IND AS 102 SHARE BASED PAYMENTS

Illustration 3 - Share-based payment with cash alternative (MTP Oct'21)

On 1st January, 20X1, ABC limited gives options to its key management personnel (employees) to take either cash equivalent to 1,000 shares or 1,500 shares. The minimum service requirement is 2 years and shares being taken must be kept for 3 years.

Fair values of the shares are as follows:	₹
Share alternative fair value (with restrictions) Grant Date	102
Grant date fair value on 1st January, 20X1 Cash alternative	113
Fair value on 31st December, 20X1	120
Fair Value on 31st December, 20X2	132

The employees exercise their cash option at the end of 20X2. Pass the journal entries.

1 Share 1000 x 102 = 102000

Grant Date {Cal" to be made considering Grant Date Fair Value}

Fair value of Equity Alternative {1500 x 102} Given 153000

" " " Cash " {1000 x 113} Given 113000

Equity Component 40000

∴ At Grant Date, Given

Liability Component = 113000

Equity Component = 40000 {For Equity, Fair Value change not considered}

1st yr End

Employee Benefit Expenses Dr. 80000

To SBPR (Equity) {40000/2} 20000

To SBPL {Liability} {1000 Sh. x 120 ÷ 2 yrs} 60000

(120 → New Fair Value)

2nd yr End

Employee Benefit Expenses Dr. 92000

To SBPR (Equity) {40000/2} 20000

To SBPL {Liability} {{1000 x 132} - 60000} 72000

At 2nd yr end

B/sheet

Equity
SBPR - 40000

Liab
SBPL - 132000 → SBPL 132000
To SBPR 132000

SBPR 132000

Since employee exercised cash option

(i) SBPL 132000
To Cash 132000

(ii) SBPR (Equity) 40000
To Retained Earnings (Equity) 40000

Share option

SBPL 132000
To SBPR 132000

SBPR 172000
To Sh. Cap 172000
To S. Prem

Illustration 10 – Modifications – Equity-settled share based payment

Marathon Inc. issued 150 share options to each of its 1,000 employees subject to the service condition of 3 years. Fair value of the option given was calculated at ₹ 129. Below are the details and activities related to the SBP plan-

Year 1: 35 employees left and further 60 employees are expected to leave. Share options re-priced (as MV of shares has fallen) as the FV fell to ₹ 50. After the re-pricing they are now worth ₹ 80, hence expense is expected to increase by ₹ 30.
Year 2: 30 employees left and further 36 employees are expected to leave
Year 3: 39 employees left
How the modification/ re-pricing will be accounted?

905 Emp × 150 Sh × 129 / 3

899

1st year

$$\frac{(1000 - 35 - 60)\ \text{Emp} \times 150\ \text{Sh} \times 129}{3\ \text{yrs}}$$

= 5837250

2nd yr

$$\frac{(1000 - 35 - 30 - 36) \times 150\,\text{sh} \times 129}{3\,\text{yrs}} \times 2\,\text{yrs} - 5837250$$

$= 5759850$

Modification Entry

$$\frac{899\ \text{Emp} \times 150\,\text{sh} \times 30}{2\,\text{yrs}}$$

$= 2022750$

∴ Total Exp (2nd yr) = 5759850 + 2022750 = 7782600

3rd yr

$$\frac{(1000 - 35 - 30 - 39)\,\text{Emp} \times 150\,\text{sh} \times 129}{3\,\text{yrs}} \times 3\,\text{yrs} - 5837250 - 5759850$$

$= 5740500$

modification Entry

$$\frac{896\ \text{Emp} \times 150\,\text{sh} \times 30}{2\,\text{yrs}} \times 2\,\text{yrs} - 2022750$$

$= 2009250$

∴ Total Exp (3rd yr) = 5740500 + 2009250

$= 7749750$

modification

Entity grants 1 share option to 100 Emp.

Vesting condition = 3 yrs.

