

7. ISSUE & REDEMPTION OF DEBENTURES

MODEL WISE ANALYSIS OF PAST EXAM PAPERS OF IPCC

MODEL NO.	N-11	M-12	N-12	M-13	N-13	M-14	N-14	M-15	N-15	M-16	N-16
Model – 1	-	-	-	-	8	-	8	-	-	-	-
Model – 2	-	-	-	-	8	-	-	-	-	-	-
Model – 3	-	8	-	-	-	8	-	-	-	-	8
Model – 4	5	-	8	-	-	-	-	12	-	-	-
Model – 5	-	-	-	-	-	-	-	4	-	4	-

Model – 1 : Debentures issue

Model – 2 : Redemption

Model – 3 : Sinking Fund

Model – 4 : Own debentures purchase and translation

Model – 5 : Theory

THEORY

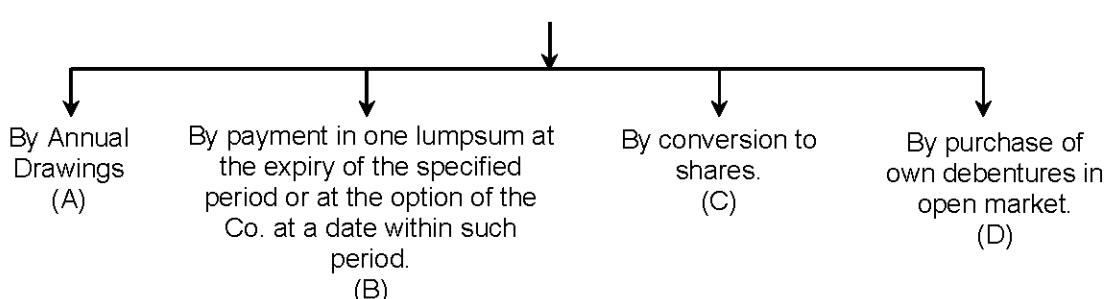
TOPICS COVERED:

1. Redemption of Debentures
2. Treatment of Interest on Debenture
3. Treatment of Interest on Own Debentures
4. Treatment of Cum-interest Quotation
5. Treatment of Ex-interest Quotation

I. REDEMPTION OF DEBENTURES:

1. Methods of Redemption of Debentures:

Methods of Redemption of Debentures



A. Redemption by Annual Drawings:

1. Redeemed over life time, every year, a certain portion,
2. Such portion is determined by "Drawing of lots".
3. Amount to be redeemed every year = $\frac{\text{Total amount of Debentures}}{\text{No. of years for which issued.}}$

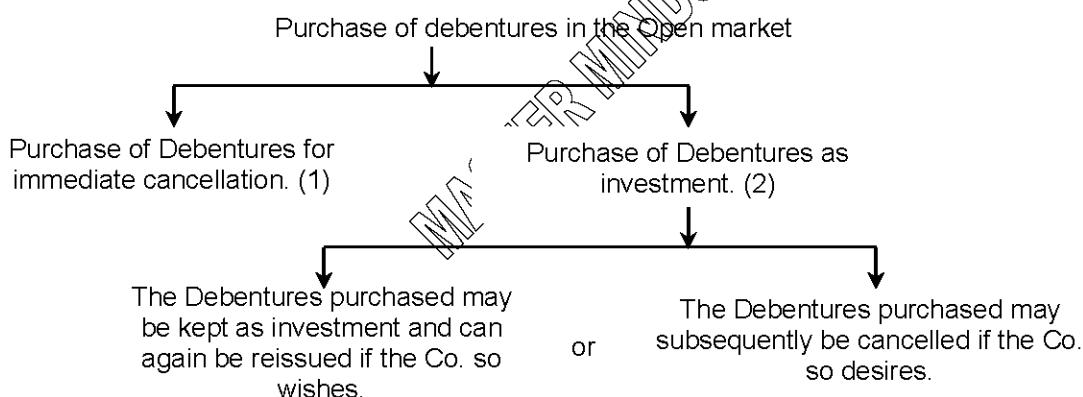
B. Lumpsum Redemption method: Need to set aside every year throughout the life of the debentures a part of the profits of the Company which would otherwise be available for dividend and to invest the same in readily convertible securities together with compound interest (DRR need to be created for this) if redemption is to be in cash.

C. Redemption by Conversion into Shares:

- According to the terms of Issue of Debentures the Debenture holders may be given the right to exercise the option to convert their Debentures into (i) Equity Shares, (ii) Preference Shares, (iii) Debentures.
- The Issue price of the shares must be equal to the amount actually received from the Debenture holders at the time of Issue of those Debentures.
- Accounting Treatment:**

1.	If shares are issued at Par: Debentures A/c To Share Capital A/c	Dr	Nominal value of the Deb.converted Nominal Amount of shares issued
2.	If shares are issued at Premium: Debentures A/c To Share Capital A/c To Securities Premium A/c	Dr	Nominal value of the Deb. Converted Nominal Amount of shares issued Difference
3.	If shares are issued at Discount: Debentures A/c Discount on Issue of Shares A/c To Share Capital A/c	Dr Dr	Nominal value of the Deb. Converted With the Discount on Issue of shares Total

D. Purchase of Debentures in the Open Market: If market price of Debentures goes down below par, the Company usually takes the opportunity to buy the Debentures in the open Market either to cancel them or to keep it as own Investment.



1. Provisions of Companies Act, 2013 on Redemption of Debentures: Section 71 (4) in the Companies Act 2013 covers the requirement of creating the Debenture Redemption Reserve. The Section 71 states as follows:

- Where a company issues debentures under this section, it shall create a debenture redemption reserve account out of its profits which are available for distribution of dividend every year until such debentures are redeemed.
- The amounts credited to the debenture redemption reserve shall not be utilised by the company except for the purpose aforesaid.
- The company referred to in sub-section (1) shall pay interest and redeem the debentures in accordance with the terms and conditions of their issue.
- Adequacy of Debenture Redemption Reserve (DRR)**

		Adequacy of Debenture Redemption Reserve (DRR)
(i)	For debentures issued by NBFCs registered with the RBI.	25% of the value of debentures issued through public issue. No DRR is required in the case of privately placed debentures.

