



शुद्ध वस्तुगत  
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IND AS 102

## Share Based Payments.

Consideration / payments  
in the

- ↳ form of shares: ~~or~~
- ↳ form of cash whose value is based on shares.

i.e. Cash based on value of shares.

Consideration for  
Some benefit derived.

Can be in the form of

- ↳ goods
- ↳ Serv.
- ↳ Assets.

Hence

To conclude we can say SBP deals with those transactions (contracts) where entity has purchased goods / services / assets and its payment



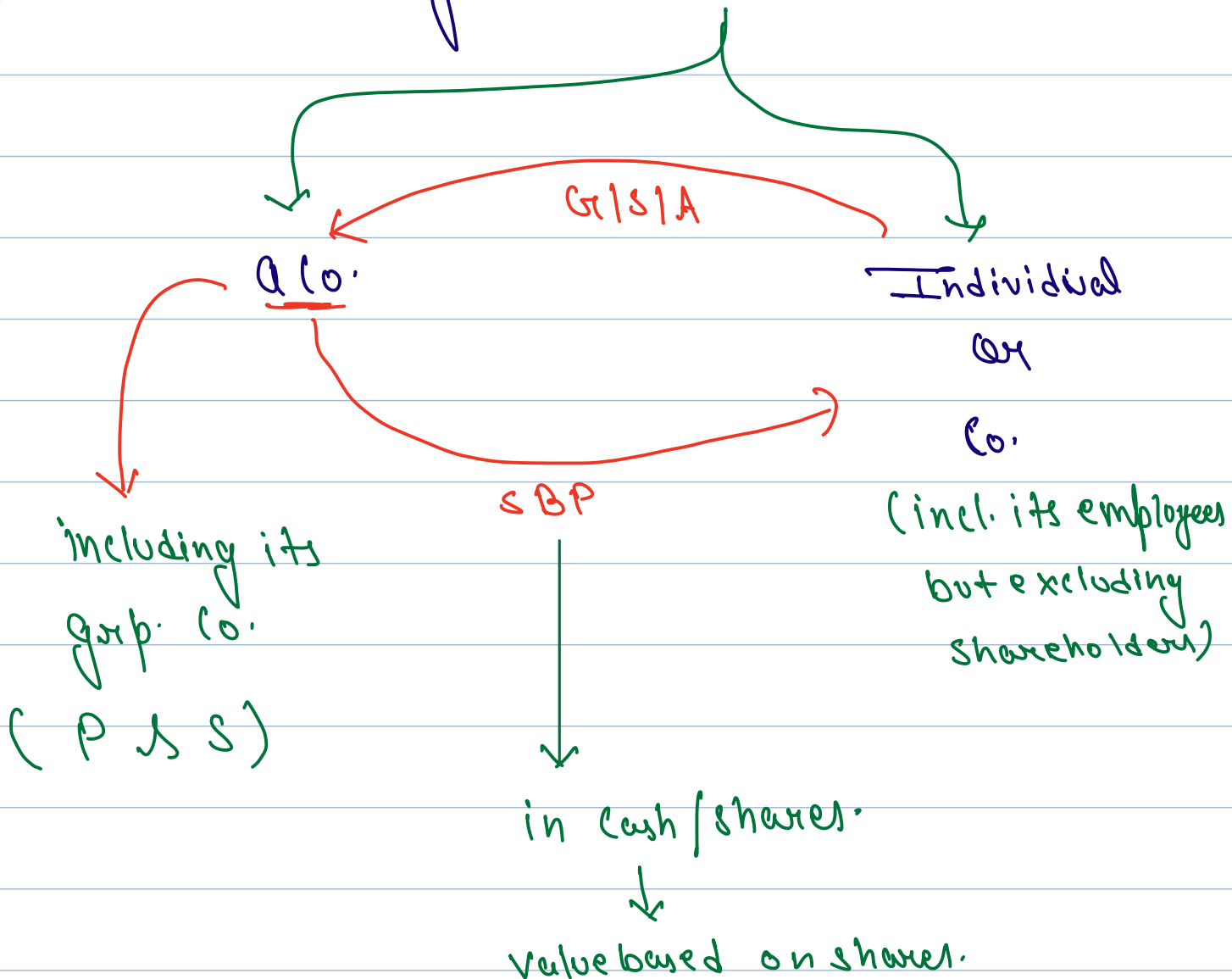
is based on shares.

- ↳ Payment in shares.
- ↳ Payment in cash based on value of shares.



## #1 Introduction

a) SBP are agreements b/w



Buddy



HD  
↓  
Dr.



Ind  
or  
Co.



empl. of.  
Dr., HD, Buddy



b)

G/S/A. Dr



→ Value of GSA

To SBP

Should be classified as

I<sup>st</sup> pref → FV of GSA

II<sup>nd</sup> pref → value of E. Shares

if payments  
is in term  
of Eq. sh.

↓  
Equity

if payment  
is in cash

↓  
Liability

if payment can  
be in term of  
cash or shares.

↓  
Option with  
holder

↓  
Liability.

↓  
Option with  
Issuer (Co.)

↓  
Liability / Equity.



∴ Cash obligation cannot be avoided by Co.



later on Reclassification is Permissible

C) S.B.P is not applicable to

- i) Shares issued to Shareholders (Bonus/Rights)
- ii) Settlement of F.L. (Ind AS 32 & 109)
- iii) Biz. Combination (IND AS 103)

D) Payment to whom & when

Immediate payment to anybody other than employee.



Gr/Sur/A Dr xx

Deferment of payment to employee.



Sur Dr xx



To Equity. xx

To SBP R/L xx



Value of sr.  
↓

Paid on basis  
of shares.

→ SBP R → Value of option  
→ SBP L → Value of shares

e) MP = 200  
Exercise price = 20

→ ₹ 180 Intrinsic value.