Exercise price = ₹ 100 ↝ 150

~~Fair value of share at grant Date = 150~~

Fair value of option at grant Date = ₹ 115

1st	2nd	3rd
E.C.E 3833	ECE 3833	ECE 3833
To SOPL 3833	To SOPL 3833	To SOPL 3833

At 1st yr End

Fair value of share price fall significantly and therefore Fair value of option reduced to ₹ 25 only.

Q.P. 100 ↝ F.V. of option = 25
F.V. of share 140

modification

Exercise price reduced to ₹ 30.

⇓

Q.P. = 30 ↝ F.V. of option = 90
F.V. of share = 140

Additional Expenses borne by Entity = 90 − 25

= 65

⇓

65 × 100 Emp = 6500

2nd yr	3rd yr
ECE 3250	ECE 3250
To SOPL 3250	To SOPL 3250

Illustration 11 - Cancellation- Equity Settled Share based payment

Cancellation & Settlement

Anara Fertilisers Limited issued 2000 share options to its 10 directors for an exercise price of ₹ 100. The directors are required to stay with the company for next 3 years.

Fair value of the option estimated	₹ 130
Expected number of directors to vest the option	8

During the year 2, there was a crisis in the company and Management decided to cancel the scheme immediately. It was estimated further as below-

Fair value of option at the time of cancellation was	₹ 90
Market price of the share at the cancellation date was	₹ 99

There was a compensation which was paid to directors and only 9 directors were currently in employment. At the time of cancellation of such scheme, it was agreed to pay an amount of ₹ 95 per option to each of 9 directors. How the cancellation would be recorded?

1620000

9 × 2000 × 130

1st yr end

Expenses = (8 Directors × 2000 sh × 130) / 3 yrs

= 693333 → E.C.E. 693333
To SBPR 693333

→ yaha par exam me ₹ 90 likh ke mat ajana.

2nd yr end

Expenses = 9 Directors × 2000 sh × 130 − 693333

= 1646667 ECE 1646667
To SBPR 1646667

2nd yr end

B/Sheet

Equity
SBPR 2340000 → 9 × 2000 × 130
(1620000)

SBPR (9 × 2000 × 90)	1620000
P/L	90000
To Cash (9 × 2000 × 95)	1710000

Cancellation Compensation to Employees = 9 Directors x 2000 sh x 95

= 1710000

But,

Fair value of option at the time of cancellation = 9 x 2000 x 90

= 1620000

Journal

SBPR (Equity)	{90}	1620000	
P/L {9x2000x5}	{5}	90000	
To Bank			1710000

Working Notes:

1. Amount to be deducted from Equity

Number of directors	9
Fair value of opton (at the date of cancellation)	90
Number of options / directors	2,000
Total	16,20,000

2. Amount transferred to Profit and Loss

Total cancellation compensation	17,10,000
Less: To deduct from Equity	(16,20,000)
Balance transferred to Profit and Loss	90,000

FYR

Question 12: (MTP/RTP May'20) **

An entity which follows its financial year as per the calendar year grants 1,000 share appreciation rights (SARs) to each of its 40 management employees as on 1st January 20X5. The SARs provide the employees with the right to receive (at the date when the rights are exercised) cash equal to the appreciation in the entity's share price since the grant date. All of the rights vest on 31st December 20X6; and they can be exercised during 20X7 and 20X8. Management estimates that, at grant date, the fair value of each SAR is ₹ 11; and it estimates that overall 10% of the employees will leave during the two-year period. The fair values of the SARs at each year end are shown below:

Year	Fair value at year end
31 December 20X5	12
31 December 20X6	8
31 December 20X7	13
31 December 20X8	12

10% of employees left before the end of 20X6. On 31st December 20X7 (when the intrinsic value of each SAR was ₹ 10), six employees exercised their options; and the remaining 30 employees exercised their options at the end of 20X8 (when the intrinsic value of each SAR was equal to the fair value of ₹12). How much expense and liability is to be recognized at the end of each year? Pass Journal entries.

