# 13. REDEMPTION OF DEBENTURES

### **SOLUTIONS TO ASSIGNMENT PROBLEMS**

### **PROBLEM NO.1**

#### **6% Mortgage Debentures Account**

20X2			Rs.	20X2			Rs.
Feb.	Т	Debenture- holders A/c	10,00,000	Jan. 1	Ву	Balance b/d	10,00,000
28	0						

#### **Premium on Redemption of Debentures Account**

20X2		Rs.	20X2		Rs.
Feb.	T Debenture- holders A/c	10,000	Feb.	B Profit and loss A/c	10,000
28	0		28	у	

#### **Debentures Redemption Reserve Investment Account**

20X2		Rs.	20X2		Rs.
Jan. 1	T Balance b/d	1,50,000	Feb.	B Bank	1,50,000
	0		28 6	У	

# Debenture Interest Account

20X2		Rs. 20X2		Rs.
Feb. 28	T Bank (10,000 x 100 x o 6% x 2/12)	10000 Feb.	B Profit & Loss A/c	10,000

# Bank A/c

20X2		Rs.	20X2		Rs.
Jan 01	To Balance b/d	9,00,000	Feb.2	By Debenture holders	10,10,000
Feb 28	To Interest on	1,000	8	(10,000 x 101)	
	Debentures			By Deb. Interest A/c	10,000
	Redemption			By Balance c/d	31,000
	Investments				
	(1,50,000 x 4% X 2/12)				
	To Debentures				
	Redemption	1,50,000			
	Reserve				
	Investment a/c				
		10,51,000			10,51,000

#### **Debenture Redemption Reserve Account**

20X2		Rs.	20X2		Rs.
Feb			Jan.1	By Balance b/d	50,000
28			Jan.1	By Profit & Loss (b/f)	50,000
	To General Reserve- note	50,000			
		1,00,00			1,00,000
		0			

**Note:** Amount to be transferred to DRR before the redemption = 1,00,000 = 10 % of (10,000 X 100)

#### Calculation of number of equity shares to be allotted

	No of debentures
Total number of debentures	30,000
Less: Debenture holders not opted for conversion	(2,400)
Debenture holders opted for conversion	27,600
Option for conversion	25%
Number of debentures to be converted (25% of 27,600)	6,900
Redemption value of 6,900 debentures at a premium of 5% [6,900 x (100+5)]	Rs. 7,24,500
Equity shares of Rs. 10 each issued on conversion @ Rs.12 each	
[Rs. 724500/ Rs. 12]	60,375 shares

## **PROBLEM NO.3**

#### **Journal Entries**

Date	Particulars	Debit (Rs.)	Credit (Rs.)
1 <sup>st</sup> June 2013	Bank A/c [3,00,000 Debentures × Rs. 100] Dr. To Debenture Application & Allotment A/c (Being application money received for 3,00,000 Debentures at Rs. 100 each)	3,00,00,000	3,00,00,000
1 <sup>st</sup> July 2013	Debenture Application & Allotment A/c Underwriters A/c To Debentures A/c (Being allotment of 3,00,000 Debenture Applicants, balance to Underwriters)	3,00,00,000	4,00,00,000
1 <sup>st</sup> July 2013	Underwriting Commission A/c [4,0900,000 × 3%] Dr. To Underwriters A/c (Being Commission payable to Underwriters at 3%)	12,00,000	12,00,000
1 <sup>st</sup> July 2013	Bank A/c Dr. To Underwriters A/c (Being balance amount receivable from Underwriters, received)	88,00,000	88,00,000
30 <sup>th</sup> Sept 2013	Debenture Interest A/c Dr. To Bank A/c (Being Debenture interest paid at 10% p.a. for 3 months)	10,00,000	10,00,000
1 <sup>st</sup> Jan 2014	10 % Debentures A/c Dr. To Equity Share Capital A/c (at Rs. 10) To Securities Premium A/c (at Rs. 30) (Being 8,00,000 shares issued on conversion of 4,00,000 × 80% = 3,20,000 Debentures)	3,20,00,000	80,00,000 2,40,00,000
31 <sup>st</sup> March 2014	Debenture Interest A/c Dr. To Cash / Bank A/c (Being interest paid on Debentures for $2^{nd}$ half-year, computed as under- $4,00,00,000 \times 10\% \times \frac{3}{12} + 80,00,000 \times 10\% \times \frac{3}{12}$	12,00,000	12,00,000
31 <sup>st</sup> March 2014	Profit & Loss A/c Dr. To Debenture Interest A/c (Being Total Interest for the year transferred to P & L)	22,00,000	22,00,000

