

## 7. ACCOUNTING FOR EMPLOYEE STOCK OPTION PLAN

### ASSIGNMENT SOLUTIONS

#### **PROBLEM NO: 1**

##### Journal Entries

Date	Particulars	Debit (Rs.)	Credit (Rs.)
15.03.13	Bank A/c (9,500X40) Dr.	3,80,000	
To	Employee Compensation Expenses A/c (W.N.1) Dr.	8,55,000	
31.03.13	To Equity Share Capital A/c (9,500 X 10)		95,000
	To Securities Premium A/c (9,500 X 120)		11,40,000
	(Being allotment to employees of 9,500 Equity Share of Rs. 10 each at a premium of Rs. 120 per share in exercise of stock options by employees)		
31.03.13	Profit & Loss A/c Dr.	8,55,000	
	To Employee Compensation expenses A/c		8,55,000
	(Being transfer of employee compensation expenses to P & L A/c)		

#### **WORKING NOTES:**

- Market Price per Share Rs. 130  
 Exercising price per option Rs. 40  
 Intrinsic Value of each option Rs. 90  
 No. of Options exercised by employees 9,500 options  
 Value of Compensation expenses to be recognized = 9,500 X Rs. 90 = Rs. 8,55,000.

#### **PROBLEM NO: 2**

Date	Particulars	Debit (Rs.)	Credit (Rs.)
15.03.13	Bank A/c Dr.	2,40,000	
To	Employee Compensation Expenses A/c Dr.	4,32,000	
31.03.13	To Equity Share Capital A/c		48,000
	To Securities Premium A/c		6,24,000
	(Being allotment to employees of 4,800 Equity Share of Rs. 10 each at a premium of Rs. 130 per share at an exercise price of Rs.50 each)		
31.03.13	Profit & Loss A/c Dr.	4,32,000	
	To Employee Compensation expenses A/c		4,32,000
	(Being transfer of employee compensation expenses to P & L A/c)		

#### **Working Note:**

- Employee Compensation Expenses = Discount between Market Price and option price = Rs. 140 - Rs. 50 = Rs. 90 per share = Rs. 90 x 4,800 = Rs. 4,32,000/- in total.
- The Employees Compensation Expense is transferred to Securities Premium Account.
- Securities Premium Account = Rs. 50 - Rs. 10 = Rs. 40 per share + Rs. 90 per share on account of discount of option price over market price = Rs. 130 per share = Rs. 130 x 4,800 = Rs. 6, 24,000/- in total.

#### **PROBLEM NO: 3**

Fair value of an option = Rs. 28

Difference between Fair value and Issue Price = Rs. 28 – Rs. 25 = 3.

Number of employees accepting the offer = 400 employees x 50% = 200 employees

Number of shares issued = 200 employees x 100 shares/employee = 20,000 shares

Employee Compensation Expenses recognized in 2014-15 = 20,000 shares x Rs. 3 = Rs. 60,000

Securities Premium A/c = Rs. 28 - 10 = Rs. 18 per share = 20,000 x 18 = Rs. 3,60,000

**Journal Entries:**

Date	Particulars	Debit (Rs.)	Credit (Rs.)
30.04.14	Bank A/c (20,000 shares X Rs.25) Dr.	5,00,000	
	Employee Compensation Expenses A/c Dr.	60,000	
	To Equity Share Capital A/c		2,00,000
	To Securities Premium A/c		3,60,000
	(Being stock purchase option accepted by 200 employees for 100 shares each at Rs.25 per share on a fair value of Rs.28 per share)		

**Note:** Employees compensation expenses amounting Rs. 60,000 will ultimately be charged to profit & loss account.

**PROBLEM NO: 4**

**Journal Entries in the Books of 'S' Ltd.**

Date	Particulars	Debit (Rs.)	Credit (Rs.)
31.03.11	Employees Compensation exp. A/c Dr.	12,000	
	To Employee Stock Options O/S A/c		12,000
	(Being Compensation exp. Recognized in respect of 1000 options granted to employees on SLM basis over 2 ½ years)		
31.03.11	P & L A/c Dr.	12,000	
	To Employees Compensation exp. A/c		12,000
	(Being Compensation exp. Transferred to P & L A/c)		
31.03.12	Employees Compensation exp. A/c Dr.	12,000	
	To Employee Stock Options O/S A/c		12,000
	(Being Compensation exp. Recognized)		
31.03.12	P & L A/c Dr.	12,000	
	To Employees Compensation expenses A/c		12,000
	(Being Compensation expenses transferred to P & L A/c)		
31.03.13	Employees Compensation expenses A/c Dr.	6,000	
	To Employees stock options outstanding A/c		6,000
	(Being balance of compensation expenses amortized)		
31.03.13	P & L A/c Dr.	6,000	
	To Employees Compensation expenses A/c		6,000
	(Being Compensation expenses transferred to P & L A/c)		
31.07.13	Bank A/c (1000 × Rs. 60 ) Dr.	60,000	
	Employees stock options O/S A/c (1,000 × Rs.30)	30,000	
	To Equity share capital A/c (1,000 × Rs.10)		10,000
	To Securities Premium A/c (1,000 × Rs.80)		80,000
	(Being 1000 options exercised at a price of Rs.60)		

**WORKING NOTES:**

Value of each option market price - exercising price = Rs.90 - Rs.60 = Rs.30

Value of total options = 1,000 × Rs.30 = Rs.30,000

The above expenses were written off over 2 ½ years on SLM Basis

First year = Rs.12,000;

Second year = Rs.12,000

Third year = Rs.6,000.