HD Ltd will issue shares @ ₹ 20  
after 3 years from \_\_\_\_\_ to  
\_\_\_\_\_ to holder of instrument

This contract is known as  
"Option"



Value of option ⇒ FV (o)



↓  
₹ 170

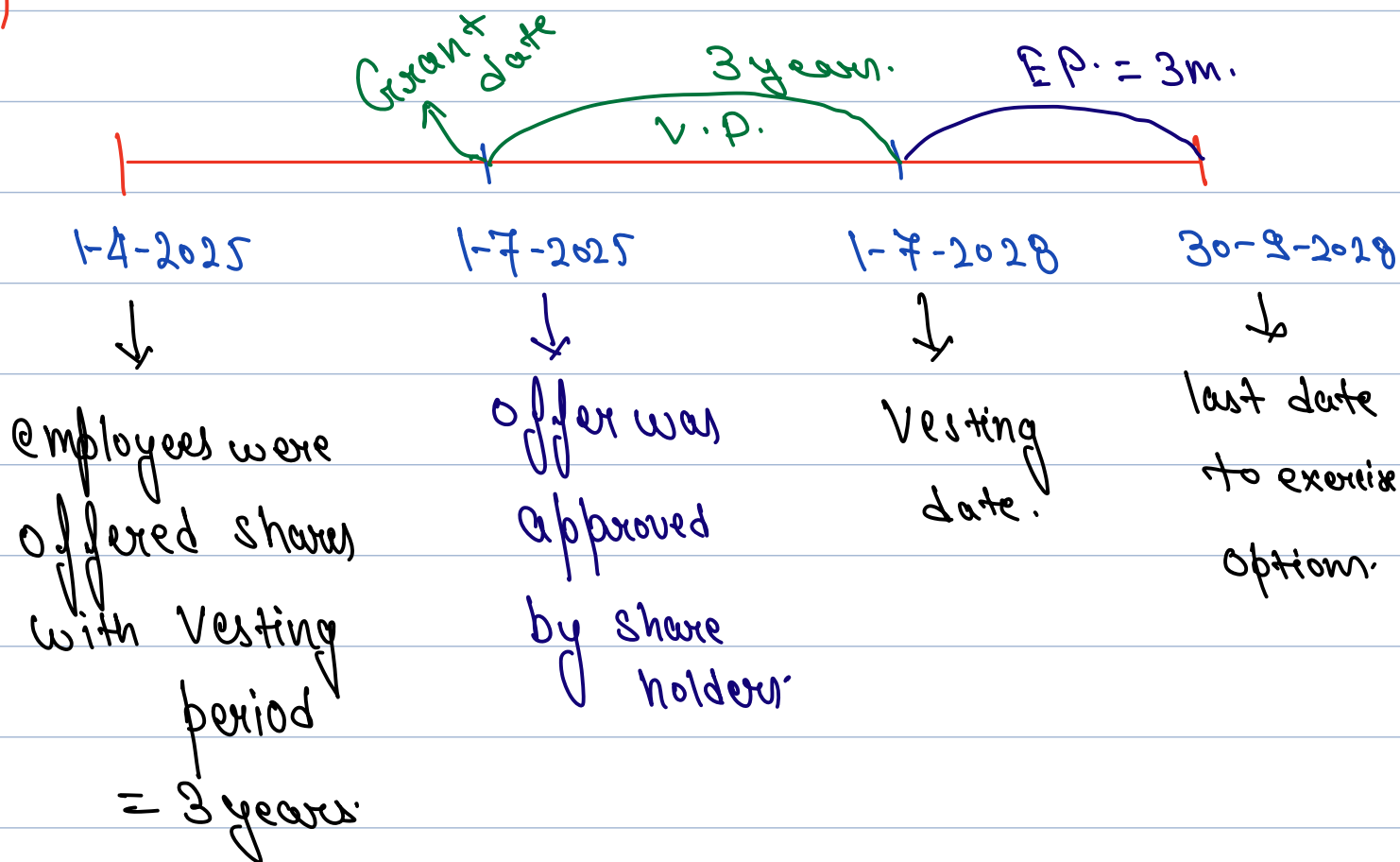


But if employee does not pay ₹ 170 for options rather he stays with co. for 3 years

Then we can say  
Cost of service = f.v. of options.

And.

$\text{FV of shares} \neq \text{FV (O)}$   
(MP - EP)



Certain definition.



i) Grant date  $\rightarrow$  date when offer is made to employees & approved by SH.



ii) Vesting date  $\rightarrow$  date when options can be exercised.

iii) Vesting period  $\rightarrow$  date b/w Gr. D. & V. D.

iv) Exercise period  $\rightarrow$  Period after V. D. during which options can be exercised.

## #2 Back ground

Salary = 200

Cash payment = 100

Off. Eq. sh. of ₹ 130 @ ₹ 30  
F.V. of shares = ₹ 10

Before IFRS

a) Salary Dr 100  
To Cash 100

b) Cash Dr 30

After IFRS.

a) Salary Dr 200  
Cash Dr 30



To Esc 10

To SP 20

To Esc 10

To SP 120

To Cash 100

c) PIL Dr 100

To Salary 100

here exps was understated.

Diff. b/w before & after  
IFRS.

↳ Exp is understated by ₹ 100

↳ SP is understated by ₹ 100

∴ we can say Exp was set off by S.P.

∴ Exp. was understated & profit was overstated & E.S.H. were not shown @

Fair value.