#### Balance sheet of Spices Ltd. as on 01.04.2018

	Particulars	Note No.	Figures as at the end of current reporting period
I.	Equity and Liabilities		
	1) Shareholders' funds		
	a) Share capital	1	1,10,000
	b) Reserves and surplus	2	72,000
	2) Non-current liabilities		
	a) Long term borrowings- Unsecured loans		28,000
	3) current liabilities		
	a) Short term borrowings		19,000
l	TOTAL		2,29,000
III.	ASSETS		
	1) Non-current assets		
	a) Fixed assets		
	i) Tangible assets		1,00,000
	2) Current assets		
	a) Cash and cash equivalents		51,000
	b) Other current assets		78,000
	TOTAL		2,29,000

#### **Notes to Accounts**

		Rs.	Rs.
1.	Share capital (11,000 shares of Rs. 10 each) (out of above 2000 shares issued to debentures hatters who opted for conversion into shares)		1,10,000
2.	Reserves and surplus General reserve Add: Debenture redemption reserve transfer	70,000 <u>6,000</u> 76,000	
	Less: Premium on redemption of the benturés (1200*Rs.5)  Add: Securities premium account(2000*Rs.1)	(6,000)	70,000 <u>2,000</u> 72,000

#### **Working notes:**

I) Calculation of number of shares to be allotted

Total number of debentures =1200

Less: No. of debentures not opting for conversion = (200)

1000

40% of 1000 400

Redemption value of 400 debentures(400\*55) Rs. 22,000

No. of equity shares to be allotted 22000/11= 2000 shares of Rs. 10 each

ii) Calculation of cash to be paid

No. of debentures = 1200

Less: No. of debentures to be converted into equity shares = (400)

Redemption value of 800 debentures (800\*55) Rs. 44,000.

iii) Cash and Bank balance

Balance before redemption = 86000Add: proceeds of investments sold = 9,000Less: cash paid to debenture holders = (44000)= 51,000