(ii)	For debentures issued by other companies including manufacturing and infrastructure companies.	25% of the value of 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 debentures.
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2. Accounting treatment for Debenture Redemption Fund: (Sinking Fund)

At the end of First year:			
1.	On transfer of profits to Deb. Redm. Fund: P&L (Appropriation) A/c To Debenture Redemption Fund A/c	Dr	With the annual amount set aside out of profit.
2.	On Investment of such amount in readily Marketable Securities: Deb. Redemption Fund Investments A/c Dr To Bank A/c		With the amount invested.
In Second & subsequent years also accounting entries will be the same excepting the last year:			
3.	On receipt of interest on investments: Bank A/c To Int. on Deb. Redm. Fund Investments A/c	Dr	With the amount of interest received on investments.
4.	On transfer of interest to Deb. Redemption Fund: Int. on Deb. Redm. Fund Investments A/c To Debenture Redemption Fund A/c	Dr	With the amount of interest received on investments.
5.	On transfer of profits to Deb. Redm. Fund A/c: P&L (Appropriation) A/c To Debenture Redemption Fund A/c	Dr	With the annual amount of profit set aside.
6.	On investment of annual profit & interest received on investment: Deb. Redemption Fund Investment A/c To Bank A/c	Dr	With the total amount of profit set aside plus interest received on investment.
At the end of last year			
7.	On receipt of Interest on Deb. Redm. Fund Investments: Bank A/c To Interest on Deb. Redm. Fund Invest. A/c	Dr	With the amount of interest received on investment.
8.	On transfer of interest: Interest on Deb. Redm. Fund Investments A/c To Debenture Redemption Fund A/c	Dr	With the amount of interest received on investment.
9.	On transfer of profits to Deb. Redm. Fund A/c: P&L (Appropriation) A/c To Debenture Redemption Fund A/c	Dr	With the amount of annual profit set aside.
10.	On realisation of Investments made to provide cash for the redemption: Bank A/c To Deb. Redm. Fund Investments A/c	Dr	With the realised value of investments.
a.	Realisation of profit thereon: Debenture Redm. Fund Investments A/c To Debenture redemption fund A/c	Dr	With the amount of profit.

b.	In case of loss: Debenture Redemption fund A/c To Debenture Redm. Fund Investments A/c	Dr	With the amount of loss.
11.	On transfer of debentures to debenture holders A/c for payment to be made: Debentures A/c To Debenture holders A/c	Dr	With the nominal value of debentures.
12.	On payment... Debenture holders A/c To Bank A/c	Dr	With the amount paid.
13.	On transfer of Deb. Redm. Fund A/c balance to General Reserve. Debenture Redemption Fund A/c To General Reserve A/c	Dr	With the balance left.

Notes:

1. The Balance of debenture redemption fund, may in certain circumstances be either more or less as compared to amount of debentures which are proposed to be redeemed.

a) In case of excess:

Debenture Redemption Fund A/c Dr.
To Capital Reserve A/c

Assuming that it is a capital profit recorded on appreciation in the value of investments or settlement of liability for a lesser amount than usually payable.

b) In case of deficit

Profit and Loss A/c Dr.
To Debenture Redemption Fund A/c

Assuming that it is a loss on reduction in the value of investment

2. Debentures sometimes are redeemable at a premium. In such a case, the appropriation to the Redemption Reserve Fund should be sufficient to pay both the amount of debentures and the premium on redemption.

In such a case entry for cancellation of premium on redemption of debenture account, on the due date of redemption will be

Premium on Redemption of Debentures A/c Dr.
To Debenture Holders A/c

3. No Investment should be made in the last year for the simple reason that payment has to be made to the Debenture holders in the last year by realizing the Investments.

4. According, MCA clarifies that (circular no. 04/2013 dated 11 Feb, 2013) creation of Debenture redemption reserve equivalent to 25% of the Debenture Issue is obligatory. However, a company may create more reserve if it so desires, this being justified by the creation of Sinking Fund.

5. The debenture redemption reserve will go on accumulating each year. Above entries are prepared based on this assumption. If Debenture redemption reserve is to be non-cumulative In that case interest will be credited to profit and loss account i.e. that interest amount shall not invest or credited to Debenture Redemption Reserve Fund.

6. Investments are sold generally at the time of redemption. Above entries are prepared based on this assumption, but Investments may be realized 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.

7. If amount available on sale of Debenture Redemption Reserve Investments is not sufficient then redemption can be made by utilizing a part of the profits of the company available in cash or by raising capital.
8. In the above case, working capital of the company is adversely affected. So it is desirable that an amount equal to the nominal value of Debentures cancelled should be transferred to the General Reserve a/c out of the profits of the company.
1. **Purchase of Debentures for Immediate Cancellation:** The Accounting Entries in such a case will be as follows:

i. **Where no Sinking Fund exists:**

1.	Debentures A/c To Bank A/c	Dr	(With the amount paid)
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Notes:

1. If there is any difference between the nominal value of the Debentures cancelled and the price paid for them, the same has to be treated as Profit/Loss on cancellation and should be credited or debited to Profit on Redemption of Debentures A/c or Loss on Redemption of Debentures A/c. Thus the entry for this will be as follows:

1.	In case of Profit: Debentures A/c To Bank A/c (with the price paid for them) To Profit on Redemption of Deb.s A/c For transferring the Profit on Redemption: Profit on Redemption of Deb.s A/c To Capital Reserve A/c	Dr	With the nominal value of debentures cancelled with the profit, if any.
2.	In case of loss: Debentures A/c Loss on Redemption of Debentures A/c To Bank A/c For Cancellation of such loss: Profit & Loss A/c (Or) Dr Capital Reserve A/c (if any) (Or) Dr Share Premium A/c (if any) Dr To Loss on Redm. of Debentures A/c	Dr	With Nominal value of debentures cancelled. With the loss, if any with the total. With the loss on Redemption.

