |  |  |  |  |
| $5 \%$ discount) |  |  |  |  |

X Ltd.
Balance Sheet

| Particulars | Note No. | Amount <br> (Rs) |
| :---: | :---: | :---: |
| I. Equity and Liabilities <br> 1. Shareholder's Funds <br> 2. Non-Current Liabilities <br> a. Long-Term Borrowings <br> 3. Current Liabilities | 1 | $15,00,000$ |
| Total |  | $\mathbf{1 5 , 0 0 , 0 0 0}$ |
| II. Assets <br> 1. Non-Current Assets <br> a. Other Non-Current <br> Assets | 2 |  |

## 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 .

Answer :

| S.No. | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount Rs |
| :---: | :---: | :---: | :---: | :---: |
| (i) | Bank A/c Dr. <br> Discount on Issue of Debenture A/c Dr. <br> $\quad$ To Debenture A/c  <br> (Debenture of Rs 100 issued at Rs 5 discount  <br>   <br> with the term repayable at Rs 100)  |  | 95 5 | 100 |
| (ii) | Bank A/c Dr. <br> Loss on Issue of Debenture A/c Dr. <br> To Debenture A/c  <br> To Premium on Redemption of Debentures  <br> (Debenture of Rs 100 issued at a discount of  <br> Rs 5 and with the term repayable at Rs 105)  |  | 95 10 | 100 |
| (iii) | Bank A/c Dr. <br> Loss on Issue of Debenture A/c Dr. <br> To Debenture A/c  <br> To Premium on Redemption of Debenture A/c  <br> (Debenture of Rs 100 issued with the term  <br> repayable at Rs 105)  |  | 100 |  |

Q8 :
A.Ltd. issued 50,00,000, $8 \%$ Debenture of Rs 100 at a discount of $\mathbf{6 \%}$ 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.

## Answer :

Loss on issue of debenture $=6 \%($ discount on issue $)+4 \%($ premium on redemption $)=10 \%$

$$
=50,00,000 \times 100 \times \frac{10}{100}=5,00,00,000
$$

| At the end <br> of | Debenture Outstanding | Ratio | Loss to be written off every year |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| March 2001 | $50,00,00,000$ | 5 | $5,00,00,000 \times \frac{5}{18}$ | $=1,38,88,889$ |  |
| March 2002 | $50,00,00,000$ | 5 | $5,00,00,000 \times \frac{5}{18}$ | $=$ | $1,38,88,889$ |
| March 2003 | $30,00,00,000$ | 3 | $5,00,00,000 \times \frac{3}{18}$ | $=$ | $83,33,333$ |
| March 2004 | $30,00,00,000$ | 3 | $5,00,00,000 \times \frac{3}{18}$ | $=$ | $83,33,333$ |


| March 2005 | 20,00,00,000 | 2 | $5,00,00,000 \times \frac{2}{18}$ $=$ | 55,55,556 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 18 |  | Rs 5,00,00,000 |
|  |  |  |  |  |

Loss on Issue of Debenture Account

| Dr. |  |  |  |  |  |  | Cr. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date |  |  | Amount |  |  | J.F. | Amount <br> Rs |
|  | Particulars | J.F. | Rs | Date | Particulars |  |  |
| 2000 | Debenture |  |  | 2001 | Particulars |  |  |
| $\begin{gathered} \text { April } \\ 01 \end{gathered}$ |  |  | $5,00,00,000$ | March 31 | Profit and Loss Balance c/d |  |  |
|  |  |  |  |  |  |  | 1,38,88,889 |
|  |  |  |  |  |  |  | 3,61,11,111 |
|  |  |  | 5,00,00,000 |  |  |  | 5,00,00,000 |
| 2001 |  |  |  | 2002 |  |  |  |
| April |  |  |  | March |  |  |  |
| 01 | Balance b/d |  | 3,61,11,111 | 31 | Profit and Loss |  |  |

## Q9 :

A company issues the following debentures:
(i) $\mathbf{1 0 , 0 0 0}, \mathbf{1 2 \%}$ debentures of Rs 100 each at par but redeemable at premium of $\mathbf{5 \%}$ 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) $\mathbf{5 , 0 0 0}, \mathbf{1 2 \%}$ debentures of Rs $\mathbf{1 , 0 0 0}$ each at a premium of $5 \%$ but redeemable at par after 5 years;
(iv) $\mathbf{1 , 0 0 0}, \mathbf{1 2 \%}$ debentures of Rs 100 each issued to a supplier of machinery costing Rs $\mathbf{9 5 , 0 0 0}$. The debentures are repayable after 5 years; and
(v) 300, $\mathbf{1 2 \%}$ 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.