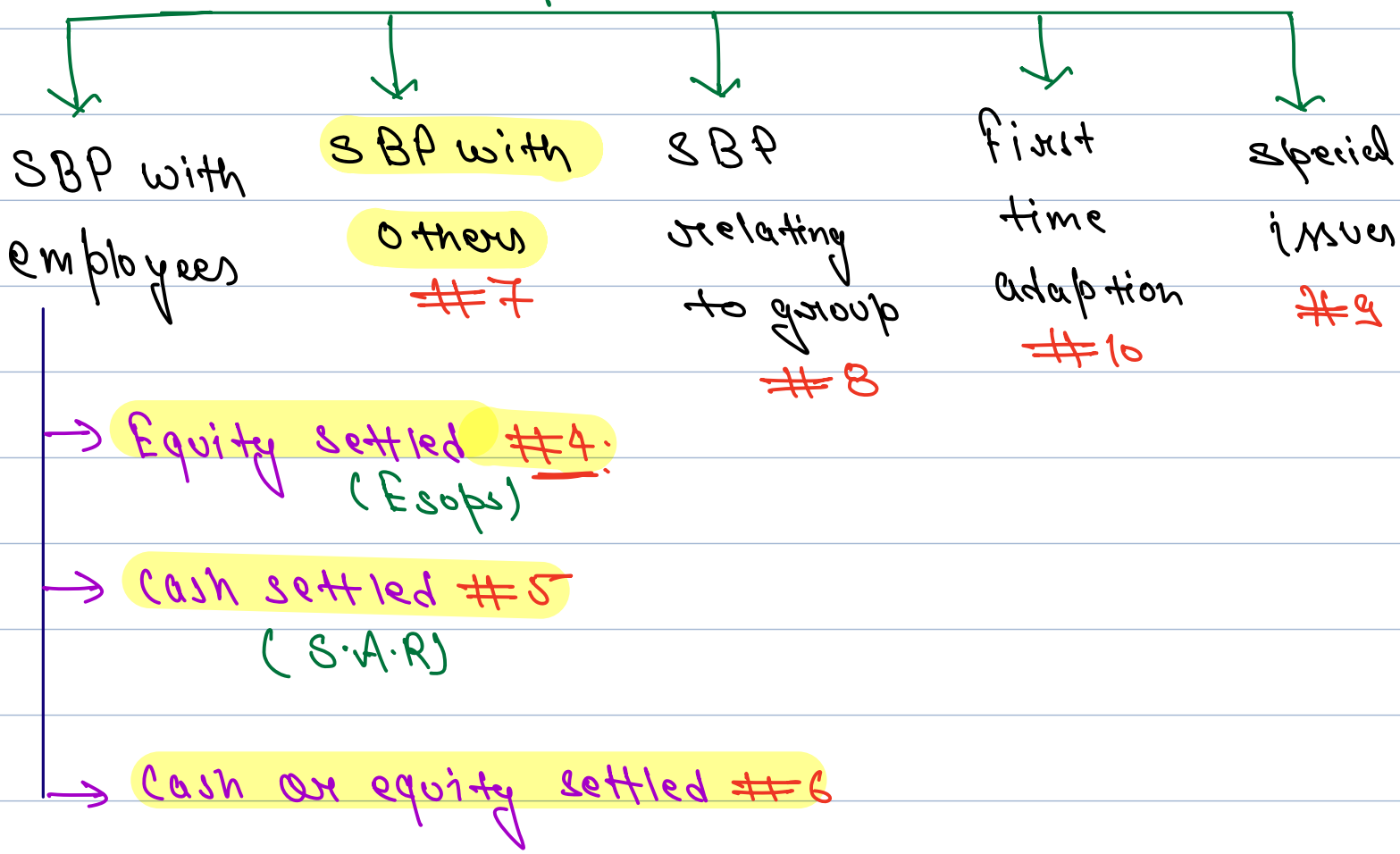
Hence IFRS-2 came into existence to overcome this loophole & to show correct pricing for SBP transactions.

→ In INDIA. there was GT/N-19

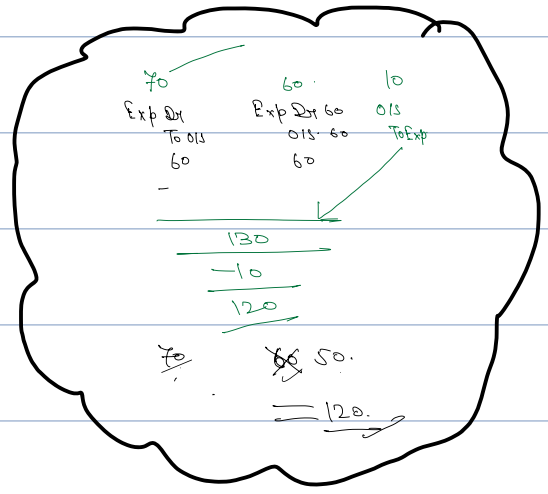
& Now IND AS 102



### #3 Overview



### #4 Equity settled option :-





eg1  $\rightarrow$  no. of employee 100  
no. of options p. emp. 10  
F.V. of option 18  
V.P. = 3 years.



$$\text{Expense} = \frac{100 \times 10 \times 18}{3} = 6000 \text{ p.a.}$$

eg-2  $\rightarrow$  no. of employee 100  
no. of options p. emp. 10  
F.V. of option 18  
V.P. = 3 years.

Co. estimates that only 80 employees will be there at end of V.P. and estimate stands correct at the end of V.P.

$$\text{Expense} = \frac{80 \times 10 \times 18}{3} = ₹ 4800 \text{ p.a.}$$

**III** Expense should be recognised on those employees which will be there in Company on vesting date. such



employees should be estimated on  
year 1 end.

Estimates may change during  
V.P.



∴ Amount of expense would also change in the year when there is change in estimate and this change is  $\Delta$  in pricing estimate should be acted prospectively in the year of change.

eg-3  
no. of employees = 100  
FV (o) = ₹ 18  
no. of options = 10  
V.P. = 3 years

Co. estimates that only 80 employees will be there at the end of V.P. 80 employees was there at the end of V.P. Calculate expense p.a. for all 3 years.

Sol<sup>n</sup>:- exp. for year 1 =  $\frac{80 \times 10 \times 18}{3} = 4800$



$$\text{exp for yr 2} = \frac{80 \times 10 \times 18}{3} \times 2 - 4800$$

⇒ 4800

$$\text{exp. for yr 3} = \frac{90 \times 10 \times 18}{3} \times 3 - 4800 - 4800$$

⇒ 6600

### Exp. p.a.

↳ no. of employees to complete V.P.

×  
no. of options

×  
FV of options (else I.V. of option)

×  
expired period.

÷

Vesting period

Cumulative exps

—

Expense earlier recognised

Exp. p.a.

× × ×



## Things to study

- i) Cal<sup>n</sup> of employees exps.
- ii) Pricing
- iii) no. of employees.
- iv) V.P.
- v) Modification
- vi) Cancellation.
- vii) Graded option

i) Cal<sup>n</sup> of employee exps / Exp. p.a.