2. On transfer of Profits which would otherwise be available for Dividend to General Reserve:

*	Profit & Loss A/c (With the nominal value of Debentures) To General Reserve A/c	Dr	(With the amount paid)
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Explanation: As in this case, Working Capital of the Company is adversely affected, it is desirable that an amount equal to the nominal value of the Debentures cancelled should be transferred to the General Reserve A/c out of the Profits of the Company. This will help in maintaining the Working Capital of the Company by not paying as Dividend a part of the Profit set aside.

ii. **When Sinking Fund exists:**

1.	On sale of Debenture Redemption Fund Investments: Bank A/c To Debenture Redm. Fund Investment A/c	Dr	With the realisation value.
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2.	On purchase and cancellation of Debentures: Debentures A/c To Bank A/c	Dr	With the amount paid.
3.	Profit/loss on cancellation or Redemption of debentures shall be transferred to Deb. Redm. Fund A/c. The accounting entries are: (a) In case of Profit: Debentures A/c To Bank A/c To Debenture Redemption Fund A/c	Dr	With Nominal value. With Price paid. With Amount of profit.
	Debenture Redemption Fund A/c To Capital Reserve A/c	Dr.	With the profit.
(b)	In case of loss: Debentures A/c Debenture Redemption Fund A/c To bank A/c	Dr Dr	With Nominal value. With Loss on redemption with the amount paid.
	Profit & Loss A/c To Debenture Redemption Fund A/c		With amount of loss.
4.	On transfer of Nominal value of the Debentures cancelled to General Reserve A/c from the Debenture Redemption Fund A/c Debentures Redemption Fund A/c To General Reserve A/c	Dr	With Nominal value of Debentures cancelled.

Note: Profit or Loss on sale of debenture redemption fund investments if any shall also be transferred to debenture redemption fund and from there it will be transferred to capital reserve or profit and loss account as the case may be.

2. Purchase of Debentures as Investment (Own Debentures):

a. Where no Sinking Fund exists:

✿	On purchase of debentures as investment: Own Debentures A/c (or) Investment in Own Debentures A/c To Bank A/c	Dr Dr	With the amount paid for the Debentures.
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b. Where Sinking Fund exists:

1	On sale of Investments: Bank A/c To Deb. Redem. Fund investment A/c Note: If there is any Profit/Loss on sale of Investments the same has to be transferred to Debenture Redemption Fund A/c.	Dr	With Realised amount.
2.	On purchase of Debentures as Investment: Own Debentures A/c (or) Investment in Own Debentures A/c To Bank A/c Notes: a. Own Debentures A/c signifies Investment and will be shown as non-current investment as per Schedule – III an Asset in the Balance Sheet until such Debentures are re-issued or cancelled in future. b. Until and unless, these debentures are re-issued or cancelled in future, the question of profit/loss on redemption of debentures will not arise.	Dr Dr	With Amount paid for the Debentures

3.	When Own Debentures are subsequently cancelled: Debentures A/c To Own Debentures A/c (or) To Investment in Own Debentures A/c	Dr	With Nominal value of Debentures	
4.	If there is any difference between the nominal value of the debentures cancelled and the amount standing to the debit of Own Debentures Account, the same has to be treated as follows: a. In case of Profit: Debentures A/c To Own Debentures A/c To Capital Reserve A/c b. In case of loss: Debentures A/c Profit and Loss A/c To Own Debentures A/c	Dr	XXX	XXX XXX
5.	When own debentures are subsequently sold then: a. For sale of Debentures: Bank A/c To Own debentures A/c To Interest A/c b. In case of Loss: Debenture Redemption Fund A/c To Own debentures A/c c. In case of profit: Own debentures A/c To Debenture Redemption Fund A/c	Dr	XXX XXX	XXX XXX XXX

II. INTEREST ON DEBENTURES:

1. Features:

- Payment of Interest at Fixed percentage irrespective of profits.
- So, it is a charge but not appropriation.
- Generally paid half yearly.
- Fixed % is paid on Nominal Value but not on Issue price.
- Effective rate of interest in case of Debentures issued at Par/Premium/Discount is calculated as:

E.g.: X Ltd. issued 1,000 12% Debentures of Rs.100 each. Assuming that the Debentures were issued at Par, at Premium of 10% & at a Discount of 10%.

Sol.:

Issue of Debentures	Nominal Value	Amount received On issue	Interest Payable
At Par	1,00,000	1,00,000	12,000
At Premium	1,00,000	1,10,000	12,000
At Discount	1,00,000	90,000	12,000

Although, the amount payable by the company on its debentures under the above cases is the same, the net effective rate will differ in each of the above cases. The net effective rate of interest will be as follows:

At Par	$= \frac{12,000}{1,00,000} \times 100 = 12\%$
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At a Premium	$= \frac{12,000}{1,10,000} \times 100 = 10.90\%$
At a Discount	$= \frac{12,000}{90,000} \times 100 = 13.33\%$

Notes:

1. In calculating the net effective rate, the actual amount received on Issue of Debentures has to be taken and not the Nominal value of the Debentures, but for payment it is the Nominal value which is relevant.
2. Income Tax will be deducted at source by the company while paying interest to debenture holders and later deposits with government.
2. **Accounting Entries:**

1	When Interest becomes due: Debenture Interest A/c To Income Tax payable A/c To Debenture holders A/c	Dr	With Gross Int. Due With amount of IT to be deducted at source	
2	On payment of Interest to Debenture Holders: Debenture holders A/c To Bank A/c	Dr	XXX	XXX
3	On payment of Income Tax to Government: Income Tax Payable A/c To Bank A/c	Dr	XXX	XXX
4	On Transfer of Debenture Interest to P&L A/c: P&L A/c To Debenture Interest A/c	Dr	XXX	XXX

Notes:

1. While transferring Debenture interest to P&L statement we should see whether full year interest is charged or not.
2. If debentures are tax free, Interest payable needs to be grossed up.