#### **Journal Entries**

Date.	Particulars	Debit (Rs.)	Credit (Rs.)
01.07.2017	Investment in Own 8% Debentures A/c Dr. Interest in Own 8% Debentures A/c Dr. To Bank A/c ( <b>WN 1</b> ) (Being 1,000 Debentures purchased at Rs. 97 cum-interest. Payment = 97,000, Interest from 1 <sup>st</sup> July to 30 <sup>th</sup> Sep = 1,00,000 $\times 8\% \times \frac{3}{12} = 2,000, \text{ hence, balance} = \text{Cost.}$	95,000 2,000	97,000
01.07.2017	8 % Debentures A/c Dr. To Investment in Own 8% Debentures A/c To Profit on Cancellation of Own Debentures A/c (Being Cancellation of Own Debentures)	1,00,000	95,000 5,000
30.09.2017	Interest Expense A/c Dr.  To Bank A/c $(9,00,000 \times 8\% \times \frac{6}{12})$ (Being half yearly Debenture Interest paid on Rs. 9,00,000 for 6 months)	36,000	36,000
29.02.2018	Investment in Own Debentures A/c $(1,800 \times Rs. 99)$ Dr.  Interest in Own 8% Debentures A/c To Bank A/c (Being 1,000 Debentures purchased at Rs. 99 - interest.  Interest from 1 <sup>st</sup> Oct to 29 <sup>th</sup> Feb, i.e. for 5 months 1,800×100×8%× $\frac{5}{12}$ = Rs. 6,000	1,78,200 6,000	1,84,200
29.02.2018	8 % Debentures A/c To Investment in Own By Debentures A/c To Profit on Cancellation of Own Debentures A/c (Being Cancellation of Own Debentures)	1,80,000	1,78,200 1,800
31.03.2018	Interest Expense A/c Dr. To Bank A/c (7,20,000 × 8% × 6/12) (Being half yearly Debenture Interest paid on Rs. 7,20,000 for 6 months)	28,800	28,800
31.03.2018	Profit & Loss A/c Dr. To Interest in Own 8% Debentures A/c Interest Expense A/c (Being Interest Expense transferred to Profit & Loss A/c)	72,800	8,000 64,800
31.03.2018	Profit on Cancellation of Own Debentures A/c Dr. To Profit & Loss A/c (Being Profit on Cancellation transferred to Profit & Loss A/c)	6,800	6,800

## **PROBLEM NO.6**

#### **Journal Entries**

Date	Particulars	Rs. Dr.	Rs. Cr.
2006 Jan 1 <sup>st</sup>	Bank Dr To 9% Debenture Applications& Allotment Account (Being application money on 40,000 debentures @ Rs. 100 debenture received)	40,00,000 per	40,00,000
	9% Debentures Applications & Allotment Account Dr To 9% Debentures Account	40,00,000	40,00,000

	(Being allotment of 40,000 9% Debentures of 100 each at par	.)		
	P& L A/c To DRR A/c (Being DRR Created - 10% Of 40,00,000)	Dr	4,00,000	4,00,000
	Debenture Redemption Reserve Investment A/c To Bank A/c (15 % of 40,00,000) (Being Investment made for redemption purpose)	Dr	6,00,000	6,00,000
2008 Jan 1 <sup>st</sup>	Bank A/c To Deb. Red. Reserve Invst. A/c (4,000 x 100 x 15%) (WN (Being realization of Debenture Redemption reserve investme respect of 4,000 debenture)		60,000	60,000
	Own Debenture A/c To Bank A/c (Being purchase of 4,000 own debentures @ Rs.102 each)	Dr.	4,08,000	4,08,000
	9% Debentures A/c Loss on cancellation of Debentures A/c To Own Debenture A/c (Being cancellation of 4,000 Debentures)	Dr. Dr.	4,00,000 8,000	4,08,000
	Profit & Loss Account To Loss on cancellation of Debentures Account (Being loss on cancellation of debentures being written transfer to Profit and Loss Account)	Dr off by	8,000	8,000
	DRR A/c To General Reserve A/c (4,000 x 100 x 10%) (Being cancellation of DRR in respect of 4,000 Depentures)	Dr.	40,000	40,000
2011 Jan 1 <sup>st</sup>	Bank A/c To Deb. Red. reserve Invst A/c (20,000 × 100 × 15%) (WN (Being realization of Debenture Redemption reserve investment (Being realization of Debenture)		3,00,000	3,00,000
	9% Debentures Account To Sundry Debenture holders (Being Amount payable debenture holders on rededebentures for Rs. 20,00,000 at par by draw of a lot)	Dr. emption	20,00,000	20,00,000
	Sundry Debenture holders  To Bank (Being Payment made to sundry debenture holders for red debentures of Rs. 20,00,000 at par)	Dr. eeming	20,00,000	20,00,000
	DRR A/c To General Reserve A/c (20,000 × 100 × 10%) (Being cancellation of DRR in respect of 20,000 Debentures)	Dr.	2,00,000	2,00,000
2012 Jan 1 <sup>st</sup>	Bank A/c To Deb-Redemption reserve investment A/c (8,000 × 100 × 15%)(WN3) (Being realization of Debenture Redemption reserve investment Reserve i	Dr. ent in	1,20,000	1,20,000
	Own Debenture A/c To Bank A/c (Being purchase of 8,000 own debentures of Rs.100 earls,7,91,200)	Dr. ach for	7,91,200	7,91,200
	9% Debentures A/c To Own Debenture A/c To P & L (Profit on cancellation of Debentures) A/c (Being cancellation of 8,000 Debentures)	Dr.	8,00,000	7,91,200 8,800
	Profit on Cancellation of Own Debentures a/c	Dr.	8,800	

