

# 7

## Share Based Payments

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### **BASIC CONCEPTS**

Share based payments cover all forms of share-based payment for goods and services supplied to the reporting entity, including:

- ◆ employee share or share option schemes – employees are defined widely and include others providing similar services
- ◆ share-based payments to parties other than employees that have supplied goods or services to the entity
- ◆ payments to be settled in cash or other assets at amounts that depend on share values, eg share appreciation rights.

### **Share Based Payment Plans**

Share-based payment plans generally take the form of Employee Stock Option Plans (ESOP), Employee Stock Purchase Plans (ESPP) and Stock Appreciation Rights (SAR).

These are being defined as follows:

- a) **The Employee Stock Option Plan (ESOP)** is a contract that gives the employees of an enterprise the right, but not obligation, for a specified period to purchase or subscribe to the specified number shares of the enterprise at a fixed or determinable price, called the exercise price.
- b) **The Employee Stock Purchase Plan (ESPP)**, is a plan under which the enterprise offers shares to its employees at a discounted price as part of public issue or otherwise.
- c) **The Stock Appreciation Rights (SAR)** are rights that entitle the employees to receive cash or shares for an amount equivalent to the excess of market price on exercise date over a stated price.

Accounting Approach-For accounting purposes, employee share-based payment plans are classified into the following categories:

- (a) **Equity-settled**: Under these plans, the employees receive shares, e.g. ESOP
- (b) **Cash-settled**: Under these plans, the employees receive cash based on the price (or value) of the enterprise's shares, e.g. Stock Appreciation Rights (SAR).

## 7.2 Financial Reporting

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(c) **Employee share- based payment plans with cash alternatives:** Under these plans, either the enterprise or the employee has a choice of whether the enterprise settles the payment in cash or by issue of shares.

### I. **Accounting procedure for ESOP**

The amount recognised as expense in a period is debited to 'Employees' Compensation A/c' with a corresponding credit to an equity account called 'Stock Options Outstanding A/c' which may ultimately be transferred to share capital, securities premium account and/or general reserve at the time of settlement.

Disclosure: Till such transfer, the credit balance of Stock Options Outstanding A/c is shown in balance sheet under a separate heading, between 'Share Capital' and 'Reserves and Surplus'.

Accounting for Balance option not exercised- the balance of Employees' Compensation A/c is transferred to the Profit & Loss A/c of the period.

On exercise of the option, the consideration for such shares comprises of the exercise price and the aggregate value of option recognised as expense, standing to the credit of Stock Options Outstanding A/c. In a situation where the right to obtain shares or stock options expires unexercised, the balance standing to the credit of the relevant equity account should be transferred to General Reserve.

### **Variation in vesting period**

In case of revision of vesting period, the basis of allocation of option value to a particular accounting period should be based on revised estimate of vesting period.

Where the vesting condition is a market condition, the fair value of option is reduced due to the possibility that the vesting condition may not be satisfied. Such fair values are recognised as expense whether or not the market condition is satisfied, over the vesting period estimated on grant date. The estimates of vesting periods are not revised subsequently in these cases.

### **Graded Vesting**

**Graded vesting** refers to a situation where options under a plan vest on different dates. Since one of the factors affecting fair value of an option is expected life, the fair value for each group should be computed separately. Fair value of a group is then allocated to accounting periods and recognised as expense for the period with reference to vesting period for the group.

In the same way as fair value, intrinsic value of a group is allocated to accounting periods and recognised as expense for the period with reference to vesting period for the group.

### II. **Employees' Stock Purchase Plans (ESPP)**

Under these plans, employees are given an option to subscribe to shares of employer in a public issue or otherwise. The exercise price is set at a specified rate of discount on the issue price/ market price on the date of exercise. The fair value of ESPP is recognised over the vesting period in the same way as ESOP.

**Modifications**

If the modification reduces the fair value of the options granted, the modification should be ignored.

If the modification increases the fair value of the options granted (e.g., when exercise price is reduced), the **incremental fair value** is recognised as expense over the remaining vesting period.

Incremental fair value is the difference between (i) fair value of the modified option estimated on the date of the modification and (ii) fair value of the original option estimated on the date of modification.

When to recognise incremental fair value - If the modification occurs after the vesting date, the incremental fair value is recognised immediately, or over the additional vesting period if the employee is required to complete an additional period of service before becoming unconditionally entitled to the options.