Tax free – Does not mean free of tax to anybody. It only means free of tax to Debenture holder.

Eg.: 500 Debentures @ 13% valued at Rs.1000/- each; TDS @ 10%

$$\begin{aligned}
 \text{Interest there on} &= 5,00,000 \times 13\% \\
 &= 65,000/90 \times 100 \\
 \text{Interest (Gross)} &= \text{Rs.}72,222. \text{ (Approximately)}
 \end{aligned}$$

3. Interest accrued and due:

✿	Debenture Interest A/c To O/s Debenture Interest A/c	Dr	XXX	XXX
Note: Deb. Interest accrued and due should be shown as an item of Other Current Liabilities.				

4. Interest accrued but not yet due:

✿	Debenture Interest A/c To Deb. Interest accrued but not yet due.	Dr	XXX	XXX
Note: Deb. Interest accrued but not yet due should be shown as an item of Other Current Liabilities.				

III. INTEREST ON OWN DEBENTURES:**1. Where no Sinking Fund exists:**

No.	Particulars	Rs.
1.	On interest becoming due on debentures: Debenture Interest A/c To Debenture holders A/c To Interest on Own Debentures A/c	With total interest on all Debentures. With amount of interest payable on Debentures held by outsiders. With the amount of Interest on Debentures held by the Company.
2.	On payment of interest on Debentures: Debenture holders A/c To Bank A/c	With the amount of interest Paid to outsiders.
3.	On transfer of Deb. Interest to P&L A/c: Profit & Loss A/c To Debenture Interest A/c	With the total interest on all the Debentures.
4.	On transfer of Int. on Own Deb. To P&L A/c Interest on Own Debentures A/c To P&L A/c	With the amount of interest on Debentures held by the Company.

Note: As the adjustment of interest on Debentures held as Investments by the Company involves Debiting & Crediting the Profit & Loss statement with the same amount, interest on such Debentures can be omitted altogether. Thus, alternatively the following Entries can be passed:

No.	Particulars	Rs.
1.	On interest becoming due on Debentures held by outsiders: Debenture Interest A/c To Debenture holders A/c	With the net amount of interest payable on Debentures held by outsiders.
2.	On payment of interest to Debenture holders: Debenture holders A/c To Bank A/c	With the net amount of interest paid on Debentures held by outsiders.
3.	On transfer of Debenture Int. to P&L A/c: Profit & Loss A/c To Debenture Interest A/c	With the net amount of interest payable on Debentures held by outsiders.

2. Where Sinking Fund Exists: Where the Debentures purchased as an Investment against the Sinking Fund, the Interest on such Debentures is credited to the Sinking Fund A/c as if the Debentures are outside securities. The Accounting Entries will be as follows:

1.	On interest becoming due on debentures: Debenture Interest A/c To Interest on Own Debentures A/c To Debenture holders A/c	With total amount of interest Payable on all the Debentures. With the amount of Interest payable on Debentures held by the Company. With the amount of interest payable on Debentures held by outsiders.
2.	On payment of interest to Debenture holders: Debenture holders A/c To Bank A/c	With the amount paid.
3.	On transfer of Interest to P&L A/c: Profit & Loss A/c To Debenture Interest A/c	With the total interest payable.
4.	For transfer on Interest on Own Debentures A/c to Sinking Fund A/c: Interest on Own Debentures A/c To Debenture Redemption Fund A/c	With the Interest on own Debentures

Note: Incase own debentures are purchased as general investment then interest on own debentures will be credited to profit and loss account.

IV. CUM-INTEREST QUOTATION:

Example: If the purchase price of Rs.95 is taken to be the cum-interest price, it implies that this includes the Interest for the expired period of 4 months (i.e. from 1st April, 2003 to 31st July, 2003) which amounts to $Rs.100 \times 9/100 \times 4/12 = Rs.3$. Therefore, the price actually paid for the Debentures should be taken at $(Rs.95 - Rs.3) = Rs.92$. The accounting entry in such a case is:

✿	If Debentures are purchased for immediate cancellation: 9% Debentures A/c Debenture Interest A/c To Bank A/c To Profit on Redemption of Debentures A/c	Dr Dr Dr	100 3 95 8	
✿	If Debentures are purchased as investment: Own Debentures A/c Debenture Interest A/c To Bank A/c Note: The question of Profit/Loss on Redemption of Debentures does not arise here as the Debentures are purchased as Investment. In such a case, Own Debentures A/c should always be debited with the actual price paid for them.	Dr Dr Dr	92 3 95	
✿	When Debentures are cancelled in future: 9% Debentures A/c To Own Debentures A/c To Capital Reserve A/c	Dr	100 92 8	

V. EX-INTEREST QUOTATION:

Example: If the purchase price of Rs.95 is taken to be the Ex-interest price it implies that this does not include the interest for the expired period of 4 months (i.e. from 1st April, 03 to 31st July, 03) which amounts to $Rs.100 \times 9/100 \times 4/12 = Rs.3$. In this case, the price of Rs.95 represents the price actually paid for the Debentures and the Co. is required to pay Rs.3 for every Debenture as interest in addition to the purchase price of Rs.95. Therefore, the Co. is required to pay $(Rs.95 + Rs.3) = Rs.98$ for every Debenture in total. The Accounting Entry in such a case should be as follows:

✿	If Deb. are purchased for immediate cancellation: 9% Debentures A/c Debenture Interest A/c To Bank A/c To Profit on Redemption of Debentures A/c	Dr Dr Dr	100 3 98 5	
✿	If Debentures are purchased as investment: Own Debentures A/c Debenture Interest A/c To Bank A/c	Dr Dr Dr	95 3 98	
✿	When Debentures are cancelled in future: 9% Debentures A/c To Own Debentures A/c To Capital Reserve A/c	Dr	100 95 5	

PROBLEMS FOR CLASSROOM DISCUSSION

Problem 1: (PRINTED SOLUTION AVAILABLE) Redemption by Annual Drawings: R Ltd issued debentures at 94% for 1,00,000 on 1-4-2003, repayable by five equal annual drawing of Rs.20,000 each. The company closes its accounts on calendar year basis. Indicate the amount of discount to be written off every accounting year, assuming that the company decided to write off the debenture discount during the life of the debentures.