Particulars.	Year 1	Year 2	Year 3
a) no. of employees expected to complete V.P.			
b) no. of options per employee			
c) F.V. of options (else I.V.)			
d) Period factor			
Total expense (a × b × c × d)			
- Exp. earlier recognised.			
Expense for e.g.			



## ii) Allocg.

### Transactions

### Journal

i) Grant date

No entry

ii) On year end or end of v.p. whichever is earlier

Employee Benefit Exps Dr  
To SBP Reserve  
(being exps recognised)

Inter

↳ EC Dr

To Esopols.

PIL Dr

To EBE

(being exps of c.y. transf. to PIL)

iii) On exercise date

Bank Dr

To SBP Res.

(being E.P. received)

Inter

Bank Dr 20

Esopols Dr 180

To Esc 10

SBP Reserve Dr

To Equity

To SP

190

Dr



To Esc

To SP.



iv) Option lapsed at the end of exercise period

SBPR Dr  
To GR.

Inter  
Esop a/c  
To GR

Final  
SBPR Dr  
To GR.

IND AS  
Silent.

Note-1 :- i) No J.E. for those options which lapsed during v.p.

ii) if in any year expense is negative then entry for expense should be reversed.

QUESTION # 2

EXAMPLE 34 OF ICAI SM

An entity issued 100 shares each to its 2,000 employees subject to service condition of next three years. Grant date fair value of shares is INR 200 each. There is an expectation that employee will remain in service @

- 95% at the end of first year ✓
- Revised to 92% at the end of second year
- 88% employees remaining at the end of third year.

Pass journal entries.

Soln :-

Particulars

Year 1

Year 2

Year 3

a) no. of employees expected to complete V.P.	$2000 \times 91\%$ $\Rightarrow 1820$	$2000 \times 92\%$ $\Rightarrow 1840$	$2000 \times 88\%$ $\Rightarrow 1760$
b) no. of options per employee	100	100	100
c) F.V. of options (else I.V.)	200	200	200
d) Period factor	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{3}$
Total expense (a x b x c x d)	12666667	24533333	3520000
- Exp. earlier recognised.	—	(12666667)	(2453333)
Expense for e.y.	12666667	11866666	10666667

## Journal Entries

Particulars	Yr 1	Yr 2	Yr 3
EBE Dr	12666667	11866666	10666667
To SBP Reserve	12666667	11866666	10666667
P/L Dr			
To EBE	11	11	11
SBP Reserve Dr			3520000
To Equity			3520000

### iii) no. of employees (calculation of employees)



To calculate EBE we consider no. of employees expected to complete V.P. is not the actual no. of employees who are eligible under scheme at every year end.

eg-4 no. of employees = 500, V.P. = 3 years.

Case 1 :- no. of employees to leave over V.P. be 20%.

Particulars:

a) no. of employees expected to complete V.P.

	Year 1	Year 2	Year 3
	500	500	500
	- 20%	- 20%	- 20%
	<u>400</u>	<u>400</u>	<u>400</u>

Case 2 :- no. of employees to leave over V.P. be 20% p.a.

Particulars:

a) no. of employees expected to complete V.P.

	Year 1	Year 2	Year 3
	500	400	320
	- 20%	- 20%	- 20%



400

320

256



Case-3 no. of employees expected to leave in V.P.  
= 20% p.a.

Actual forfeiture in yr-1 = 15%, yr-2 = 20%  
no. of employees at the end of yr-3  
= 300

Particulars:

a) no. of employees expected to complete V.P.

	Yr 1	Yr 2	Yr 3
	500	500	300
	- 20%	- 20%	
	- 20%	- 20%	
	- 20%	- 20%	
	<u>256</u>	<u>256</u>	

Case-4 :- no. of employees expected to leave = 3% p.a.  
at end of yr 1 = 5% forfeiture actual  
at end of yr 2 = expectation revised to 6% over entire V.P.  
Actual no. of employees at yr-3 end = 350

Particulars:

a) no. of employees expected to complete V.P.

	Year 1	Year 2	Year 3
	500	500	350
	- 3%	- 6%	
	- 3%		
	- 3%		
	<u>456</u>	<u>470</u>	

Case-5 Estimated = 3% p.a. employees wanted to leave over V.P., Actual left in year 1 = 10

In year 2 revised estimation that 5% would leave in remaining V.P., actual left in year 2 = 30.

In year 3 actual left = 40

Particulars:

a) no. of employees expected to complete V.P.

	Year 1	Year 2	Year 3
	500	500	500
	- 3%	- 10	- 10
	- 3%	- 30	- 30
	- 3%		
	<u>456</u>	460	<u>- 40</u>
		- 5%	<u>420</u>
		<u>437</u>	

note :-

Q. may specify



no. of employees expected to leave over entire V.P. is given

no. of employees to leave or retire over remaining V.P. is given.

In such a situation we are not interested in actual no. of employees left or retired in C.Y.

In such a situation no. of employees is calc<sup>n</sup> as follows

no. of employee = Total employee - %

Expected to leave till end of V.P.

Total employee - actual left till C.Y. - expected to leave over remaining V.P.

i.e. - C.Y. or

— २५% — २५% — २५%



8

in last year consider actual  
at yr. end.



100

**QUESTION # 1**

**{SM – ILLUSTRATION – 1}**

ABC Limited granted to its employees, share options with a fair value of INR 5,00,000 on 1 April 2010, if they remain in the organization upto 31st March 2013.

On 31st March 2011, ABC limited expects only 91% of the employees to remain in the employment.

On 31st March 2012, company expects only 89% of the employees to remain in the employment. However, only 82% of the employees remained in the organisation at the end of March, 2013 and all of them exercised their options.

Pass the Journal entries.