**PROBLEM NO: 5**

i) Value of options = 1,250 x (Rs.200 - Rs.80) = Rs.1,50,000

ii) Amount to be recognised = Rs.1,50,000 / 3 = Rs.50,000 each year.

## In the books of HCL

## Journal

Date	Particulars	L.F.	Dr. (Rs.)	Cr. (Rs.)
31 <sup>st</sup> March, 2013	Employee Compensation Expense A/c Dr. To Employee stock option outstanding A/c (Being expenses in respect of ESOP recognised for the year-1)		50,000	50,000
31 <sup>st</sup> March, 2013	P & L A/c Dr. To Employee Compensation Expenses A/c (Being Employee Compensation Expenses for the year transfer to P & L A/c)		50,000	50,000
31 <sup>st</sup> March, 2014	Employee Compensation Expense A/c Dr. To Employee stock option outstanding A/c (Being expenses in respect of ESOP recognised for the year-2)		50,000	50,000
31 <sup>st</sup> March, 2014	P & L A/c Dr. To Employee Compensation Expenses A/c (Being Employee Compensation Expenses for the year transfer to P & L A/c)		50,000	50,000
31 <sup>st</sup> March, 2015	Employee Stock Options Outstanding A/c Dr. To General reserve A/c (W.N) (Being the reversal of compensation accounting on lapse of 450 options)		4,000	4,000
31 <sup>st</sup> March, 2015	P & L A/c Dr. To Employee Compensation Expenses A/c (Being Employee Compensation Expenses for the year transfer to P & L A/c)		32,000	32,000
31 <sup>st</sup> August, 2015	Bank A/c (800 x Rs.80) A/c Dr. Employee Stock Options Outstanding A/c Dr. To Equity Share Capital A/c (800 × 10) To Securities Premium A/c (800 × 190) (Being the exercise of 800 options)		64,000 96,000	8,000 1,52,000

## Dr. Employee Stock Options Outstanding Account Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
31.03.13	To Balance c/d	50,000	31.03.13	By Employee Compensation Expense A/c	50,000
		<b>50,000</b>			<b>50,000</b>
31.03.14	To Balance c/d	1,00,000	01.04.13	By Balance b/d	50,000
			31.03.14	By Employee Compensation Expense A/c	50,000
		<b>1,00,000</b>			<b>1,00,000</b>
31.03.15	To General reserve	36,000	01.04.14	By Balance b/d	1,00,000
	To Balance c/d	96,000	31.03.15	By Employee Compensation Expense A/c	32,000
		<b>1,32,000</b>			<b>1,32,000</b>
	To Equity share capital	8,000	01.04.15	By Balance b/d	96,000
	To Securities premium	1,52,000	31.08.15	By Bank A/c	64,000
		<b>1,60,000</b>			<b>1,60,000</b>

**DISCLOSURE IN THE BALANCE SHEET:**

- Employee Stock Options Outstanding will appear in the Balance Sheet as part of reserves and surplus on shareholders' equity as per Schedule III.

**WORKING NOTE:**

Employee Stock Option Expense recognised	1,00,000
<b>Less:</b> Employee Stock Option Expense to be recognised	<u>(96,000)</u>
Excess Employee Compensation Expense to be reversed	<u>4,000</u>