Note: _____

Problem 2: Redemption of Debentures – Sinking Fund Investments: The following balances appeared in the books of Paradise Ltd on 1-4-2011:

1. 12 % Debentures Rs.7,50,000
2. Balance of Sinking Fund Rs.6,00,000
3. Sinking Fund Investment 6,00,000 represented by 10% Rs.6,50,000 secured bonds of government of India.

Annual contribution to the Sinking Fund was Rs.1,20,000 made on 31st March each year.

On 31-3-2012, balance at bank was Rs.3,00,000 before receipt of interest. The company sold the investment at 90% of Face value, 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, 2012:

1. Debentures Account	4. Bank Account
2. Sinking Fund Account	5. Debenture Holders Account
3. Sinking Fund Investment Account	

(PM) (May-2012)

(Ans.: Total of debentures A/c is 7,50,000 & sinking fund A/c is 7,85,000 & sinking fund investment A/c is 6,00,000, bank A/c is 9,50,000 & debenture holders A/c is 8,25,000)

Note: _____

Problem 3: Conversion of Debentures- Basic level: Libra Limited recently made a public issue in respect of which the following information is available:

1. No. of partly convertible Debentures issued 2,00,000; face value and issue price Rs.100 per debenture.
2. Convertible portion per debenture 60%, date of conversion on expiry of 6 months from the date of closing of issue.
3. Date of closure of subscription lists 1-5-2012, date of allotment 1-6-2012, rate of interest on debenture 15% payable from the date of allotment, value of Equity share for the purpose of conversion Rs.60 (Face Value Rs.10)
4. Underwriting Commission 2%.
5. No. of debentures applied for 1,50,000.
6. Interest payable on debentures half-yearly on 30th September & 31st March.

Write relevant Journal Entries for all transactions arising out of the above during the year ended 31st March 2013.(Including cash & Bank entries)

(PM) (May-1995, Nov 2013 Similar Problem)

Note: _____

Problem 4: Conversion of Debentures: The summarized Balance Sheet of Entyce Ltd. as on 31st March, 2013 read as under:

	Rs.
LIABILITIES:	
Share Capital: 4,00,000 equity shares of Rs. 10 each fully paid up	40,00,000
General Reserve	50,00,000
Debenture Redemption Reserve	35,00,000
12% Convertible Debentures : 80,000 Debentures of Rs. 100 each	80,00,000
Other Loans	45,00,000
Current Liabilities and Provisions	90,00,000
	3,40,00,000
ASSETS:	
Fixed Assets (at cost less depreciation)	1,50,00,000
Debenture Redemption Reserve Investments	30,00,000
Cash and Bank Balances	40,00,000
Other Current Assets	1,20,00,000
	3,40,00,000

The debentures are due for redemption on 1st April, 2013. 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 25% of their holding into equity shares at a predetermined price of Rs. 11.90 per share and the balance payment in cash.

Assuming that:

1. Except for debenture holders holding 12,000 debentures in aggregate, rest of them exercised the option for maximum conversion,
2. The investments realized Rs. 32,00,000 on sale,
3. All the transactions were taken place on 1st April, 2013 without any lag, and
4. Premium on redemption of debentures is to be adjusted against General Reserve.

Redraft the Balance Sheet of Entyce Ltd. as on 01.04.2013 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. (PM)

(Ans: Total of Balance sheet 2,75,85,000)

(Solve problem no. 1 and 2 of assignment problems as rework)

Note: _____

Problem 5: (PRINTED SOLUTION AVAILABLE) Treatment for ex-interest and cum-interest purchase of own debentures for immediate cancellation: Himalayas Ltd. had Rs.10,00,000, 8% Debentures of Rs.100 each as on 31st March, 2012. The company purchased in the open market following debentures for immediate cancellation:

On 01-07-2012 – 1,000 debentures @ Rs. 97 (cum interest)

On 29-02-2013 – 1,800 debentures @ Rs. 99 (ex-interest)

Debenture interest due date is 30th September and 31st March.

Give Journal Entries in the books of the company for the year ended 31st March, 2013. (PM)

(Solve problem no. 3 of assignment problems as rework)

Note: _____

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

March 1	Rs. 5,000 at Rs. 98.00 (cum interest)
Aug. 1	Rs. 10,000 at Rs. 100.25 (cum interest)
Dec. 15	Rs. 2,500 at Rs. 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. (SM) (Solve problem no. 4 of assignment problems as rework)

Note: _____

Problem 7: Purchase of own debentures for immediate cancellation:

1. Swati Associates Ltd has issued 10,000 12% Debentures of Rs.100 each on 1st January 2010. These debentures are redeemable after 3 years each at a premium of Rs.5 per debenture. Interest is payable annually.
2. On 1-10-2011, it buys 1500 debentures from the market at Rs.98 per debenture. These are sold away on 30-6-2012 at Rs.105 per debenture.
3. On 1-1-2012, it buys 1000 debentures at Rs.104 per debenture in the open market. These are cancelled on 1-4-2012.
4. On 1-10-2012 it buys 2,000 debentures at Rs.106 per debenture from the open market. These debentures along with other debentures are redeemed on 31-12-2012.