Particulars.	31-3-11	31-3-12	31-3-13
a) no. of employees expected to complete V.P.	91%	89%	82%
b) no. of options per employee	1	1	1
c) F.V. of options (else I.V.)	500000	500000	500000
d) Period factor	1/3	2/3	3/3
Total expense (a × b × c × d)	151667	296667	410000
— Exp. earlier recognised.	—	(151667)	(296667)
Expense for c.y.	151667	145000	113333

# Journal



	31-3-11	31-3-12	31-3-13
EBE Dr	151667	145000	113333
To SBP A.	151667	145000	113333
PIL Dr	11	11	11
To EBE			

**QUESTION # 3** **PRACTICE Q.7 OF ICAI SM, { RTP MAY 23 }**

Entity A runs a copper-mining business. Entity A has a year-end of 31st March. Dividends declared on the shares accrue to the employees during the three-year period. If the condition is met, the employees will receive the shares together with the dividends that have been declared on those shares during the three years upto 31st March, 20X3.

The entity estimates that on 1st April, 20X0 its shares are valued at ₹ 10 each. The grant date fair amount of each share is ₹10. ✓

Entity A prepares annual financial statements for the year ended 31 st March and:  
 on 1st April, 20X0 it estimates that 800 shares will vest;  
 at the end of the first year (31st March, 20X1) it has revised this estimate to 780; ✓  
 at 31st March, 20X2 it has further revised this estimate to 750; and  
 750 shares vest on 31st March, 20X3 based on the number of employees still employed on that date.

On 1st April, 20X0 as part of a long-term incentive scheme, Entity A provisionally awards its sales employees 1,000 Entity A's shares receivable on 31st March, 20X3. Explain the accounting treatment for the above share-based awards based on satisfaction of the condition that the sales employees must remain in employment until 31st March, 20X3. The requirement to remain in employment is a service condition and would not be reflected in the fair value of the share awards. ✓

Particulars.	31-3-01	31-3-02	31-3-03
a) no. of employees expected	780	750	750

to Complete V.P.

6) No. of options per employee

c) F.V. of options (e.g. I.V.)

d) Period factor

Total expense (a x b x c x d)

- Exp. earlier recognised.

Expense for e.g.

	1	1	1
	₹ 10	₹ 10	₹ 10
	1/3	2/3	3/3
	2600	5000	7500
	—	(2600)	(5000)
	2600	2400	2500



### Journal

	31-3-01	31-3-02	31-3-03
EBE Dr	2600	2400	2500
To SBP Reserve	2600	2400	2500
PIL Dr	11	11	11
To EBE			

#### QUESTION # 4

Omega grants 120 share options to each of its 460 employees, with vesting period of 3 years and fair value of option being ₹12.

Omega estimates that 25% of employees will leave during the three-year period.

<b>YEAR 1</b>	25 employees leave. Omega revises its estimate of total leave over the three-year period from <u>25%</u> to <u>20%</u> .
<b>YEAR 2</b>	Another 22 employee's leave. Omega revises its estimate of total leave over the three-year period from 20% to <u>15%</u> .
<b>YEAR 3</b>	A further 13 employees leave

Calculate the amounts to be recognised for services received.

Solution :- Cal<sup>n</sup> of expense p.a. to be recognised

Particulars	Yr 1	Yr 2	Yr 3
a) no. of employees expected to complete V.P.	460 - 20% <u>368</u>	460 - 15% <u>391</u>	460 - 25 - 22 <u>13</u> <u>400</u>
b) no. of options per employee	120	120	120
c) f.v. of options (excl intrinsic value)	12	12	12
d) period factor ↳ $\frac{\text{exp. period}}{\text{V.P.}}$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{3}$
Total expense (a x b x c x d)	176640	375360	576000
- exp. already recognised	—	(176640)	(375360)
Exp. for c.y.	176640	198720	200640

iv) vesting period :-

## Vesting conditions

## Non vesting Condition.

### Service Condition

Under this employee has to stay with the company for certain no. of years which is known as V.P.

### Performance Condition

#### Non-market Condition

i) Target is set like  
eg>  $\uparrow$  in sales

$\uparrow$  in profit

$\uparrow$  in EPS

$\downarrow$  in cost

ii) V.P. is based on target. hence V.P. is estimated as to when target will be achieved.

&

expenses recognised on estimated V.P.

But this V.P. is reviewed & revised at every year.

#### Market Condition

i) Target is set like

$\uparrow$  in M.P. of shares.

ii) Under this situation Co. estimates V.P.

and exps. are recognised over estimated V.P.

**if actual V.P. < estimated V.P.**

then entire remaining period exps. will be recognised in last year of actual V.P.

**if actual V.P. > estim. V.P.**

then exps. is recognised over estimated V.P.

i) In such cases there are no V.P. & hence entire exps. is recognised at the time of exercising the option.

ii) In such cases there are Post vesting restriction on sale of shares but that does not impact expense recognised.

## QUESTION # 5

An entity has a reporting date of 31st. Decem

On 1st January 2021 it grants 100 share options to each of its 500 employees. Each grant is conditional upon the employee working for the entity until 31st December 2023. At the grant date the fair value of each share option is ₹15..

Calculate the remuneration expense that will be recognised in each of the three years of the share-based payment scheme

During 2021 ✓	20 employees leave and the entity estimates that a total of 20% of the 500 employees will leave during the three-year period.
During 2022 ✓	a further 20 employees leave and the entity now estimates that only 15% of the original 500 employees will leave during the three-year period.
During 2023 ✓	A further 10 employees leave

Particulars.	Year 1	Year 2	Year 3
a) no. of employees expected to complete V.P.	500 - 20% = 400	500 - 15% = 425	500 - 20 - 20 - 10 ⇒ 450
b) no. of options per employee	100	100	100
c) F.V. of options (else I.V.)	₹ 15	₹ 15	₹ 15
d) Period factor	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{3}$
Total expense (a × b × c × d)	200000	425000	675000
- Exp. earlier recognised.	-	(200000)	(425000)
Expense for e.y.	200000	225000	250000

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.

Vesting Period and Exercise Period	3 years each ✓
Exercise Price and Market Price	₹50 each ✓
Expected forfeitures per year	3 %
Fair value of the option	₹ 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 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. Calculate the remuneration expense that will be recognised in each of the three years of the share-based payment scheme.

i) Cal<sup>n</sup> of employee exps / Exp. p.a.