	To Profit & loss Account		8,800
	(Being transfer of profit on cancellation of own debentures to capital reserve)		
	DRR A/c Dr. To General Reserve A/c (8,000 × 100 × 10%) (Being cancellation of DRR in respect of 8,000 Debentures)	80,000	80,000
2016 Jan 1 <sup>st</sup>	Bank A/c Dr. To Deb. Red. Reserve Invst. A/c (8,000 x 100 x 15%) (WN 4) (Being realization of Debenture Redemption reserve investment in respect of 8,000 debenture)	1,20,000	1,20,000
	9% Debentures Account Dr. Premium on Redemption of Debentures A/c Dr. To Sundry Debenture holders (Being amount payable to holders of debentures of the face value of Rs. 8,00,000 on redemption at a premium of 2% as per resolution of the board of directors)	8,00,000 16,000	8,16,000
	Sundry Debenture holders A/c Dr.  To Bank Account (Being payment to sundry debenture holders)	8,16,000	8,16,000
	Profit & Loss Account Dr. To Premium on Redemption of Debentures Account (Being Premium on Redemption of Debentures Account is closed with P&L Account)	16,000	16,000
	DRR A/c Dr. To General Reserve A/c (8,000 × 100 × 10%) (Being cancellation of DRR in respect of 8,000 Debendures)	80,000	80,000

Relevant Provision: As per Rule 18(7) of the companies (share capital and debentures amendment rules, 2014. In respect of Unlisted Company other than AIFI, Banking Company, NBFC and HFC, the company shall be required to create D.R.R of 10% value of the outstanding debentures issued. The company shall be required to invest minimum 15% of depentures outstanding.

### WN 1: Redemption of Debenture Redemption Investments on 1st Jan 2008 amounting to Rs.60,000

Since the company purchased 4,000 own rebentures on 1<sup>st</sup> Jan 2008 the company would realize the investments 15% corresponding to these debentures of which computation is as follows:

= No of own debentures to be bought x value per debenture x  $15\% = 4,000 \times 100 \times 15\% = 60,000$ /-

#### WN 2: Redemption of Debenture Redemption Investments on 01/01/2011 amounting to Rs.3,00,000

Since the company redeemed Rs.20,00,000 debentures on 1<sup>st</sup> Jan 2011, the company would also realize investment of 15% corresponding to these debentures for which computation is as follows:

- = No of own debentures to be bought X value per debenture X15%
- $= 20,000 \times 100 \times 15\% = 3,00,000$

#### WN 3: Redemption of Debenture Redemption Investments on 01/01/2012 amounting to Rs.1,20,000

Since the company purchased Rs.8,00,000 face value own debentures on 1<sup>st</sup> Jan 2012 the company would realize the investments 15% corresponding to these debentures of which computation is as follows:

- = No of own debentures to be bought X value per debenture X15%
- $= 8.000 \times 100 \times 15\% = 1.20.000/-$

#### WN 4: Redemption of Debenture Redemption Investments on 01/01/2016 amounting to Rs. 1,20,000

The remaining debentures i.e. total debentures less own debentures would be redeemed on 1<sup>st</sup> Jan 2016 and hence the company would also realize the balance investments of 15% corresponding to these debentures for which computation is as follows:

- = Remaining debentures x Face Value per debenture x 15%
- $= (40,000 4,000 20,000 8,000) \times 100 \times 15\% = Rs.1,20,000$

#### **Journal Entries**

Date	Particulars	Debit (Rs.)	Credit (Rs.)
01.04.17	Investment in Own Debentures A/c Dr. To Bank A/c (Being purchase of Rs. 50,000 Nominal Value Own Debentures at Rs. 49,450 ex-interest	49,450	49,450
01.09.17	Investment in Own Debentures A/c (balancing figure) Dr. Interest in Own Debentures A/c (Rs. 30,000 × 8% × 5/12) Dr. To Bank A/c (Given) (Being purchase of Rs. 30,000 Nominal Value Own Debentures at Rs. 30,250 cum-interest	<b>29,250</b> 1,000	30,250
30.09.17	Interest on Debentures A/c(Rs. 30,000 × 8% x 6/12) Dr. To Interest on Own Debentures A/c (Rs. 80,000 × 8% x 6/12) To Bank A/c (Being interest due on 30,000 Debentures for 6 months, Interest on Own Debentures recognized and balance paid to Outsiders)	12,000	3,200 8,800
31.03.18	Interest on Debentures A/c(Rs. 30,000 × 8% × 6/12) Dr. To Interest on Own Debentures A/c (Rs. 80,000 × 8% x 6/12) To Bank A/c (Being interest due on 30,000 Debentures for 6 months, Interest on Own Debentures recognized and balance paid (6) Outsiders)	12,000	3,200 8,800
31.03.18	8 % Debentures A/c (50,000 + 30,000) Dr.  To Investment in Own Debentures A/s (49,480 + 29,250)  To P & L A/c (Profit on Cancellation) (balancing figure)  (Being Cancellation of Own Debentures against Debenture Liability)	80,000	78,700 <b>1,300</b>

#### i) Dr. **Debentures Account**

Date	Particulars	Rs.	Date	Particulars	Rs.
31.5.X1	To Own Debentures (8,000 X 98)	7,84,000	1.4.X1	By balance b/d	50,00,000
31.5.X1	To Profit on cancellation	16,000			
31.3.X2	To balance c/d	42,00,000			
		50,00,000			50,00,000

#### Dr. **Interest on Debentures Account** Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
31.5.X1	To Bank	12,000	31.3.X2	By Profit and Loss A/c (b.f.)	3,90,000
	(Interest for 2 months on				
	8,000 Debentures) (WN)				
30.9.X1	To Bank	1,89,000			
	(Interest for 6 months on				
	42000 debentures) (WN)				
31.3.X2	To Bank	1,89,000			
	(Interest for 6 months on				
	42000 debentures)				
		3,90,000			3,90,000

Cr.

#### ii) Dr.

#### **Debentures Redemption Reserve A/c**

Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
31 <sup>st</sup> May 20X1	To General Reserve (8,000 x 100 x 10%)	80,000	1 <sup>st</sup> April, 20X1	By Profit & Loss A/c (50,000 x 100 x 10%)	5,00,000
31 <sup>st</sup> Mar 20X2	To Balance c/d	4,20,000			
		5,00,000			5,00,000

#### iii) Debentures Redemption Reserve Investments A/c

Date	Particulars	Rs.	Date	Particulars	Rs.
1 <sup>st</sup> April 20X1	To Bank A/c	7,50,000	30 <sup>th</sup> May 20X1	By Bank A/c (8,000 x 100 x 15%)	1,20,000
			31 <sup>st</sup> Mar 20X2	By Balance c/d	6,30,000
		7,50,000			7,50,000

#### **Working Note:**

31.5. X1 Acquired 8,000 Debentures @ 98 per debenture Rs.

(ex-interest) Purchase price of debenture (8,000 × Rs.98) =7,84,000

31.5.X1 Interest for 2 months  $[Rs.8,00,000 \times 9\% \times 2/12]_{2}$  = 12,000