Answer :

In the books of $\qquad$ Journal
a) Issue of Debentures

| $\begin{gathered} \text { S. } \\ \text { No. } \end{gathered}$ | Particulars | L.F. | Debit <br> Amount Rs | Credit <br> Amount Rs |
| :---: | :---: | :---: | :---: | :---: |
| (i) | Bank A/c Dr. <br> To 12\% Debenture Application A/c (Debenture Application money of $10,00012 \%$ debentures <br> @ 100 each received) |  | 10,00,000 | 10,00,000 |
|  | 12\% Debenture Application A/c Dr. Loss on Issue of Debenture A/c Dr. To 12\% Debenture A/c To Premium on Redemption of Debenture A/c (Debenture Application money of $10,00012 \%$ debentures @ Rs 100 each transferred to $12 \%$ Debentures Account and the Debentures are issued with term of repayable at 5\% premium) |  | $\begin{array}{r} 10,00,000 \\ 50,000 \end{array}$ | $\begin{array}{r} 10,00,000 \\ 50,000 \end{array}$ |
| (ii) | Bank A/c Dr. <br> To Debenture Application and Allotment A/c (Debenture Application money received excluding discount on issue) |  | 9,00,000 | 9,00,000 |


| $12 \%$ Debenture Application \& Allotment A/c Dr. <br> Discount on Issue of Debenture A/c Dr. <br> To Debentures A/c (Debenture Allotment made due) | $\begin{aligned} & 9,00,000 \\ & 1,00,000 \end{aligned}$ | 10,00,000 |
| :---: | :---: | :---: |
|  (iii) Bank A/c$\quad$ Dr.    $52,50,000$ <br> To Debenture Application and Allotment A/c     <br> (Debenture Application money received)     <br>      <br> Sebenture Application and Allotment A/c Dr. $52,50,000$   <br> To Debenture A/c $\quad 50,00,000$     <br> To Security Premium A/c $2,50,000$    <br> (Allotment of debenture at premium)     | 52,50,000 |  |

Q10 :
A company issued debentures of the face value of Rs 5,00,000 at a discount of $\mathbf{6 \%}$ on January 01, 2001. These debentures are redeemable by annual drawings of Rs, $1,00,000$ made on December 31 each year. The directors decided to write off discount based on the debentures outstanding each year.

Calculate the amount of discount to be written-off each year. Give journal entries also.

Answer :

## Journal

| Date | Particulars |  | Debit | Credit |
| :---: | :---: | :---: | :---: | :---: |
| Lan 1 | Lank A/c <br> To Debenture Application and Allotment A/c <br> (Debenture Application money received) | Dr. | Amount |  |
| Rs |  |  |  |  |


| Jan 1 | Debenture Application and Allotment A/c <br> Discount on Issue of Debenture A/c <br> To Debentures A/c <br> (Debenture Application money transferred to <br> Debenture Account) | Dr. <br> Dr. | $4,70,000$ |
| :--- | :--- | ---: | ---: | ---: |
| 30,000 |  |  |  |$\quad 5,00,000$

Amount of Discount on Issue of Debenture $=5,00,000 \times \frac{6}{100}=30,000$

| Year | Debenture <br> outstanding | Ratio | Amount written off |
| :---: | :---: | :---: | :---: |
| 2001 | $5,00,000$ | 5 | $30,000 \times \frac{5}{15}=1$ |
| 2002 | $4,00,000$ | 4 | $30,000 \times \frac{4}{15}=8,000$ |
| 2003 | $3,00,000$ | 3 | $30,000 \times \frac{3}{15}=6,000$ |
| 2004 | $2,00,000$ | 2 | $30,000 \times \frac{2}{15}=4,000$ |
| 2005 | $1,00,000$ | 1 | $30,000 \times \frac{1}{15}=2,000$ |
|  |  |  |  |

## Q11 :

A company issued $10 \%$ Debentures of the face value of Rs,1,20,000 at a discount of $\mathbf{6 \%}$ on January 01,2001 . The debentures are payable by annual drawings of Rs 40,000 commencing from the end of third year.

How will you deal with discount on debentures?

Show the discount on debentures account in the company ledger for the period of duration of debentures. Assume accounts are closed on December 31.

## Answer :

In the books of.

## Journal



Q12 :
B.Ltd. issued debentures at $94 \%$ for Rs 4,00,000 on April 01, 2000 repayable by five equal drawings of Rs $\mathbf{8 0 , 0 0 0}$ each. The company prepares its final accounts on December 31 every year.

Indicate the amount of discount to be written-off every accounting year assuming that the company decides to write off the debentures discount during the life of debentures.
(Amount to be written-off: 2000 Rs 6,000; 2001 Rs 6,800; 2002 Rs 5,200; 2003 Rs 3,600;
2004 Rs 2,000; 2005 Rs 400).