Prepare the relevant Ledger Accounts showing the above transactions. Workings should form part of your answer. (SM)

Note: _____

Problem 8: (PRINTED SOLUTION AVAILABLE): Accounting treatment for Redemption by Annual drawings by purchasing in open market for immediate cancellation: On 1st January 2000, a company issued 1,000 6% debentures of Rs.1,000 each at Rs.950. Terms of issue provided that beginning with 2002 Rs.50,000 of debenture' should be redeemed, either by drawings at par or by purchase in the market every year. The expenses of the issue amounted to Rs.3,000 which was written off in 2000. The company wrote off Rs.10,000 from the discount on debentures every year. In 2002 the debentures to be redeemed were repaid at the end of the year by drawings. In 2003, the company purchased for cancellation 50 debentures at the ruling price Rs.980 on 31st December, the expenses being Rs.100. Interest is payable yearly. Ignore Income tax. Give Journal Entries & the Balance Sheet (as far as it relates to debentures) on 31st Dec. 2003.

Note: _____

Problem 9: Purchase of own debentures for immediate cancellation: Progressive Ltd. issued Rs.10,00,000, 6% Debenture Stock at par on 21.1.2003, Interest was payable on 30th June and 31st December, in each year.

Under the terms of the Debentures Trust the owned stock is redeemable at par. The trust deed obliges the Company to pay to the trustees on 31st December, 2010 and annually thereafter the sum of Rs.1,00,000 to be utilized for the redemption and cancellation of an equivalent amount of stock, which is to be selected by drawing lots. Alternatively, the Company is empowered as from 1st January, 2010 to purchase its own debentures on the open market.

These Debentures must be surrendered to the Trustees for cancellation and any adjustments for accrued interest recorded in the books of account. If in any year the nominal amount of the stock surrendered under this alternative does not amount to Rs.1,00,000 then the shortfall is to be paid by the Company to the Trustees in cash on 31st December.

The following purchases of stock were made by the Company: (PM)

Particulars	Nominal value of stock purchased (Rs.)	Purchase price per Rs.100 of stock (Rs.)
30th September, 2010	1,20,000	98
31st May, 2011	75,000	95 (Ex-interest)
31st July, 2012	1,15,000	92

The Company fulfilled all its obligations under the trust deed.

Prepare the following Ledger Accounts:

1. Debenture Stock A/c
2. Debenture Redemption A/c
3. Debenture Interest A/c

Note: Ignore costs and taxation

(Ans.: Total of debentures stock A/c is 7,80,000 & debentures redemption A/c is 1,15,000)
PM (Solve problem no. 5 and 6 of assignment problems as rework)

Note: _____

Problem 10: (PRINTED SOLUTION AVAILABLE) **Redemption of Debentures – Sinking Fund:** A company had 16,000, 12% debentures of Rs. 100 each outstanding as on 1st April, 2012, redeemable on 31st March, 2013. On that day, sinking fund was Rs. 14,98,000 represented by 2,000 own debentures purchased at the average price of Rs. 99 and 9% stocks face value of Rs. 13,20,000. The annual instalment was Rs. 56,800.

On 31st March, 2013 the investments were realized at Rs. 98 and the debentures were redeemed. You are required to write up the following accounts for the year ending 31st March 2013:

1. 12% Debentures account
2. Debenture redemption sinking fund account. (PM)

(Ans: Total of 12% Debentures a/c 16,00,000 & Debenture redemption Sinking fund a/c 16,99,600)
(Solve problem no. 7 of assignment problems as rework)

Note: _____

Problem 11: Accounting treatment for redemption of debentures by creation of sinking fund: On 1.1.2000 A Ltd., issued 2,000 6% Debentures of Rs.100 each repayable at the end of four years at a premium of 5%. It has been decided to institute a Sinking Fund for the purpose, the investments being expected to realise 4% net, sinking fund tables show that 0.235490 annually amounts to one rupee @ 4%. In four years investments were made in multiple of hundred only. On 31st December 2003 the balance at bank was Rs.59,000 and the investments realized Rs.1,56,800. The debentures were paid off. Give journal entries & ledger a/c's (except for debenture interest).

Note: _____

Problem 12: Hindustan Ltd., issued 50,000, 6% Debentures of 100 each on 1st January, 2009. The debentures are redeemable by the creation of a Debenture Redemption Reserve. The company had the right to call upon the Trustee to apply the Debenture Redemption Reserve monies in purchasing own debentures, if available below par. The following information is given: (SM)

1. The annual appropriation is Rs. 50,000.
2. Debenture Redemption Reserve Balance as on 1st January, 2012 was Rs.1,31,942 represented by 6% State Loan at cost of Rs. 74,262 (face value Rs. 80,000) and Debenture Redemption Reserve cash Rs. 57,680. This cash balance which includes the annual appropriation of Rs.50,000 was invested in 6% State Loan. The Loan bond, purchased cum interest, had a face value of Rs. 60,000.
3. 1st September, 2012 sold the State Loan of the face value Rs. 40,000 out of loan held on 1st January, 2012 Rs. 38,000 (ex-interest) and the proceeds were applied in purchasing own debentures (face value Rs. 45,000 ex-interest).
4. The debentures purchased are cancelled on 31st December.
5. Interest on State Loan is received on 31st March and 30th September.
6. Interest on debentures is paid on 30th June and 31st December.
7. Debentures outstanding as on 1st January, 2012 were Rs. 4,67,000.

Make ledger entries in the books of the company to give effect to the above.

Note: _____

Problem 13: Redemption of Debentures – Purchase in Open Market: MM Ltd had the following among their ledger opening balances as on 1-1-2012. (SM)

11% Debentures A/c	50,00,000
Debenture Redemption Reserve A/c	45,00,000
13.5% Debentures in XX Ltd (F.V: Rs.20,00,000)	19,50,000
Own Debentures (FV Rs.20,00,000)	18,50,000

On 31-12-2012, was the date for redemption of the debentures, the company started buying own debentures and made the following purchases in the open market:

1-2-2012	2,000 Debentures at Rs.98 cum-interest
1-6-2012	2,000 Debentures at Rs.99 ex-interest.

Half yearly interest is due on the Debentures on 30th June & 31st December in case of both the companies. On 31st December 2012 the Debentures in XX limited were sold for Rs.95 each ex-interest. On that date the outstanding Debentures of MM Limited were redeemed by payment and by cancellation. Show the entries in the books of MM Ltd (Ledger a/c's) during 2012: (a) Debenture Redemption reserve A/c (b) Own Debentures A/c.