1st yr end 31.12.05

Expenses = (40 − 10%) i.e. $\frac{36 \text{ emp} \times 1000 \text{ SAR} \times 12}{2 \text{ years}}$ = 216000

Journal

E.B.E.	216000	
To SBPL		216000

2nd yr End 31.12.06

Expenses = $\frac{36 \text{ Emp} \times 1000 \text{ SAR} \times 8}{24\text{ms}} \times 24\text{ms} - 216000 = 72000$

Journal

E.B.E.	72000	
TO SBPL		72000

B/sheet

SBPL = 216000
(+) 72000
288000

3rd yr End 31.12.06

Total Liability = 30 Emp × 1000 × 13 (Fair value) + 6 Emp × 1000 × 10 (Intrinsic value)
= 390000 + 60000
= 450000

∴ Exc in liab = 450000 − 288000
= 162000

Journal

E.B.E.	162000	
TO SBPL		162000
SBPL	60000	
TO Cash		60000

SBPL (288000 + 162000) = 450000

SBPL (450000 − 60000) = 390000 (= 30 × 1000 × 13)

390000

4th yr End (31.12.07)

Total Liab = 30 Emp × 1000 × 12 (F.V.) = 360000

Journal

SBPL	360000	
TO Cash		360000
SBPL	30000	
TO E.B.E. (P/L)		30000

1 CAN

SBPL	390000	
TO Cash		360000
TO E.B.E (P/L)		30000

Question 10: (MTP Mar'19) (RTP Nov'19)

F.V. of option on grant date = 1.20

QA Ltd. had on 1st April, 20X1 granted 1,000 share options each to 2,000 employees. The options are due to vest on 31st March, 20X4 provided the employee remains in employment till 31st March, 20X4.

On 1st April, 20X1, the Directors of Company estimated that 1,800 employees would qualify for the option on 31st March, 20X4. This estimate was amended to 1,850 employees on 31st March, 20X2 and further amended to 1,840 employees on 31 st March, 20X3.

On 1st April, 20X1, the fair value of an option was ₹ 1.20. The fair value increased to ₹ 1.30 as on 31st March, 20X2 but due to challenging business conditions, the fair value declined thereafter. In September, 20X2, when the fair value of an option was ₹ 0.90, the Directors repriced the option and this caused the fair value to increase to ₹ 1.05. Trading conditions improved in the second half of the year and by 31st March, 20X3 the fair value of an option was ₹ 1.25. QA Ltd. decided that additional cost incurred due to repricing of the options on 30th September, 20X2 should be spread over the remaining vesting period from 30th September, 20X2 to 31st March, 20X4.

The Company has requested you to suggest the suitable accounting treatment for these transaction as on 31st March, 20X3.

1st yr End (31.3.02)

$$\text{Expenses} = \frac{1850 \text{ Emp} \times 1000 \times 1.20}{3 \text{ yrs}} = 740000$$

2nd yr End (31.3.03)

$$\text{Expenses} = 1840 \times \frac{1000 \times 1.20}{3 \text{ yrs}} \times 2 \text{ yrs} - 740000 = 732000$$

modification

$$\text{Expense} = \frac{1840 \times 1000 \times .15}{1.5 \text{ yrs}} \times .5 \text{ yrs} = 92000$$

Total expenses (31.3.03) = 732000 + 92000 = 824000

3rd yr End (31.3.04)

No info provided

Accordingly, the amounts recognised in years 1 and 2 are as follows:

Year	Calculation	Compensation expense for period	Cumulative compensation expense
		₹	₹
1	[1,850 employees x 1,000 options x ₹1.20] x 1/3	7,40,000	7,40,000
2	(1,840 employees x 1,000 options x [(₹1.20 x 2/3) + {(₹1.05 - 0.90) x 0.5/1.5}] - 7,40,000	8,24,000	15,64,000

Note: Year 3 calculations have not been provided as it was not required in the question.

Liab.