## Answer :

Debenture issued = 4,00,000@ $94 \%$
Discount on Issue $=6 \%$
Amount on Discount on Issue of Debenture

$$
=4,00,000 \times \frac{6}{100}=24,000
$$

Amount of discount to written off every year

In $2000=$ Rs 6,000

In $2001=2,000+4,800=$ Rs 6,800
In $2002=1,600+3,600=$ Rs 5,200

In $2003=1,200+2,400=$ Rs 3,600
In $2004=800+1,200=$ Rs 2,000

In $2005=$ Rs 400

Working Notes
i) Amount of discount to be written off every year


| Apr-Dec | $3,20,000$ | 4 | 9 | $36=$ | 4,800 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2002 |  |  |  | $24,000 \times \frac{36}{180}$ |  |
| Jan-Mar | $3,20,000$ | 4 | 3 | $12=$ | 1,600 |
| Apr-Dec | $2,40,000$ | 3 | 9 | 27 | 3,600 |
| 2003 |  |  |  | $24,000 \times \frac{12}{180}$ |  |
| Jan-Mar | $2,40,000$ | 3 | 3 | 9 | $=$ |
| Apr-Dec | $1,60,000$ | 2 | 9 | 18 | $2,000 \times \frac{27}{180}$ |
| 2004 |  | Jan- | Mar 1,60,000 2 | $24,000 \times \frac{9}{180}$ |  |

Q13 :
B. Ltd. issued 1,000, $12 \%$ debentures of Rs 100 each on January 01, 2005 at a discount of $5 \%$ redeemable at a premium of $10 \%$.

Give journal entries relating to the issue of debentures and debentures interest for the period ending December 31, 2005 assuming that interest is paid half yearly on June 30 and December 31 and tax deducted at source is $\mathbf{1 0 \%}$. B.Ltd. follows calendar year as its accounting year.

Answer :

| Date | Particulars |  | Debit | Credit |
| :---: | :--- | :--- | :--- | :--- |
| Amount | Lmount <br> Rs |  |  |  |
| 2005 |  |  | Rs |  |
| Jan. 01 | Bank A/c | Dr. |  | 95,000 |
|  | Loss on Issue on Debentures A/c |  |  |  |
| To 12\% Debenture A/c | Dr. |  | 15,000 |  |
|  |  |  |  | $1,00,000$ |


| June 30 | To Premium on Redemption of Debentures A/c (Debenture issued at discount and redeemable at Premium) | 6,000 | 10,000$\begin{array}{r} 600 \\ 5,400 \end{array}$ |
| :---: | :---: | :---: | :---: |
|  | Debenture Interest A/c Dr. To Income Tax Payable A/c To Debenture Holders A/c (Amount of interest on $12 \%$ debentures Rs $1,00,000$ due for 6 months and $10 \%$ tax deducted at source) |  |  |
| June 30 | Debenture Holders A/c Dr. <br> To Bank A/c <br> (Interest paid to Debenture Holders) | 5,400 | 5,400 |
| Dec. 31 | Debenture Interest A/c Dr. To Income Tax Payable A/c To Debenture Holders A/c (Amount of interest on $12 \%$ Debentures Rs 1,00,000 due for 6 months and $10 \%$ tax deducted at source) | 6,000 | 600 5,400 |
| Dec. 31 | Debenture Holders A/c Dr. <br> To Bank A/c <br> (Interest paid to Debenture Holders) |  | $\begin{aligned} & 5,400 \\ & 5,400 \end{aligned}$ |
| Dec. 31 | Profit and Loss A/c Dr. <br> To Debenture Interest A/c (Interest on debentures transferred to Profit and Loss Account) | 12,000 | 12,000 |

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?

Answer :


| (c) <br> Debenture A/c Dr. <br> Premium on Redemption of Dr. <br> Debenture A/c <br> To Debentures Holders A/c <br> (Amount due for redemption on debentures that were <br> issued at <br> discount with the term of redeemable at premium) <br> Debenture Holders A/c Dr. <br> To Bank A/c <br> (Payment made to Debenture Holders) |  |
| :--- | :--- | :--- |

## Q15 :

On January 01, 1998, X. Ltd. issues 5,000, $8 \%$ Debentures of Rs 100 each repayable at par at the end of three years. It has been decided to set up a cumulative sinking fund for the purpose of their redemption. The investments are expected to realise $4 \%$ net. The Sinking Fund Table shows that Rs 0.320348 amounts to one rupee @ $4 \%$ per annum in three years. On December 31, 2000 the balance at bank was Rs 2,42,360 and the investments realised Rs $\mathbf{3 , 2 5 , 0 0 0}$. The debentures were paid off.