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

(May 2015)

Note: _____

Problem 14: Conversion of Debentures – Own Debentures: The Summary Balance Sheet of Chanjit Ltd. at March 31, 2012 was:

Particulars	Rs.	Particulars	Rs.
Issued and Fully Paid Share Capital :		Sundry Assets	21,55,000
50,000 6%Redeemable 'A' Pref. Shares of Rs. 10 each	5,00,000	Own Debentures (Nominal Rs. 1,20,000)	1,05,000
40,000 7% Redeemable 'B' Pref. Shares of Rs. 10 each (less calls in arrear on 5,000 shares@ Rs. 1)	3,95,000	Cash at Bank	5,80,000
50,000 Equity shares of Rs. 10 each	5,00,000		
Securities Premium Account	1,00,000		
Capital Reserve Account	1,00,000		
Profit and Loss Account	4,00,000		
General Reserve Account	2,00,000		
5% Debentures	4,00,000		
Trade Payables	2,45,000		
	28,40,000		28,40,000

On September 30, 2012 following were due for redemption:

1. The Rs. 4,00,000 5% Debentures at a premium of 10 per cent.
2. The Rs. 5,00,000 6% 'A' Preference Shares at a premium of Rs. 1 per share.
3. The Rs. 4,00,000 7% 'B' Preference Shares at a premium of 5 per cent.

It was decided:

1. Out of the trading profits of Rs. 2,00,000 earned in the seven months to Oct. 31, 2012, to pay the debenture interest and preference dividends for the half year to September 30, 2012;
2. To offer to the debenture holders new 6% debentures or repayment in cash. The offer of new debentures in exchange for the original holding was accepted by 50 per cent of the debenture holders including those held by Chanjit Ltd. The whole transaction was completed on September 30, 2012;
3. A transfer was made to General Reserve of a sum equivalent to the nominal value of redemption;
4. To make an issue of 60,000 Equity Shares of Rs. 10 each at a premium of Rs. 2.50 per share. This was done on August 31, 2012 and all moneys were received on that date;
5. To repay in cash both 'A' and 'B' Preference shares, and this was carried through on September 30, 2012.

You are required to (1) show the ledger accounts recording the above transaction in the company books and (2) give the company's Balance Sheet at Oct. 31, 2012. Ignore expenses and taxation.

(SM) (Ans: Total of Balance sheet 26,16,500)

Note: _____

Problem 15: Redemption of Debentures: The Summary Balance Sheet of BEE Co. Ltd. on 31st March, 2012 read as under :

(SM)

Liabilities	Rs.	Assets	Rs.
Share Capital:		Freehold property	1,15,000
Authorized:		Stock	1,35,000

30,000 Equity Shares of Rs.10 each	3,00,000	Trade receivables	75,000
Issued and Subscribed:		Cash	30,000
20,000 Equity Shares of Rs.10 each fully paid	2,00,000	Balance at Bank	2,20,000
Profit and Loss Account	1,20,000		
12% Debentures	1,20,000		
Trade payables	1,15,000		
Proposed Dividends	20,000		
	5,75,000		5,75,000

At the Annual General Meeting it was resolved:

1. To pay the proposed dividend of 10 per cent in cash.
2. To give existing shareholders the option to purchase one Rs. 10 share at Rs. 15 for every four shares (held prior to the bonus distribution), this option being taken up by all shareholders.
3. To issue one bonus share for every four shares held.
4. To repay the debentures at a premium of 3 per cent.

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

(Ans: Balance sheet total: 5,06,400)

(Solve problem no. 8 of assignment problem as rework)

Note: _____

ASSIGNMENT PROBLEMS

Problem 1: Conversion of Debentures: The summarised Balance Sheet of Convertible Limited, as on 30th June, 2012, stood as follows:

LIABILITIES:	Rs.
Share Capital: 5,00,000 equity shares of Rs. 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 Rs. 100 each	1,00,00,000
Other loans	50,00,000
Current Liabilities and Provisions	1,25,00,000
	4,50,00,000
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	2,00,00,000
	4,50,00,000

The debentures are due for redemption on 1st July, 2012. 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 Rs. 15.75 per share and the payment in cash.

Assuming that:

1. Except for 100 debenture holders holding totally 25,000 debentures, the rest of them exercised the option for maximum conversion.
2. The investments realise Rs. 44 lakhs on sale; and
3. All the transactions are put through, without any lag, on 1st July, 2012.

Redraft the balance sheet of the company as on 1st July, 2012 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.

(SM) (Ans: Total of Balance sheet 3,64,75,000)

Problem 2: Xyz Ltd has issued 30,000, 15% convertible debentures of Rs.100 each on 1st April 2008. The debentures are due for redemption on 1st March, 2011. 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 in to equity shares (Nominal value Rs.10) at a price of Rs.15 per share. Debenture holders holding 2500 debentures did not exercise the option. Calculate the number equity shares to be allowed to the debenture holders exercising the option to the maximum

(May – 2011) (Ans.: 38,500 shares)

Problem 3: Treatment for ex-interest and cum-interest purchase of own debentures for immediate cancellation: Rama limited issued 8% debentures of Rs.3,00,000 in earlier year on which interest is payable half yearly on 31st march and 30th September. The company has power to purchase its own debentures in the open-market for cancellation thereof. The following purchases were made during the financial year 2012-2013 and cancellation made on 31st march, 2013.

1. On 1st April, Rs.50,000 nominal value debentures purchased for Rs.49,450, ex-interest.
2. On 1st Sept., Rs.30,000 nominal value debentures purchased for Rs.30,250 cum interest.

Show the journal entries (without narrations) for the transactions held in the year 2012-13.

(PM) (Nov-2010, 2012)

Problem 4: Purchase of own debentures for immediate cancellation: On 1st April, 2012, in MK Ltd.'s ledger 9% debentures appeared with a opening balance of Rs. 50,00,000 divided into 50,000 fully paid debentures of Rs. 100 each issued at par.