**Cancellation and settlements during vesting period**

If an enterprise cancels or settles a grant of shares or stock options during the vesting period (other than a grant cancelled by forfeiture when the vesting conditions are not satisfied):

- (a) The entire amount of unamortised value of option should be recognised immediately.
- (b) Payments made to the employees on cancellation or settlement should be debited to ESOP Outstanding A/c to the maximum extent of fair value of options granted, measured at the cancellation / settlement date. Any payment in excess of the fair value is recognised as an expense.
- (c) If new options are granted to the employees in replacement for the cancelled options, the replacement is regarded as modification. The net fair value of the cancelled option is their fair value, immediately before the cancellation, less the amount of any payment made to the employee on cancellation that is debited to ESOP Outstanding A/c, in accordance with (b) above.

**Dilution of Earning per share (EPS) due to ESOP granted-Applicability of AS-20**

Dilution occurs when expected proportionate increase in number of shares is more than expected proportionate increase in profit available to equity shareholders. This happens because issue of shares at less than fair value implies issue of certain number of shares for no consideration. These shares are taken in computation of diluted EPS as potential equity.

$$\text{Number of shares issued for no consideration} = \frac{\text{Expected issue proceeds}}{\text{Fair value per share}}$$

$$\text{No. of shares issued for no consideration} = \text{No. of shares issued} - \text{No. of shares issued for consideration}$$

## 7.4 Financial Reporting

Issue of shares under a scheme of share-based payment, increases the number of shares outstanding. Since the shares are issued at exercise price, which is lower than the fair value of shares issued, an ESOP gives rise to situation of dilution of EPS. In calculating the number of shares issued for no consideration, the expected proceeds from the exercise of option is taken as sum of (i) Exercise Price (ii) Value of services to be rendered by employees in future upto the vesting date. This value of services is measured as unamortised value of option.

### III. Stock Appreciation Rights (SAR)

Stock Appreciation Rights (SAR) entitle the employees to claim cash payment to the extent of excess of market price of underlying shares on exercise date over the exercise price. The accounting procedures for ESOP and SAR are similar except that: (i) The liability for SAR is recognised as Provision instead of ESOP Outstanding and (ii) value per option is reassessed at each reporting date.

#### **Employee Share-Based Payment Plans With Cash Alternatives**

These plans consist of two components viz., (i) liability, i.e., the employer's obligation to pay price differential in cash and (ii) equity, i.e., the employer's obligation to issue shares at exercise price. The company should first measure, on the grant date, fair value of the plan on the assumption that all employees will exercise their options in favour of (i) cash settlement (ii) equity settlement. The fair value of plan for cash settlement is the fair value of the liability component. The excess, if any, of fair value of plan for equity settlement over the liability component is the fair value of equity component. The accounting procedure for equity component is same as that for ESOP. The accounting procedure for liability component is same as that for SAR.

On the date of settlement, the company should remeasure the liability to its fair value. If the employees opt for shares, the amount of liability should be treated as the consideration for the shares issued. If the employees opt for cash settlement, the balance in ESOP Outstanding A/c should be transferred to general reserve.

#### **Question 1**

*Choice Ltd. grants 100 stock options to each of its 1,000 employees on 1.4.2014 for ₹ 20, depending upon the employees at the time of vesting of options. The market price of the share is ₹ 50. These options will vest at the end of year 1 if the earning of Choice Ltd. is 16%, or it will vest at the end of the year 2 if the average earning of two years is 13%, or lastly it will vest at the end of the third year if the average earning of 3 years will be 10%. 5,000 unvested options lapsed on 31.3.2015. 4,000 unvested options lapsed on 31.3.2016 and finally 3,500 unvested options lapsed on 31.3.2017.*

*Following is the earning of Choice Ltd.:*

Year ended on	Earning (in %)
31.3.2015	14%

31.3.2016	10%
31.3.2017	7%

850 employees exercised their vested options within a year and remaining options were unexercised at the end of the contractual life. Pass Journal entries for the above.

**Answer**

**Journal Entries**

Date	Particulars		₹	₹
31.3.2015	Employees compensation expenses A/c Dr. To ESOS outstanding A/c (Being compensation expense recognized in respect of the ESOP i.e. 100 options each granted to 1,000 employees at a discount of ₹ 30 each, amortised on straight line basis over vesting years- Refer W.N.)		14,25,000	14,25,000
31.3.2015	Profit and Loss Account Dr. To Employees compensation expenses A/c (Being compensation expense charged to Profit & Loss A/c)		14,25,000	14,25,000
31.3.2016	Employees compensation expenses A/c Dr. To ESOS outstanding A/c (Being compensation expense recognized in respect of the ESOP - Refer W.N.)		3,95,000	3,95,000
31.3.2016	Profit and Loss Account Dr. To Employees compensation expenses A/c (Being compensation expense charged to Profit & Loss A/c)		3,95,000	3,95,000
31.3.2017	Employees compensation Expenses A/c Dr. To ESOS outstanding A/c (Being compensation expense recognized in respect of the ESOP – Refer W.N.)		8,05,000	8,05,000
31.3.2017	Bank A/c (85,000 X ₹20) Dr. ESOS outstanding A/c Dr. [(26,25,000/87,500) x 85,000]		17,00,000 25,50,000	