Give journal entries and show ledger account.

Answer :

Books of X. Ltd.

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount Rs |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1998 \\ & \text { Jan } 1 \end{aligned}$ | Bank A/c <br> To Debentures A/c (Issued 5,000 Debentures @ Rs 100 each) |  | $5,00,000$ | 5,00,000 |
| $\begin{gathered} \text { Dec } \\ 31 \end{gathered}$ |  Dr. <br> Profit and Loss Appropriation A/c  <br> To Cumulative Sinking Fund A/c  <br> (Annual Installment of Cumulative Sinking Fund  <br> debited to Profit  <br> and Loss Appropriation Account)  <br> Cumulative Sinking Fund Investment A/c Dr. |  | $\begin{aligned} & 1,60,174 \\ & 1,60,174 \end{aligned}$ | 1,60,174 |



## Q16 :

On January 01, 2003 a company issued $15 \%$ debentures of Rs $10,00,000$ at par. The debentures were redeemable at par after three years on December 31, 2003. A sinking fund was set up to raise funds for redemption of debentures. The amount for the purpose was invested in $6 \%$ Government securities of Rs 100 each available at par. The sinking fund table shows that if investments earn $6 \%$ per annum, to get Re. 1 at the end of 3 years, one has to invest Rs 0.31411 every year together with interest that will be earned. On December 31, 2005, all the Government securities were sold at a total loss of Rs 6,000 and the debentures were redeemed at par.

Prepare Debentures Account Sinking Fund Account, Sinking Fund Investment Account and Interest on Sinking Fund Investment Company closes its books of accounts every year on December 31.

## Answer :

## Ledger

15\% Debentures Account
Dr.

|  |  | Amount |  |  | Amount |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | J.F. | Rs | Date | Particulars | J.F. | Rs |
| 2003 |  |  | 2003 |  |  |  |  |
| Dec |  |  |  |  |  |  |  |
| 31 |  |  |  |  |  |  |  |

Balance c/d

Sinking Fund Account
Dr.


Sinking Fund Investment Account
Dr.
Cr.

Q17 :

On January 01, 2004 the following balances appeared in the books of Z. Ltd.:

|  | Rs |
| :--- | ---: |
| 6\% Debentures | $1,00,000$ |
| Debentures Redemption Reserve Fund | 80,000 |
| D.R. Reserve Fund Investments | 80,000 |

The investments consisted of $\mathbf{4 \%}$ Government securities of the face value of Rs $\mathbf{9 0 , 0 0 0}$. The annual installment was Rs $\mathbf{1 6 , 4 0 0}$. On December 31, 2004, the balance at Bank was Rs 26,000 (after receipt of interest on D.R.Reserve Fund Investment). Investments were realised at $\mathbf{9 2 \%}$ and the Debentures were redeemed. The interest for the year had already been paid.

Show the ledger accounts affecting redemption.

Answer :

Book of Z. Ltd.

| Dr. $6 \%$ Debentures Account |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | J.F. | Amount Rs | Date | Particulars | J.F. | Amount Rs |
| $\begin{gathered} 2004 \\ \text { Dec } \\ 31 \end{gathered}$ | Debenture Holders |  | 1,00,000 | $\begin{aligned} & 2004 \\ & \text { Jan } \end{aligned}$ | Balance b/d |  | 1,00,000 |
|  |  |  | 1,00,000 |  |  |  | 1,00,000 |
|  |  |  |  |  |  |  |  |

Debentures Redemption Reserve Fund
Dr.
Cr.

| Date | Particulars | J.F. | Rs | Date | Particulars | J.F. | Rs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 <br> Dec <br> 31 | General Reserve |  | $1,02,800$ | 2004 <br> Jan 1 <br> Dec <br> Balance b/d <br> 31 <br> Interest on <br> Debenture <br> Redemption Reserve <br> Fund Investment (4\% <br> of 90,000) <br> Profit and Loss <br> Appropriation <br> Debentures <br> Redemption Reserve <br> Fund Investment | 30,000 |  |  |

Debenture Redemption Reserve Fund Investment Account
Dr.

| Date | Particulars | J.F. | Rmount | Date | Particulars | J.F. | Rs |
| :--- | :--- | ---: | ---: | :---: | :---: | :---: | :---: |
| 2004 |  |  |  |  |  |  |  |
| Jan 1 | Balance b/d (face <br> value Rs 90,000) <br> Debentures <br> Redemption <br> Reserve Fund |  | 80,000 | 2004 <br> Dec <br> 31 | Bank (92\% of <br> $90,000)$ |  | 82,800 |
|  |  | 2,800 |  |  |  |  |  |
|  |  | 82,800 |  |  | 82,800 |  |  |

The following balances appeared in the books of A.Ltd. on January 01, 2004

|  | Rs |
| :--- | ---: |
| $12 \%$ Debentures | $4,00,000$ |
| Debentures Redemption Fund | $3,60,000$ |
| Debentures Redemption Fund Investment | $3,60,000$ |
| Securities Premium | 30,000 |
| Bank Balance $1,00,000$ |  |

On January 01, 2004, the company redeemed all the debentures at 105 per cent out of funds raised by selling all the investments at Rs $\mathbf{3 , 4 8 , 0 0 0}$. Prepare the necessary ledger accounts.