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

On 31.5.2012, the company purchased 8,000 debentures of its own @ Rs. 98 (ex-interest) per debenture.

On 31.12.2012 it cancelled 5,000 debentures out of 8,000 debentures acquired on 31.5.2012.

On 31.1.2013 it resold 2,000 of its own debentures in the market @ Rs. 101 (ex-interest) per debenture.

You are required to prepare:

1. Own debentures account;
2. Interest on debentures account; and
3. Interest on own debentures account.

(PM)

(Ans: (i) Total of Own debentures a/c 8,00,000 (ii) Total of Interest on debentures a/c 4,38,750 (iii) Total of Interest on own debentures a/c 45,750)

Problem 5: Purchase of own debentures for immediate cancellation: Sencom Limited issued Rs. 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, 2012 and the cancellation were made on the following 31st March:

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

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

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

1. Debentures Account;
2. Own Debenture Investment Account; and
3. Debenture Interest Account.

Ignore taxation and make calculations to the nearest rupee. (SM)

(Ans: (i) Total of Debentures a/c 1,50,000 (ii) Total cost of Own Debenture Investment a/c 45,000 (iii) Total of Debenture int. a/c 3,188)

Problem 6: Accounting treatment for purchase of own debentures in the open market for cancelling them with an intention of redeeming them every year: Indebted Ltd issued 10% Debentures at par for 8 lakhs on 1-1-1998. Interest was payable half yearly on 30th June and 31st December every year. Under the terms of the trust deed, the Debentures are redeemable at par (after three years of issue) by the company purchasing them in the open market and cancelling them with a minimum redemption of Rs.80,000 every year.

In case there was a short fall in redemption by the company by open market operations, the shortfall would be made good by the company by payment on the last day of the accounting year to the trustees who would draw lots and redeem the Debentures.

The company purchases its own Debentures for cancellation as under:

On 30-9-2001	Rs.1,00,000	@ Rs.98 cum-interest
On 31-5-2002	Rs.60,000	@ Rs.95 ex-interest
On 31-7-2003	Rs.90,000	@ Rs.96 cum-interest

The company carried out its obligations under the deed. Prepare the following ledger accounts for calendar years 2001, 2002 & 2003: (a) Debentures A/c (b) Debentures Redemption A/c and (c) Debenture Interest A/c and Ignore taxation.

Problem 7: The following balances appeared in the books of a company as on December 31, 2012: 6% Mortgage 10,000 debentures of Rs. 100 each; Debenture Redemption Reserve (for redemption of debentures) Rs. 10, 42,000; Investment Rs. 5,28,000, 4% Government Loan purchased at par and Rs. 5,60,000, 3-1/2% Government paper purchased for Rs. 5,42,000. (SM) The Interest on debentures had been paid up to December 31, 2012.

On February 28, 2013, the investments were sold at Rs. 90 and Rs. 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.

Problem 8: Accounting treatment for redemption of debentures by raising share capital: Gamma Ltd. has an authorized capital of Rs.15,00,000 in shares of Rs.10 each of which 80,000 shares have been issued and are fully paid. The following is the summary of the Balance sheet as on 31st October, 2001:

Name of the Company : Gamma Ltd

Balance Sheet as at : 31st October, 2001

			Particulars	Notes No.	Rs.
1	a	I	EQUITY AND LIABILITIES:	2	3
			Shareholder's funds		
			Share capital		8,00,000
2	a	I	Reserves and Surplus	1	5,00,000
			Non-current liabilities		
			Long term borrowings		
3			6% Debentures 2001-2003		4,00,000
			Current liabilities		1,70,000
TOTAL					18,70,000

1	a	(i)	ASSETS: Non current assets Fixed assets Tangible assets (net)		12,50,000
2	a b c d		Current Assets		1,85,000
			Current Investments (At cost)		1,80,000
			Inventories (Stock)		1,07,000
			Trade receivables (Debtors)		1,48,000
			Cash and cash equivalents (Balance at bank)		TOTAL 18,70,000

Note to Accounts:

Particulars	Rs.
1. Reserves and Surplus	
Debenture Redm. Reserve	3,00,000
Reserve fund	2,00,000

The following transactions took place:

- On 1st March, 2002, there were offered to existing shareholders, in the ratio of one for every five held, new shares at a price of Rs.12.50 per share, payable as to Rs.5 on application, and the balance on allotment. The shareholders took up all the shares to which they were entitled and the amounts due on allotment, which took place on 17th March, 2002 were all received by 22nd March, 2002.
- On April 2002, all the investments were realised, the net proceeds, amounting to Rs.1,66,000 being received on 12th April.
- On 30th April 2002, all outstanding debentures were redeemed at a premium of 5% and the half-year interest due on that date was paid.
- Expenses of the share issue amounted to Rs.5,000 and were paid on 20th April.

Journalise the entries to record the above transactions, utilising the Share Premium A/c to the full extent permitted by law.

THEORY QUESTIONS

- Noida Toll Bridge Corporation Ltd. (an infrastructure Company) issued 100 lakhs 10% Debentures of Rs.100 each on 1st April, 2013 due for redemption on 31st March, 2014 at 10% Premium. How much minimum amount should be credited to Debenture Redemption Reserve as per the MCA clarification? Also state the amount required to be deposited / invested in the year of redemption. Record necessary entries for redemption of debentures. **(RTP Nov-2013)**
- Mention the ways by which redeemable debentures may be redeemed under Companies Act,2013 **(May-2016)**

ABC ANALYSIS

	A Category	B Category	C Category
Class Room Problems	4, 5, 6, 7, 8, 9, 11, 13	1, 2, 3, 10, 14, 15	12
Assignment Problems	2, 3, 4, 5, 6	1, 7, 8	-

Verified by: Hari Narayana Sir, GSR Sir,

THE END

Executed by: Rajasekhar