9. P Ltd. granted 400 stock appreciation rights (SAR) each to 75 employees on 1st April 20X1 with a fair value ₹ 200. The terms of the award require the employee to provide service for four years in order to earn the award. The fair value of each SAR at each reporting date is as follows:

31st March 20X2	₹ 210
31st March 20X3	₹ 220
31st March 20X4	₹ 215
31st March 20X5	₹ 218

What would be the difference if at the end of the second year of service (i.e. at 31st March 20X3), P Ltd. modifies the terms of the award to require only three years of service?

Without modification

1st yr ⇒ $75 \times 400 \times \frac{210}{4\text{yrs}} = 1575000$

2nd yr ⇒ $75 \times 400 \times \frac{220}{4\text{yrs}} \times 2\text{yrs} - 1575000 = 1725000$

3rd yr ⇒ $75 \times 400 \times \frac{215}{4\text{yrs}} \times 3\text{yrs} - 1575000 - 1725000 = 1537500$

4th yr ⇒ $75 \times 400 \times \frac{218}{4\text{yrs}} \times 4\text{yrs} - 1575000 - 1725000 - 1537500 = 1702500$

With modification

1st yr ⇒ $75 \times 400 \times \frac{210}{4\text{yrs}} = 1575000$

2nd yr ⇒ $75 \times 400 \times \frac{220}{3\text{yrs}} \times 2\text{yrs} - 1575000 = 2825000$

3rd yr ⇒ $75 \times 400 \times \frac{215}{3\text{yrs}} \times 3\text{yrs} - 1575000 - 2825000 = 2050000$

4th yr $75 \times 400 \times 218 - 1575000 - 2825000 - 2050000 = 9000$

Date	Particulars		Debit	Credit
31.03.20X2	Profit and Loss account	Dr.	15.75	
	To Liability against SARs			15.75
	(Being expenses liability for stock appreciation rights recognised)			
31.03.20X3	Profit and Loss account	Dr.	17.25	
	To Liability for SARs			17.25
	(Being expenses liability for stock appreciation rights recognised)			
31.03.20X4	Profit and Loss account	Dr.	15.38	
	To Liability for SARs			15.38
	(Being expenses liability for stock appreciation rights recognised)			
31.03.20X5	Profit and Loss account	Dr.	17.02	
	To Liability for SARs			17.02
	(Being expenses liability for stock appreciation rights recognised)			

Date	Particulars		Debit	Credit
31.03.20X2	Profit and Loss account	Dr.	15.75	
	To Liability for SARs			15.75
	(Being expenses liability for stock appreciation rights recognised)			
31.03.20X3	Profit and Loss account	Dr.	28.25	
	To Liability for SARs			28.25
	(Being expenses liability for stock appreciation rights recognised)			
31.03.20X4	Profit and Loss account	Dr.	20.50	
	To Liability for SARs			20.50
	(Being expenses liability for stock appreciation rights recognised)			

5000

Question 11

A parent, Company P, grants 30 shares to 100 employees each of its subsidiary, Company S, on condition that the employees remain employed by Company S for three years. Assume that at the outset, and at the end of Years 1 and 2, it is expected that all the will remain employed for all the three years. At the end of Year 3, none of the employees has left. The fair value of the shares on grant date is ₹ 5 per share.

100 Emp × 30 × 5 = 15000

Company S agrees to reimburse Company P over the term of the arrangement for 75 percent of the final expense recognised by Company S. What would be the accounting treatment in the books of Company P and Company S?

Parent

Inv in Subsidiary	(25%)	1250	
Bank	(75%)	3750	
To SBPR			5000

Subs.

E.B.E.		5000	
To Cash			3750
To Capital contr from parent			1250

Same Entry in 2nd & 3rd yr.

Question 7 (RTP Nov'22)

The following particulars in respect of stock options granted by a company are available:

No. of Employees covered	400	Nominal Value per share	100
No. of options per Employee	60	Exercise price per share	125

Shares offered were put in three groups. Group 1 was for 20% of shares offered with vesting period one-year. Group II was for 40% of shares offered with vesting period two- years. Group III was for 40% of shares offered with vesting period three-years. Fair value of option per share on grant date was 10 for Group I, 12.50 for Group II and 14 for Group III.