## Answer :

## Books of A. Ltd.

12\% Debentures Account
Dr

| Date | Particulars | J.F. | Amount <br> Rs | Date | Particulars | J.F. | Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \hline 2004 \\ \text { Jan. } \\ 01 \end{gathered}$ | Debenture Holders |  |  | $\begin{gathered} 2004 \\ \text { Jan. } \\ 01 \end{gathered}$ | Balance b/d |  |  |
|  |  |  | 4,00,000 |  |  |  | 4,00,000 |
|  |  |  | 4,00,000 |  |  |  | 4,00,000 |
|  |  |  |  |  |  |  |  |

Debenture Redemption Fund Account

| Dr. Cr. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | J.F. | Amount <br> Rs | Date | Particulars | J.F. | Amount <br> Rs |
| $\begin{gathered} \hline 2004 \\ \text { Jan. } \\ 01 \end{gathered}$ | Debentures <br> Redemption Fund <br> Investment <br> General Reserve |  | $\begin{array}{r} 12,000 \\ 3,48,000 \end{array}$ | $\begin{gathered} \hline 2004 \\ \text { Jan. } \\ 01 \end{gathered}$ | Balance b/d |  | 3,60,000 |
|  |  |  | 3,60,000 |  |  |  | 3,60,000 |
|  |  |  |  |  |  |  |  |

Debenture Redemption Fund Investment Account

| Dr. | Cr. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | J.F. | Amount Rs | Date | Particulars | J.F. | Amount Rs |
| 2004 <br> Jan. <br> 01 | Balance b/d |  | 3,60,000 | $\begin{gathered} 2004 \\ \text { Jan. } \\ 01 \end{gathered}$ | Bank <br> Debentures <br> Redemption Fund (Loss) |  | $\begin{array}{r} 3,48,000 \\ 12,000 \end{array}$ |
|  |  |  | 3,60,000 |  |  |  | 3,60,000 |
|  |  |  |  |  |  |  |  |

## Cash Book (Bank Column)

| Dr. | Cr. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | J.F. | Amount Rs | Date | Particulars | J.F. | Amount Rs |
| $\begin{array}{\|l\|} \hline 2004 \\ \text { Jan. } \\ 01 \end{array}$ | Balance b/d <br> Debentures <br> Redemption Fund Investment |  | $\begin{array}{r} 1,00,000 \\ 3,48,000 \end{array}$ | $\begin{aligned} & 2004 \\ & \text { Jan. } \\ & 01 \end{aligned}$ | Debenture <br> Holders <br> Balance c/d |  | $\begin{array}{r} 4,20,000 \\ 28,000 \end{array}$ |
|  |  |  | 4,48,000 |  |  |  | 4,48,000 |
|  |  |  |  |  |  |  |  |

Dr.
Securities Premium Account Cr.



Q19 :

The following balances appeared in the books of Z.Ltd. on January 01, 2004

|  | Rs |
| :--- | :---: |
| $12 \%$ Debentures | $1,50,000$ |
| Debentures Redemption Fund | $1,25,000$ |
| Debentures Redemption Fund Investment | $1,25,000$ |
| (Represented by Rs $1,47,500,3 \%$ Govt. Securities | $1,25,000$ |

The annual installment added to the fund is Rs 20,575. On December 31, 2004, the bank balance after the receipt of interest on the investment was Rs 39,100 . On that date, all the investments were sold at 83 per cent and the debentures were duly redeemed.

Show the necessary ledger accounts for the year 2004.