Particulars.

a) no. of employees expected to complete V.P.

b) no. of options per employee

c) F.V. of option (₹)

d) Period factor

Total expense (a × b × c × d)

- Exp. earlier recognised.

Expense for c.y.

	Year 1	Year 2	Year 3
a)	1000 - 3% - 3% - 3% ⇒ 812	1000 - 6% - 6% - 6% ⇒ 830	840
b)	300	300	300
c)	15	15	15
d)	1/3	2/3	3/3
Total expense	1368000	2490000	3780000
- Exp. earlier recognised.	-	(1368000)	(2490000)
Expense for c.y.	1368000	1122000	1290000

QUESTION # 7

Q.5 OF ICAI SM

Entity X grants 10 shares to its 1000 employees on the conditions as below-

1. Service condition to remain in service & Entity's PAT will reach to INR 100 Million,
2. Expected to reach PAT of INR 100 Million by end of 3 years
3. Fair value at Grant date is INR 100
4. Expected for vesting right by 1st year 97%, then it revises to 95% by 2nd year and finally to 93% by 3rd year.

Calculate expenses for next 3 years on account of Share-based payment?

Particulars:	Year 1	Year 2	Year 3
a) no. of employees expected to complete V.P.	$1000 \times \frac{97\%}{97}$	$1000 \times \frac{95\%}{95}$	$1000 \times \frac{93\%}{93}$
b) no. of options per employee	10	10	10
c) F.V. of options (I.V.)	₹ 100	₹ 100	₹ 100
d) Period factor	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{3}$
Total expense (a x b x c x d)	323333	633333	930000
- Exp. earlier recognised.	-	(323333)	(633333)
Expense for e.y.	323333	310000	296667

Issue is calculation of employees

Ankita holding Inc. grants 100 shares to each of its 500 employees on 1st January 2021. The employees should remain in the service during vesting period. The shares will vest at the end of

1 <sup>st</sup> year ✓	if the company's <u>earnings</u> increase <u>by 12%</u> <span style="color:red">VP=1</span>
2 <sup>nd</sup> year ✓	2nd year if the company's <u>earnings</u> increase by more than <u>20%</u> over 2 year period
3 <sup>rd</sup> year ✓	3rd year if the company's <u>earnings</u> increase by more than <u>22%</u> over 3 year period

The fair value per share at the grant date is (NR 122)

<u>In 2021</u> ✓	Earnings increased by <u>10%</u> and <u>29 employees</u> left the organisation. The organisation expects that earnings will continue at <u>similar rate</u> in 2022 and <u>expects</u> that the shares will vest at the end of 2022. The company also <u>expects</u> that <u>additional 31 employees</u> will leave the organisation in 2022.
<u>At the end of 2022</u>	The company's earning's increased by <u>18%</u> , therefore shares did not vest. Only <u>29 employees</u> left the organisation during <u>2022</u> . Company <u>believes</u> that <u>additional 23 employees</u> will leave in <u>2023</u> and earnings will further increase so that performance target will be achieved in 2023.
<u>At the end of 2023</u>	Only <u>21 employees</u> have left the organisation. Assume the company's earnings have reached the <u>desired level</u> and performance target has been met.

Pass journal entries ✓

Particulars:

	2021	2022	2023
a) no. of employees expected to complete V.P.	500 - 29 - 31 <u>440</u>	500 - 29 - 29 <u>442</u>	500 - 29 - 29 <u>442</u>
b) no. of options per employee	100	100	100
c) F.V. of options (I.V.)	₹ 122	₹ 122	₹ 122
d) Period factor	1/2	2/3	3/3
Total expense (a x b x c x d)	2684000	3407867	5136200

Exp. earlier recognised.



Expense for C.Y.

—	(2684000)	(3407867)
2684000	723867	1728333

## Journal



	2021	2022	2023
EBE Dr	2684000	723867	1728333
To SBPR.	2684000	723867	1728333

PIL Dr			
To EBE	11	11	11

SBPR Dr			5136200
To Equity	11	11	5136200

**QUESTION # 9** **OLD SYLLABUS SM**

**Issue is calculation of employees and vesting period**

At the beginning of year 1, an enterprise grants stock options to each of its 100 employees working in the sales department. The stock options will vest at the end of year 3, provided that the employees remain in the employment of the enterprise, and provided that the volume of sales of a particular product increases by at least an average of 5 per cent per year. S.C + P.C.

- If the volume of sales of the product increases by an average of between 5 per cent and 10 per cent per year, each employee will receive 100 stock options.
- If the volume of sales increases by an average of between 10 per cent and 15 per cent each year, each employee will receive 200 stock options.
- If the volume of sales increases by an average of 15 per cent or more, each employee will receive 300 stock options.

On the grant date, the enterprise estimates that the stock options have a fair value of ₹ 20 per option. The enterprise also estimates that the volume of sales of the product will increase by an average of between 10 per cent and 15 per cent per year, and therefore expects that, for each employee who remains in service until the end of year 3, 200 stock options will vest. The enterprise also estimates, on the basis of a weighted average probability, 20 per cent of employees will leave before the end of year 3. By the end of year 1, 7 employees have left and the enterprise still expects that a total of 20 employees will leave by the end of year 3. Product sales have increased by 12 per cent and the enterprise expects this rate of increase to continue over the next 2 years. By the end of year 2, a further 5 employees have left. The enterprise now expects that only 3 more employees will leave during year 3. Product sales have increased by 18 per cent, resulting in an average of 15 per cent over the two years to date. The enterprise now expects that sales increase will average 15 per cent or more over the three-year period, and hence expects each sales employee to receive 300 stock options at the end of year 3.

By the end of year 3, a further two employees have left. Hence, 14 employees have left during the three-year period, and 86 employees remain. The sales of the enterprise have increased by an average of 16 per cent over the three years. Therefore, each of the 86 employees receives 300 stock options.

Pass journal entries ✓



Issue is change in FV of options

At the beginning of year 1, an enterprise grants 10,000 stock options to a senior executive, conditional upon the executive remaining in the employment of the enterprise until the end of year 3.