## 7.6 Financial Reporting

	To Equity share capital (85,000 x ₹ 10)		8,50,000
	To Securities premium A/c (85,000 x ₹40)		34,00,000
	(Being 85,000 options exercised at an exercise price of ₹ 50 each)		
	Profit and Loss A/c	Dr.	8,05,000
	To Employees compensation expenses A/c		8,05,000
	(Being compensation expenses charged to Profit & Loss A/c)		
	ESOS outstanding A/c	Dr.	75,000
	To General Reserve A/c		75,000
	(Being ESOS outstanding A/c on lapse of 2,500 options at the end of exercise of option period transferred to General Reserve A/c)		

### Working Note:

#### Statement showing compensation expenses to be recognised

Particulars	Year 1 (31.3.2015)	Year 2 (31.3.2016)	Year 3 (31.3.2017)
Expected vesting period (at the end of the year)	2 <sup>nd</sup> year	3 <sup>rd</sup> year	3 <sup>rd</sup> year
Number of options expected to vest	95,000 options	91,000 options	87,500 options
Total compensation expenses accrued @ 30 (i.e. 50-20)	<u>₹ 28,50,000</u>	<u>₹ 27,30,000</u>	<u>₹ 26,25,000</u>
Compensation expenses of the year	28,50,000 x 1/2 = ₹14,25,000	27,30,000 x 2/3 = ₹18,20,000	₹ 26,25,000
Compensation expenses recognized previously	<u>Nil</u>	<u>₹ 14,25,000</u>	<u>₹ 18,20,000</u>
Compensation expenses to be recognized for the year	<u>₹ 14,25,000</u>	<u>₹ 3,95,000</u>	<u>₹ 8,05,000</u>

### Question 2

ABC Ltd. grants 1,000 employees stock options on 1.4.2013 at ₹ 40, when the market price is ₹ 160. The vesting period is 2½ years and the maximum exercise period is one year. 300 unvested options lapsed on 1.5.2015. 600 options were exercised on 30.6.2016. 100 vested options lapsed at the end of the exercise period. Pass Journal Entries giving suitable narrations.

## Answer

## Journal Entries in the books of ABC Ltd.

Date	Particulars	Dr. (₹)	Cr. (₹)
31.3.2014	Employees compensation expenses account Dr. Employees stock option outstanding account (Being compensation expenses recognized in respect of the employees stock option i.e. 1,000 options granted to employees at a discount of ₹ 120 each, amortised on straight line basis over $2\frac{1}{2}$ years)	48,000	48,000
	Profit and loss account Dr. To Employees compensation expenses account (Being expenses transferred to profit and loss account at the end of the year)	48,000	48,000
31.3.2015	Employees compensation expenses account Dr. To Employees stock option outstanding account (Being compensation expenses recognized in respect of the employee stock option i.e. 1,000 options granted to employees at a discount of ₹ 120 each, amortised on straight line basis over $2\frac{1}{2}$ years)	48,000	48,000
	Profit and loss account Dr. To Employees compensation expenses account (Being expenses transferred to profit and loss account at the end of the year)	48,000	48,000
31.3.2016	Employees stock option outstanding account Dr. (W.N.1) To General Reserve account (W.N.1) (Being excess of employees compensation expenses transferred to general reserve account)	12,000	12,000

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30.6.2016	Bank A/c (600 x ₹ 40)	Dr.	24,000	
	Employee stock option outstanding account (600 x ₹ 120)	Dr.	72,000	
	To Equity share capital account (600 x ₹ 10)			6,000
	To Securities premium account (600 x ₹ 150)			90,000
	(Being 600 employees stock option exercised at an exercise price of ₹ 40 each)			
01.10.2016	Employee stock option outstanding account	Dr.	12,000	
	To General reserve account			12,000
	(Being Employees stock option outstanding A/c transferred to General Reserve A/c, on lapse of 100 options at the end of exercise of option period)			

### Working Note:

On 31.3.2016, ABC Ltd. will examine its actual forfeitures and make necessary adjustments, if any to reflect expenses for the number of options that have actually vested. 700 employees stock options have completed 2.5 years vesting period, the expense to be recognized during the year is in negative i.e.