**PROBLEM NO: 6**In the Books of 'P' Ltd.Journal Entries:

Date	Particulars	Debit (Rs.)	Credit (Rs.)
31.03.2011	Employees Compensation exp. A/c Dr.	80,000	
	To Employee Stock Options o/s A/c		80,000
	(Being Compensation exp. Recognized for 6 months in respect of employees stock options on SLM basis) [8000 x (170 - 80) / 4 ½ years x 6m / 12m = 80,000]		
31.03.2011	P & L A/c Dr.	80,000	
	To Employees Compensation exp. A/c		80,000
	(Being Compensation exp. Transferred to P & L A/c)		
31.03.2012	Employees Compensation exp. A/c Dr.	1,60,000	
	To Employee Stock Options O/S A/c		1,60,000
	(Being Compensation exp. Recognized for the full year)		
31.03.2012	P & L A/c Dr.	1,60,000	
	To Employees Compensation expenses A/c		1,60,000
	(Being Compensation expenses transferred to P & L A/c)		
31.03.2013	Employees Compensation expenses A/c Dr.	80,000	
	To Employee Stock Options O/S A/c		80,000
	(Being Compensation expenses recognized in respect of 4000 options for full year) [4,000 x (170 - 80) / 4 ½ years x Full year]		
31.03.2013	P & L A/c Dr.	80,000	
	To Employees Compensation expenses A/c		80,000
	(Being Compensation expenses transferred to P & L A/c)		
31.03.2013	Employees Stock Options o/s A/c Dr.	1,20,000	
	To General Reserve A/c		1,20,000
	(Being excess compensation expenses transferred to General Reserve A/c) [(80,000 + 1, 60,000) - 4,000 / 8,000 = 1,20,000]		
31.03.2014	Employees Compensation expenses A/c Dr.	80,000	
	To Employee Stock Options O/S A/c		80,000
	(Being Compensation expenses recognized in respect of stock options of 4000)		
31.03.2014	P & L A/c Dr.	80,000	
	To Employees Compensation expenses A/c		80,000
	(Being Compensation expenses transferred to P & L A/c)		
31.03.2015	Employees Compensation expenses A/c Dr.	80,000	
	To Employee Stock Options O/S A/c		80,000
	(Being Compensation expenses recognized in respect of stock options of 4000)		
31.03.2015	P & L A/c Dr.	80,000	
	To Employees Compensation expenses A/c		80,000
	(Being Compensation expenses transferred to P & L A/c)		
30.09.2015	Bank A/c (3000 × Rs. 80 ) Dr.	2,40,000	
	Employees stock options O/S A/c (3000 × Rs.90)	2,70,000	
	To Equity share capital A/c (3000 × 10)		30,000
	To Securities Premium A/c (3000 × 160)		4,80,000
	(Being 3000 employees stock options exercised at an exercise price of Rs.80 each)		
30.09.2015	Employees Stock Options O/s A/c Dr.	90,000	
	To General Reserve A/c		90,000
	(Being balance in ESOS transferred to General Reserve A/c)		

WORKING NOTES:

1. Fair value of each option Rs.170 - Rs.80 = Rs.90
2. Amount Transferred to General Reserve

On 01.12.2012 4,000 Unvested options  $= (80,000 + 1,60,000) \times \frac{4,000}{8,000} = \text{Rs. } 1,20,000$

On 30.09.2015 1,000 Unexercised lapsed options  $= 1000 \times \text{Rs.}90 = \text{Rs.}90,000$ .

### **PROBLEM NO: 7**

Since the exercise price varies depending on the outcome of a performance condition which is not a market condition the effect of that performance condition (i.e. the possibility that the exercise price might be Rs.40 and the possibility that the exercise price might be Rs.30) is not taken into account when estimating the fair value of the stock options at the grant date. Instead, the enterprise estimates the fair value of the stock options at the grant date under each scenario and revises the transaction amount to reflect the outcome of that performance condition at the end of every year based on the information available at that point of time.

#### **Calculation of compensation expenses to be charged every year**

Year	Calculation	Compensation expenses for the period (Rs.)	Cumulative compensation expense (Rs.)
1	10,000 options $\times$ Rs. 16 $\times$ 1/3	53,333	53,333
2	(10,000 options $\times$ Rs. 16 $\times$ 2/3) - Rs. 53,333	53,334	1,06,667
3	(10,000 options $\times$ Rs. 12 $\times$ 3/3) - Rs. 1,06,667	13,333	1,20,000

### **PROBLEM NO: 8**

Year	Calculation	Expenses for the period (Rs.)	Cumulative expense (Rs.)
1	55,200 options $\times$ 75% $\times$ Rs. 12 $\times$ 1/3 years	1,65,600	1,65,600
2	(55,200 options $\times$ 75% $\times$ Rs. 12 $\times$ 2/3 years) - Rs. 1,65,600	1,65,600	3,31,200
3	(55,200 options $\times$ 75% $\times$ Rs. 12 $\times$ 3/3 years) - Rs. 3,31,200	1,65,600	4,96,800

An enterprise should review all estimates taken in consideration for valuation of option. The value of options recognised as expense in an accounting period is the excess of cumulative expense as per latest estimates upto the current accounting period over total expense recognised upto the previous accounting period.

### **PROBLEM NO: 9**

#### **Calculation of ESOP cost to be amortized**

	2015-2016	2016-2017
Fair value of options per share	Rs.18	Rs.18
No. of options expected to vest under the scheme	93,000 (930 $\times$ 100)	88,000 (880 $\times$ 100)
Fair value of options	16,74,000	Rs. 15,84,000
Value of options recognized as expenses	(Rs.16,74,000 / 2) 8,37,000	(Rs.15,84,000 - Rs.8,37,000) 7,47,000

**THE END**

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