The exercise price is ₹40. However, the exercise price drops to ₹30 if the earnings of the enterprise increase by at least an average of 10 per cent per year over the three-year period.

On the grant date, the enterprise estimates that the fair value of the stock options, with an exercise price of ₹30, is ₹16 per option. ~~✓~~ → M.P.

If the exercise price is ₹40, the enterprise estimates that the stock options have a fair value of ₹12 per option. ✓

During year 1, the earnings of the enterprise increased by 12 per cent, and the enterprise expects that earnings will continue to increase at this rate over the next two years. The enterprise, therefore, expects that the earnings target will be achieved, and hence the stock options will have an exercise price of ₹30. ✓

During year 2, the earnings of the enterprise increased by 13 per cent, and the enterprise continues to expect that the earnings target will be achieved. During year 3, the earnings of the enterprise increased by only 3 per cent, and therefore the earnings target was not achieved. The executive completes three years' service, and therefore satisfies the service condition. Because the earnings target was not achieved, the 10,000 vested stock options have an exercise price of ₹40. ✓  
Journalise

Particulars.	Year 1	Year 2	Year 3
a) no. of employees expected to complete V.P.	1	1	1
b) no. of options per employee	10000	10000	10000
c) F.V. of options (else I.V.)	₹16	₹16	₹12
d) Period factor	1/3	2/3	3/3
Total expense (a × b × c × d)	53333	106667	120000
- Exp. earlier recognised.	—	(53333)	(106667)
	53333	53334	133333

Expense for E.Y.

23333

23334

13333



Journal (H.W.)



QUESTION # 11

{ OLD SM ILLUSTRATION – 8 }

**Performance Conditions (Reversals)**

ACC limited granted 10,000 share options to one of its manager. In order to get the options, the manager has to work for next 3 years in the organization and reduce the cost of production by 10% over the next 3 years.

Fair value of the option at Grant date was ₹95

Cost reduction achieved-

YEAR – 1	12%	Achieved
YEAR – 2	8%	Not expected to vest in future
YEAR – 3	10%	Achieved

How the expenses would be recorded?

# Particulars:



a) no. of employees expected to complete V.P.

b) no. of options per employee

c) F.V. of options (else I.V.)

d) Period factor

Total expense (a x b x c x d)

- Exp. earlier recognised.

Expense for e.y.

	Year 1	Year 2	Year 3
a)	1	1	1
b)	10000	10000	10000
c)	25	25	25
d)	1/3	0	2/3
Total expense	316667	0	950000
- Exp. earlier recognised.	-	(316667)	0
Expense for e.y.	316667	(316667)	950000



∴ Expected not to be vest.  
∴ entire year exp. derecognise.

## QUESTION # 13

{ SM TYK Q. NO 4 }

An Entity P issues Share based payment to its employees, details are

No. of employees	100 nos
Fair value at Grant date	INR 25
Market condition	Share price to reach at INR 30
Service condition	To remain in service until market condition is met
Expected completion of market condition	4 years ✓

Define expenses each year subject to the below scenarios-

- (a) Market condition meets in the year 3, OR
- (b) Market condition meets in the year 5 ✓

# a) market condition if fulfilled in 3 years



Particulars	Yor 1	Yor 2	Yor 3
a) no. of employees expected to complete V.P.	100	100	100
b) no. of options per employee	1	1	1
c) f.v. of options (excl. intrinsic Value)	25	25	25
d) period factor $\frac{\text{exp period}}{\text{V.P.}}$	$\frac{1}{4}$	$\frac{2}{4}$	$\frac{3}{3}$
Total expense (a) x (b) x (c) x (d)	625	1250	2500
- exp. already recognised	—	(625)	(1250)
Exp. for c.y.	625	625	1250

A.V.P. = 3 ✓

E.V.P. = 4

Act. = 5  
Est = 4

# b) market condition if fulfilled in 5 years

Particulars	Yor 1	Yor 2	Yor 3	Yor 4 <del>Yor 5</del>
a) no. of employees expected to complete V.P.	100	100	100	100
b) no. of options per employee	1	1	1	1
c) f.v. of options (excl. intrinsic Value)	25	25	25	25
d) period factor	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{3}{5}$	$\frac{4}{5}$



$\rightarrow$  exp. period  
 v.p.  
 Total expense (a x b x c x d)  
 - exp. already recognised  
 Exp. for c.y.

	14	14	14	4
Total expense (a x b x c x d)	625	1250	1875	2500
- exp. already recognised	—	(625)	(1250)	(1875)
Exp. for c.y.	625	625	625	625

### QUESTION # 14

IFRS

At the beginning of year 1, an enterprise grants 10,000 stock options to a senior executive, conditional upon the executive remaining in the employment of the enterprise until the end of year 3. However, the stock options cannot be exercised unless the share price has increased from ₹ 50 at the beginning of year 1 to above ₹ 65 at the end of year 3. If the share price is above ₹ 65 at the end of year 3, the stock options can be exercised at any time during the next seven years, i.e. by the end of year 10.

The enterprise applies a binomial option pricing model, which takes into account the possibility that the share price will exceed ₹ 65 at the end of year 3 (and hence the stock options become exercisable) and the possibility that the share price will not exceed ₹ 65 at the end of year 3 (and hence the options will not become exercisable). It estimates the fair value of the stock options with this market condition to be ₹ 24 per option.

Exp.

Sol<sup>n</sup> :- Since actual v.p. is not given  
 $\therefore$  we assume 3 years as v.p. because it is estimated.

### Statement of expense

	Year 1	Year 2	Year 3
a) no. of employees	1	1	1
b) no. of options	10000	10000	10000
c) F.V. of option	₹ 24	₹ 24	₹ 24
d) Period factor	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{3}$
Total expense (a x b x c x d)	80000	160000	240000
- exp. earlier recognised	—	(80000)	(160000)
Exp. for c.y.	80000	80000	80000

On 1st January 2021, one hundred employees were given 50 share options each. These will vest if the employees still work for the entity on 31st December 2022 and if the share price on that date is more than ₹5.