## Answer :

## Books of Z. Ltd.

## Journal

12\% Debentures Account


| $\begin{gathered} \text { Dec. } \\ 31 \end{gathered}$ | Debenture Holders | 1,50,000 | Jan. <br> 01 | Balance b/d | 1,50,000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1,50,000 |  |  | 1,50,000 |
|  |  |  |  |  |  |

Debenture Redemption Fund Account
Dr. Cr.

| Date | Particulars | J.F. | Amount <br> Rs | Date | Particulars | J.F. | Amount Rs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | Debentures <br> Redemption Fund <br> Investment <br> General Reserve |  |  | 2004 |  |  |  |
| Dec. $31$ |  |  |  | Jan. <br> 01 | Balance b/d |  | 1,25,000 |
|  |  |  | 2,575 |  |  |  |  |
| $\begin{gathered} \text { Dec. } \\ 31 \end{gathered}$ |  |  | 1,47,425 | Dec. | Profit and Loss |  | 20,575 |
|  |  |  |  | 31 | Appropriation |  |  |
|  |  |  |  | Dec. | Interest on |  |  |
|  |  |  |  | 31 | Debentures <br> Redemption Fund Investment |  | 4,425 |
|  |  |  | 1,50,000 |  |  |  | 1,50,000 |
|  |  |  |  |  |  |  |  |

Debenture Redemption Fund Investment Account
Dr. Cr.


## Bank Account

Dr. Cr.
$\left.\begin{array}{|c|c|c|c|c|c|c|c|}\hline \text { Date } & \text { Particulars } & \text { J.F. } & \text { Rs } & \text { Date } & \text { Particulars } & \text { J.F. } & \text { Rs } \\ \hline \text { 2004 } & & & 39,100 & \begin{array}{c}2004 \\ \text { Dec. } \\ 31 \\ \text { Dec. }\end{array} & \text { Balance b/d } & \text { Debenture Holders }\end{array}\right)$

Q20 :
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?

Answer :

| S.No. | Particulars | Debit | Credit |  |
| :--- | :--- | :---: | :---: | :---: |
| (a) | Profit and Loss Appropriation A/c <br> To Debentures Redemption Reserve A/c <br> (Profit transferred to Debentures Redemption Reserve) | Dr. | Amount | Amount |
| Rs |  |  |  |  |



Q21 :
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.

Answer :

## Books of A. Ltd.

| Dr.Debenture Account <br> Cr. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | J.F. | Amount <br> Rs | Date | Particulars | J.F. | Amount Rs |
|  |  |  |  |  |  |  |  |
|  | Bank |  | 1,00,000 |  | Bank |  | 4,75,000 |
|  | (Redemption) |  |  |  |  |  |  |
|  | Balance c/d |  | 4,00,000 |  | Discount on Issue |  | 25,000 |
|  |  |  | 5,00,000 |  |  |  | 5,00,000 |
|  |  |  |  |  |  |  |  |

Discount on Issue of Debentures
Dr. Cr.

| Date | Particulars | J.F. | Rs | Date | Particulars | J.F. | Rs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1^{\text {st }}$ year | Debenture A/c |  | 25,000 | 1 st <br> year | Profit and Loss |  | 8,333 |
|  |  |  |  |  |  |  |  |



Discount on Issue of Debenture $=5,00,000 \times \frac{5}{100}=25,000$

Writing of Discount on Issue of Debenture

| Year | Debenture <br> Outstanding | Ratio | Amount written off |
| :---: | :---: | :---: | :---: |
| 2001 | $5,00,000$ | 5 |  |

Q22 :
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.)

Answer :

## Books of X. Ltd.

Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |  |
| :---: | :--- | :--- | :--- | :---: | :---: |
| 2004 | Bank A/c 1 | Dr. |  |  |  |


| To Debenture Application and Allotment A/c <br> (Application and allotment money received for 5,000 <br> 15\% Debentures @ Rs 90 each ) |  | $4,50,000$ |
| :--- | :--- | :--- |

Debenture Application and Allotment A/c Dr. 4,50,000
Loss on Issue of Debenture A/c Dr. 1,00,000
To $15 \%$ Debentures A/c 5,00,000
To Premium on Issue of Debentures 50,000 (5,000 15\% Debentures @ Rs 100 each with the term of $10 \%$ discount on issue and repayable at $10 \%$ premium allotted)

Dec 31 15\% Debenture A/c Dr. 1,25,000
Premium on Redemption of Debentures A/c Dr. 12,500 To Debentureholders 1,37,500
(1250 15\% Debentures @ Rs100 each due for


Q23 :
Z.Ltd. issued 2,000, 14\% debentures of Rs. 100 each on January discount of $10 \%$, redeemable at a premium of $10 \%$ in equal 4 years out of profits.

Give journal entries both at the time of issue and redemption of the treatment of loss on issue of debentures and interest.)

01, 2005 at a annual drawings in
debentures. (Ignore

Answer :

Books of Z. Ltd.