Position on 1st Year	Position on 2nd Year	Position on 3rd Year
No. of employees left = 40	Employees left = 35	Employees left = 28
Estimate of employees to leave in Year 2 = 36	Estimate of employees to leave in Year 3 = 30	Employees exercising Options in Group III = 295
Estimate of employees to leave in Year 3 = 34	Employees exercising Options in Group II = 319	

Employees exercising Options in Group I = 350		

Options not exercised immediately on vesting, were forfeited. Compute expenses to recognise in each year and show important accounts in the books of the company.

V.P. = 1 yr

Group 1 (12 options)

Year 1

400 − 40

No. of employees = 360

Fair value = 10

Exp = 360 × 12 × 10

= 43200 (1st yr)

Year 1 = 43200

V.P. = 2 yrs

Group 2 (24 options)

Year 1

No. of Emp. = 400 − 40 − 36 = 324

Fair value = 12.5

Exp (total) = 324 × 24 × 12.5

= 97200

Exp (1st year) = $\frac{97200}{2}$ = 48600 (1st yr)

Year 2

No. of Emp = 400 − 40 − 35 = 325

∴ Exp (total) = 325 × 24 × 12.5

= 97500

Exp (2nd yr) = 97500 − 48600 (1st yr)

= 48900 (2nd yr)

Year 1 − 48600 | Year 2 − 48900

V.P. = 3 yrs.

Group 3 (24 options)

Year 1

No. of Emp = 400 − 40 − 36 − 34 = 290

Fair value = 14

Exp (total) = 290 × 24 × 14 = 97440

∴ Exp (1st yr) = $\frac{97440}{3}$ = 32480

Year 2

No. of Emp. = 400 − 40 − 35 − 30 = 295

∴ Exp (total) = 295 × 24 × 14 = 99120

∴ Exp (2nd) = $\frac{99120}{3}$ × 2 − 32480 = 33600

Year 3

No. of Emp = 400 − 40 − 35 − 28 = 297

∴ Exp (total) = 297 × 24 × 14 = 99792

∴ Exp (3rd yr) = 99792 − 32480 − 33600

= 33712

Year 1 − 32480 | Year 2 − 33600

Year 3 − 33712

Total Expenses year wise

	Group 1	Group 2	Group 3	
Year 1	43200 +	48600 +	32480	= 124280
Year 2		48900 +	33600	= 82500
Year 3			33712	= 33712

Group 2

Group 3

DM. | Emp. Benefits Exp A/c | CM.

To SBPR (Year 1)	124280	By P/L (Year 1)	124280
To SBPR (Year 2)	82500	By P/L (Year 2)	82500
To SBPR (Year 3)	33712	By P/L (Year 3)	33712

Share Based Payment Reserve A/c* (Practice)

Year 1

To Retained Earnings (10 × 13 × 10)	1200	By E.B.E (10)	124280
To Share Cap. (350 × 12 × 100)	420000	By Bank (350 × 12 × 125) (420000)	525000
To Securities Prem (350 × 12 × 35)	147000		
By Bal c/d (48600 + 32480) (Group 2, Group 3)	81080		

Year 2

To Retained Earnings (6 × 24 × 12.5)	1800	By Bal b/d (Group 2 & 3)	81080
To Share Cap. (319 × 24 × 100)	765600	By E.B.E	82500
To Securities Prem (319 × 24 × 37.5)	287100	By Bank (319 × 24 × 125)	957000
By Bal c/d (32480 + 33600)	66080		

Year 3

To Retained Earnings (2 × 24 × 14)	672	By Bal b/d	66080
To Share Cap. (295 × 24 × 100)	708000	By E.B.E	33712
To Securities Prem (295 × 24 × 39)	276120	By Bank (295 × 24 × 125)	885000