30.9. X1 Interest on other debentures Rs.42,00,000 × 9% × 9 = 1,89,000

## PROBLEM NO

Journal of SEE

Particulars		Dr. (Rs.)	Cr. (Rs.)
Bank A/c	Dr.	1,50,000	
To Equity Shareholders A/c			1,50,000
(Application money received on 10,000 shares Rs. 15 per share to be issued as rights shares in the ratio of 1:4)			
Equity Shareholders A/c	Dr.	1,50,000	
To Equity Share Capital A/c			1,00,000
To Securities Premium A/c			50,000
(Share application money on 10,000 shares @ Rs. 10 per share transferred to Share Capital Account and Rs. 5 per share to Securities Premium Account vide Boards Resolution dated.)			
Securities Premium A/c	Dr.	50,000	
Profit & Loss A/c	Dr.	1,50,000	
To Bonus to Shareholders A/c			2,00,000
(Amount transferred for issue of bonus shares to existing shareholders in the ratio of 2:5 vide General Body's resolution dated)			
Bonus to Shareholders A/c	Dr.	2,00,000	
To Equity Share Capital A/c			2,00,000
(Issue of bonus shares in the ratio of 2 for 5 vide Board's resolution dated)			
Profit and Loss A/c	Dr.	24,000	
To Debenture Redemption Reserve			24,000
(for DRR created 10% x 2,40,000)			

Debenture Redemption Reserve Investment A/c To Bank A/c (2,40,000 x 15%) (For Debenture Redemption Reserve Investment created)	Dr.	36,000	36,000
12% Debentures A/c Premium Payable on Redemption A/c @ 2%	Dr. Dr.	2,40,000 4,800	
To Debenture holders A/c			2,44,800
(Amount payable to debentures holders)			
Profit and loss A/c	Dr.	4,800	
To Premium Payable on Redemption A/c			4,800
(Premium payable on redemption charged to Profit & Loss A/c)			
Debenture Redemption Reserve A/c To General Reserve A/c (for DRR transferred to general reserve)	Dr.	24,000	24,000
Bank A/c To Debentures Redemption Reserve Investment A/c (For Debenture Redemption Reserve Investment Realised)	Dr.	36,000	36,000
Debenture holders A/c	Dr.	2,44,800	
To Bank A/c			2,44,800
(Amount paid to debenture holders on redemption)			

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

Particulars Particulars	Note No	Rs.
I. Equity and liabilities		
1) Shareholder's Funds		
a) Share Capital	1	7,00,000
b) Reserves and Surplus	2	85,200
2) Current Liabilities		
a) Trade payables		2,30,000
Total		10,15,200
II. Assets		
1) Non-current assets		
a) Property, Plant and Equipment		
i) Tangible Assets	3	2,30,000
2) Current assets		
a) Inventories		2,70,000
b) Trade receivables		1,50,000
c) Cash and bank balances	4	3,65,200
Total		10,15,200

#### **Notes to Accounts**

			Rs.
1.	Share Capital		
	70,000 shares of Rs. 10 each fully paid (20,000 shares of Rs. 10 each, fully paid issued as bonus shares out of securities premium and P&L A/c)		7,00,000
2.	Reserve and Surplus		
	Profit & Loss Account Less: Premium on redemption of debenture	2,40,000 (4,800)	
	Less: Utilisation for issue of bonus shares	(1,50,000)	

	Less: DRR created	(24,000)	
		61,200	
	General Reserve	<u>24,000</u>	85,200
3.	Tangible assets		
	Freehold property		2,30,000
4.	Cash and bank balances		
	Cash at bank (4,00,000 + 1,50,000 - 2,44,800)	3,05,200	
	Cash in hand	60,000	3,65,200

## THE END

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