## Journal

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline 2005 \\ & \text { Jan } 1 \end{aligned}$ | Bank A/c Dr. <br> To Debenture Application and Allotment A/c (Debenture Application and Allotment money received for 2,000 <br> 14\% Debentures of Rs 100 at Rs 90 each) |  | 1,80,000 | 1,80,000 |
| Dec 31 | Debenture Application and Allotment Dr. A/c Loss on Issue of Debentures A/c Dr. To 14\% Debentures A/c To Premium on Issue of Debentures A/c (2000 14\% Debentures @ Rs 100 each allotted with the term of $10 \%$ discount on issue and repayable at $10 \%$ premium) |  | $\begin{array}{r} 1,80,000 \\ 40,000 \end{array}$ | $\begin{array}{r} 2,00,000 \\ 20,000 \end{array}$ |
|  | Profit and Loss Appropriation A/c Dr. <br> To Debentures Redemption Reserve A/c (Profit transferred to Debentures Redemption Reserve) |  | 2,00,000 | 2,00,000 |
|  | 14\% Debentures A/c Dr. <br> Premium on Redemption of Debentures Dr. A/c <br> To Debenture Holders A/c <br> (Amount due for redemption of debentures) |  | 50,000 5,000 | 55,000 |
|  | Bank A/c Dr. To Debenture Holders A/c |  | 55,000 | 55,000 |



Q24 :
A.Ltd. purchased its own debentures of the face value of Rs. $2,00,000$ from the open market for immediate cancellation at Rs.92. Pass the journal entries.

Answer :

In the books of A. Ltd.

| Date | Particulars | L.F. | Debit Amount Rs | Credit <br> Amount Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Profit and Loss Appropriation A/c Dr. <br> To Debentures Redemption Reserve A/c <br> (Profit transferred to Debenture Redemption Reserve) |  | 2,00,000 | 2,00,000 |
|  | Own Debentures A/c Dr. To Bank A/c (2,000 Own Debentures @ Rs 100 each at Rs 92 purchased) |  | $1,84,000$ | $1,84,000$ |
|  | Debenture A/c Dr. <br> To Own Debentures A/c |  | 2,00,000 | 1,84,000 |


|  | To Profit on Cancellation of Debentures A/c <br> (Debenture of Rs 2,00,000 cancelled) | 16,000 |  |
| :--- | :--- | :--- | :--- |
| Profit on Cancellation of Debentures A/c <br> To Capital Reserve A/c <br> (Transfer of profit on redemption of debenture to <br> Capital <br> Reserve Account) | 16,000 | Dr. | 16,000 |

Q25 :
A.Ltd. purchased for cancellation Rs. $\mathbf{5 0 , 0 0 0}$ of its $\mathbf{1 5 \%}$ debentures at Rs.98. The expenses of purchase amounted to Rs. 50.

Answer :

In the books of A. Ltd.

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | Own Debenture A/c Dr. <br> To Bank A/c  <br> (Debentures face value Rs 50,000 purchased for  <br> cancellation)  |  | 49,050 | 49,050 |
|  | 15\% Debentures A/c Dr. <br> To Own Debenture A/c  |  | 50,000 | $49,050$ |


|  | To Profit on Cancellation of Debentures A/c <br> (Debentures face value of Rs 50,000 cancelled) | 950 |
| :--- | :--- | :--- | :--- |
| Profit on Cancellation of Debentures A/c <br> To Capital Reserve A/c <br> (Profit on cancellation of own debentures transferred <br> to <br> Capital Reserve Account) | 950 | 950 |

Q26 :
On January 01, 2002, X.Ltd. issued 40,000, $9 \%$ debentures of Rs. 100 each at Rs. 95.
The terms of issue provided that, beginning with 1999 , Rs.2,00,000 debentures should be redeemed either by drawings at par or by purchase in the open market every year. The expenses of issue amounted to Rs. 12,000 which were written-off in 2002 . The company also wrote off Rs.40,000 every year from Discount on Debentures Account. At the end of 2004, debentures to be redeemed were repaid by drawings. During 2005, the company purchased for cancellation 2,000 debentures at the market price of Rs. 98 on December 31, the expenses being Rs.400. Interest on debentures is payable at the end of every calendar year.

Pass the journal entries in the books of the company to record these transactions.

## Answer :

In the books of X . Ltd.

| Date |  |  | Debit | Credit |
| :---: | :---: | :---: | :---: | :---: |
|  |  | L.F. | Amount | Amount |
|  |  | Rs | Rs |  |

$\left.\begin{array}{|r|l|l|l|l|}\hline 2002 \\ \text { Jan } 1 & \begin{array}{l}\text { Bank A/c Dr. } \\ \text { To 9\% Debentures Application and Allotment A/c } \\ \text { (Debentures Application and Allotment money } \\ \text { received) }\end{array} & & 38,00,000\end{array}\right\}$

Q27 :
A.Ltd. redeemed $8,000,12 \%$ debentures of Rs. 100 each which were issued at a discount of $5 \%$, by converting them into equity shares of Rs. 10 each at par.