	₹
No. of options actually vested (700 x ₹120)	84,000
Less: Expenses recognized ₹(48,000 + 48,000)	<u>(96,000)</u>
Excess expenses transferred to general reserve	<u>(12,000)</u>

### Question 3

*Santosh Ltd. granted 500 options to each of its 2,500 employees in 2011 at an exercise price of ₹ 50 when the market price was the same. The contractual life (vesting and exercise period) of the options granted is 6 years with the vesting period and exercise period being 3 years each. The expected life is 5 years and the expected annual forfeitures are estimated at 3 per cent. The fair value per option is arrived at ₹ 15. Actual forfeitures in 2011 were 5 per cent. However at the end of 2011 the management of Santosh Ltd. still expects that the actual forfeitures would average only 3 per cent over the entire vesting period. During 2012 the management revises its estimated average forfeiture rate to 10 per cent per annum over the entire vesting period. Of the 2,500 employees 1,900 employees have completed the 3 year vesting period. 1,000 employees exercise their right to obtain shares vested in them in pursuance of ESOP at the end of 2015 and 500 employees exercise their right at the end of 2016. The rights of the remaining employees expire unexercised at the end of 2016. The face value per share is ₹ 10. Show the necessary journal entries with suitable narrations. Workings should form part of the answer.*

## Answer

## Journal Entries

Year 2011		₹	₹
Employee Compensation Expense A/c	Dr.	57,04,205	
To Employee Stock Options Outstanding A/c			57,04,205
(Being the compensation expenses recognized in respect of the ESOP)			
Profit and Loss A/c	Dr.	57,04,205	
To Employee Compensation Expense A/c			57,04,205
(Being Expenses of the year transferred to P & L A/c)			
<i>Year 2012</i>			
Employee Compensation Expense A/c	Dr.	34,08,295	
To Employee Stock Options Outstanding A/c			34,08,295
(Being the compensation expenses recognized in respect of the ESOP)			
Profit and Loss A/c	Dr.	34,08,295	
To Employee Compensation Expense A/c			34,08,295
(Being Expenses of the year transferred to P & L A/c)			
<i>Year 2013</i>			
Employee Compensation Expense A/c	Dr.	51,37,500	
To Employee Stock Options Outstanding A/c			51,37,500
(Being the compensation expenses recognized in respect of the ESOP)			
Profit and Loss A/c	Dr.	51,37,500	
To Employee Compensation Expense A/c			51,37,500
(Being Expenses of the year transferred to P & L A/c)			
<i>Year 2015</i>			
Bank A/c	Dr.	250,00,000	
Employee Stock Options Outstanding A/c	Dr.	75,00,000	
To Share Capital A/c			50,00,000
To Securities Premium			275,00,000
(Being shares issued to employees against options vested in them in pursuance of the ESOP)			

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<i>Year 2016</i>			
Bank A/c	Dr.	125,00,000	
Employee Stock Options Outstanding A/c	Dr.	37,50,000	
To Share Capital A/c			25,00,000
To Securities Premium A/c			137,50,000
(Being shares issued to employees against options vested in them in pursuance of the ESOP)			
Employee Stock Options Outstanding A/c	Dr.	30,00,000	
To General Reserve A/c			30,00,000
(Being the balance standing to the credit of stock options outstanding account, in respect of vested options expired unexercised, transferred to general reserve account)			

### Working Notes:

#### 1. Fair value of options recognized as expense in the year 2011

Number of options expected to vest =  $500 \times 2,500 \times .97 \times .97 \times .97 = 11,40,841$  options\*

Fair value of options expected to vest =  $11,40,841 \times ₹ 15 = ₹ 171,12,615$

One third of fair value recognized as expense =  $₹ 171,12,615 / 3 = ₹ 57,04,205$

<b>Year 2012</b>	
Fair Value of options revised in the year = $500 \times 2500 \times 0.90 \times 0.90 \times 0.90 \times ₹ 15$	₹ 136,68,750
Revised cumulative expenses in year 2012 = $136,68,750 \times \frac{2}{3}$	₹ 91,12,500
Less: Already recognized in year 2011	<u>₹ (57,04,205)</u>
Expenses to be recognized in year 2012	<u>₹ 34,08,295</u>
<b>Year 2013</b>	
Number of options actually vested = $1900 \times 500 = 9,50,000$	
Fair Value of options actually vested = $9,50,000 \times ₹ 15$	₹ 1,42,50,000
Less: Expense recognized till year 2013	<u>₹ (91,12,500)</u>
Balance amount to be recognized	<u>₹ 51,37,500</u>

\* One can also first calculate the estimated employees in absolute figure and then multiply number of options i.e.  $2,500 \times 0.97 \times 0.97 \times 0.97 = 2282$  employees (approx.) and then  $2282 \times 50 = 11,41,000$  options and so on.