Answer :

In the books of A. Ltd.

| Date | Particulars |  | Debit | Credit |
| :---: | :---: | :---: | :---: | :---: |
|  |  | L.F. | Amount | Amount |
|  |  | Rs | Rs |  |



## Working Notes:-

Number of Shares to be issued
$=\frac{\text { Amount due to debenture holders }}{\text { Agreed amount of Shares }}$
$=\frac{7,60,000}{10}=76,000$

Q28 :
Y.Ltd. redeemed 4,800, $12 \%$ debentures of Rs. 100 each which were issued at par, at 110 per cent by converting them into equity shares of Rs. 10 each issued at a discount of $4 \%$. Journalise.

## Answer :

\begin{tabular}{|c|c|c|c|c|}
\hline Date \& Particulars \& L.F. \& \begin{tabular}{l}
Debit \\
Amount
Rs
\end{tabular} \& \begin{tabular}{l}
Credit \\
Amount
Rs
\end{tabular} \\
\hline \& \begin{tabular}{|lr|}
\hline \(12 \%\) Debentures A/c \& Dr. \\
Premium on Redemption of Debenture \& Dr. \\
A/c \& \\
To Debenture Holders A/c \& \\
(Amount of debentures due to Debenture Holders) \& \\
\hline Debenture Holders A/c Dr. \& \\
Discount on Issue of Shares A/c Dr. \& \\
To Equity Share Capital A/c \\
(Equity shares issued to Debenture Holders in lieu of \\
debentures) \& \\
\hline
\end{tabular} \& \& \(4,80,000\)
48,000

$5,28,000$

22,000 \& $$
\begin{gathered}
5,28,000 \\
\\
5,50,000
\end{gathered}
$$ <br>

\hline
\end{tabular}

## Working Notes:-

Number of shares to be issued
$=\frac{\text { Amount due to debenture holders }}{\text { Agreed amount of Shares }}$
$=\frac{5,28,000}{9.6}=55,000$

Q29 :
Z.Ltd. redeemed $\mathbf{2 , 0 0 0}, \mathbf{1 2 \%}$ debentures of Rs. 100 each which were issued at a discount of $\mathbf{5 \%}$, by converting them into equity shares of Rs. 10 each issued at a premium of $\mathbf{2 5 \%}$.
Journalise.

## Answer :

## In the books of $\mathbf{Z}$. Ltd.

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
| :---: | :---: | :---: | :---: | :---: |
|  | 12\% Debentures A/c <br> To Debenture Holders <br> To Discount on Issue of Debentures A/c <br> (Amount of debentures due to Debenture Holders) <br>  <br> Debenture Holders A/c Dr. <br> To Equity Share Capital A/c <br> To Securities Premium A/c <br> (15,200 equity shares @ Rs 10 each at 25\% Premium <br> issued to Debenture Holders in lieu of debentures) |  | $\begin{aligned} & \hline 2,00,000 \\ & 1,90,000 \end{aligned}$ | $\begin{array}{r} 1,90,000 \\ 10,000 \\ \\ 1,52,000 \\ 38,000 \end{array}$ |
| Note: Here it has been assumed that the debentures are converted into equity shares before the date of redemption. If the debentures are converted into shares before maturity, then the net proceeds from the issue of debentures will be taken at the time of conversion. |  |  |  |  |

## Working Notes:-

Number of shares to be issued
$=\frac{\text { Amount due to debenture holders }}{\text { Agreed amount of Shares }}$
$=\frac{1,90,000}{12.5}=15,200$

Q30 :
X.Ltd. redeemed 1,000, $12 \%$ debentures of Rs. 50 each by converting them into 15\% New Debentures of Rs. 100 each. Journalise.

## Answer :

## In the books of $\mathbf{X}$. Ltd.

| Date | Particulars | L.F. | Debit <br> Amount <br> Rs | Credit <br> Amount <br> Rs |
| :--- | :--- | :---: | :---: | :---: |
|  | $12 \%$ Debentures A/c Dr. <br> To Debenture Holders <br> (Amount of debentures due to Debenture Holders) |  | 50,000 | 50,000 |
| Debenture Holders Dr. <br> To 15\% Debentures A/c <br> (15\% Debentures issued to Debenture Holders in <br> lieu of $100012 \%$ Debentures @ 100 each) | 50,000 | 50,000 |  |  |

## Working Notes:-

Number of Debentures to be issued
$=\frac{\text { Amount due to debenture holders }}{\text { Agreed amount of debentures }}$
$=\frac{50,000}{100}=500$