**2. Amount recorded in share capital account and securities premium account upon issue of shares**

<i>Particulars</i>	<i>Year 2015</i>	<i>Year 2016</i>
Number of employees exercising option	1,000	500
Number of shares issued upon exercise of option @ 500 per employee	5,00,000	2,50,000
Exercise price received @ ₹ 50 per share	2,50,00,000	1,25,00,000
Corresponding amount recognized in the 'Employee stock options outstanding A/c' @ ₹ 15 per option	<u>75,00,000</u>	<u>37,50,000</u>
Total consideration	<u>3,25,00,000</u>	<u>1,62,50,000</u>
Amount to be recorded in 'Share capital A/c' @ ₹ 10 per share	50,00,000	25,00,000
Amount to be recorded in 'Securities premium A/c' @ ₹ 55 (i.e. 65 – 10) per share	<u>2,75,00,000</u>	<u>1,37,50,000</u>
	<u>3,25,00,000</u>	<u>1,62,50,000</u>

**Question 4**

On 1<sup>st</sup> April, 2016, a company offered 100 shares to each of its 500 employees at ₹ 50 per share. The employees are given a month to decide whether or not to accept the offer. The shares issued under the plan (ESPP) shall be subject to lock-in on transfers for three years from grant date. The market price of shares of the company on the grant date is ₹ 60 per share. Due to post-vesting restrictions on transfer, the fair value of shares issued under the plan is estimated at ₹ 56 per share.

On 30<sup>th</sup> April, 2016, 400 employees accepted the offer and paid ₹ 50 per share purchased. Nominal value of each share is ₹ 10.

Record the issue of shares in the books of the company under the aforesaid plan.

**Answer**

Fair value of an ESPP = ₹ 56 – ₹ 50 = ₹ 6

Number of shares issued = 400 employees x 100 shares/employee = 40,000 shares

Fair value of ESPP which will be recognized as expenses in the year 2016-2017

= 40,000 shares x ₹ 6 = ₹ 2,40,000

Vesting period = 1 month

Expenses recognized in 2016-2017 = ₹ 2,40,000

## 7.12 Financial Reporting

### Journal Entry

Date	Particulars	Dr. (₹)	Cr. (₹)
30.04.2016	Bank A/c (40,000 shares x ₹ 50) Dr.	20,00,000	
	Employees compensation expense A/c Dr.	2,40,000	
	To Share Capital A/c (40,000 shares x ₹ 10)		4,00,000
	To Securities Premium (40,000 shares x ₹ 46) (Being shares issued under ESPP @ ₹ 50)		18,40,000

### Exercise

#### Question 1

At the beginning of year 1, an enterprise grants 300 options to each of its 1,000 employees. The contractual life (comprising the vesting period and the exercise period) of options granted is 6 years. The other relevant terms of the grant are as below:

Vesting Period	3 years
Exercise Period	3 years
Expected Life	5 years
Exercise Price	₹ 50
Market Price	₹ 50
Expected forfeitures per year	3%

The fair value of options, calculated using an option pricing model, is ₹ 15 per option. Actual forfeitures, during the year 1, are 5 per cent and at the end of year 1, the enterprise still expects that actual forfeitures would average 3 per cent per year over the 3 year vesting period. During the year 2, however, the management decides that the rate of forfeitures is likely to continue to increase, and the expected average forfeiture rate for the entire award is changed to 6 per cent per year. It is also assumed that 840 employees have actually completed 3 years vesting period.

200 employees exercise their right to obtain shares vested in them in pursuance of the ESOP at the end of year 5 and 600 employees exercise their right at the end of year 6. Rights of 40 employees expire unexercised at the end of the contractual life of the option, i.e., at the end of year 6. Face value of one share of the enterprise is ₹ 10.

**[Answer: The enterprise estimates the fair value of the options expected to vest at the end of the vesting period as No. of options expected to vest =  $300 \times 1,000 \times 0.97 \times 0.97 \times 0.97 = 2,73,802$  options**

**Fair value of options expected to vest =  $2,73,802 \text{ options} \times ₹ 15 = ₹ 41,07,030$**

**In the first year it recognizes ₹ 41,07,030/3 towards the employee services.**

**Expense to be recognized in year 2 = ₹ 11,22,740**

**Expense to be recognized in year 3 = ₹ 12,88,250]**

#### Question 2

Write short note on Stock Appreciation Rights.

#### Question 3

What are the disclosure requirements in respect of share based payments?