On 1st January 2021, the fair value of the options was ₹1.

The share price on 31st December 2021 was ₹3 and it was considered unlikely that the share price would rise to ₹5 by 31st December 2022.

Ten employees left during the year ended 31st December 2021 and a further ten are expected to leave in the following year.

How should the above transaction be accounted for in the year ended 31st December 2021?

Sol<sup>n</sup> :-

∴ it is expected that market condition will not be fulfilled in expected V.P of 2 years.

∴ we recognised expense over Expected V.P. of 2<sup>nd</sup> year as Nil.

Statement of expense as on 31-12-2021

a) no. of employee	100 - 10 - 10 = 80
b) no. of options	50
c) F.V. of option	₹1
d) Period factor	<u>1/2</u>
Total expense (a × b × c × d)	<u>2000</u>

## V) Modifications



It is change in terms of SBP scheme offered to employee by the Co.



Why?

if FMV of shares are decreasing during V.P. then employees loose interest in the scheme. hence to keep interest of employees in the scheme, modifications are made.

Modifications are made that are advantageous to employees. This additional advantage is expense due to modification & is an expense for company & is acted separately from ongoing SBP scheme.

It is calculated in 2 ways.

increase in no. of options

Decrease in F.P.



add<sup>n</sup> exps.

⇒ additional options  
x f.v. (o) after  
modification.

add<sup>n</sup> Exp

⇒  $\left\{ \begin{array}{l} PV(o) \text{ after} \\ \text{mod}^n \end{array} - \begin{array}{l} FV(o) \text{ before} \\ \text{mod}^n \end{array} \right\}$   
x  
no. of options.

note :- Treatment of add<sup>n</sup> Expenses is to be  
w/o over Remaining v.p.

↓  
Date of mod<sup>n</sup> to  
vesting date.

Steps to solve Q.

Step 1 a) same as original scheme.

Step 2 b) Add<sup>n</sup> exp. due to  $\Delta$  in f.v.  
of option.

Step 3 c) Add<sup>n</sup> exp. due to inc. in no.  
of options.

eg - 5 HD 2+d granted 100 options to each its.



employees on 1-4-2022, no. of employees = 100

F.V. of options on 1-4-22  $\Rightarrow$  ₹ 30

FV of options on 31-3-23 = ₹ 18

FV of options on 31-3-24 = ₹ 9

VP = 3 years, on 31-3-24, HD Ltd

modified plan of SBP & reduced its E.P., due to which FV becomes = ₹ 12

Calculate Exp. Recognised p. yr. after modification.



Sol<sup>n</sup> :- Step 1 :- Expense without modification

Particulars.	Yr 1	Yr 2	Yr 3
a) no. of employees expected to complete V.P.	100	100	100
b) no. of options per employee	100	100	100
c) F.V. of options (else I.V.)	30	30	30
d) Period factor	1/3	2/3	3/3
Total expense (a x b x c x d)	100000	200000	300000
- Exp. earlier recognised.	—	(100000)	(200000)

# Expense for E.Y. (A)



## Step 2 Additional expense.

	100000	100000	100000
	31-3-23	31-3-24	31-3-25
a) no. of employees	—	—	100
b) no. of options	—	—	100
c) change in f.v. of option (12-9)	—	—	3
d) Period factor	—	—	1/1
Exp (a × b × c × d) (B)	—	—	30000
c) Total Exp. (A+B)	100000	100000	130000

eg-6 HD Ltd. granted 30000 stock options on 1-4-22 with v.p. of 4 years. FV of option = ₹50. on 1-7-24. f.v. of option = ₹30 & hence scheme was modified & exercise price was reduced & FV of option = ₹40, no. of options were increased to 32000. calculate RBE

## Sol<sup>n</sup> Statement of Expense recognised.

Particulars.	31-3-23	31-3-24	31-3-25	31-3-26
a) no. of employees expected				

to complete V.P.

b) no. of options per employee

c) F.V. of options (else I.V.)

d) Period factor

Total expense (a x b x c x d)

- Exp. earlier recognised.

Expense for C.Y. (A)

	1	1	1	1
b)	30000	30000	30000	30000
c)	50	50	50	50
d)	1/4	2/4	3/4	4/4
Total expense	375000	750000	1125000	1500000
- Exp. earlier recognised.	—	(375000)	(750000)	(1125000)
Expense for C.Y. (A)	375000	375000	375000	375000



Additional expense due to Δ in F.V.

a) no. of employees

b) options

c) Δ in f.v. (40-30)

d) Period factor

Total exp. (B)

a)	—	—	1	1
b)	—	—	30000	30000
c)	—	—	10	10
d)	—	—	1/21	12/21
Total exp. (B)	—	—	128571	171429

Additional exp. due to inc. in no. of option

a) no. of employee

b) Add<sup>n</sup> options

c) f.v. after mod<sup>n</sup>

a)	—	—	1	1
b)	—	—	2000	2000
c)	—	—	40	40

d) P. Factor



Total exp. (C)

Exp. (A + B + C)

—	—	$\frac{9}{21}$	$\frac{12}{21}$
—	—	34286	45714
375000	375000	537856	592143

QUESTION # 16

{ SM ILLUSTRATION 10 }

Marathon Inc. has 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 INR 129. The below are the details 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 had fallen to INR 50. After the re-pricing they are now worth INR 80, hence expense is expected to increase by INR 30
YEAR - 2	30 left, further 36 expected to leave
YEAR - 3	38 left

How the modification/ re-pricing will be accounted?

Sol<sup>n</sup>:- Calculation of Expense recognised.

Particulars	Year 1	Year 2	Year 3
a) no. of employees exp. to complete v.p.	1000 - 35 - 60 <hr/> 905	1000 - 35 - 30 - 36 <hr/> 899	1000 - 35 - 30 - 38 <hr/> 897
b) no. of options	150	150	150
c) Fair Value	129	129	129
d) Period factor	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{3}$
Total exp. (a x b x c x d)	5837250	11597100	17356950
- Exp. earlier recog.	—	(5837250)	(11597100)
Total exp for c.y. (A)	58373250	5759850	5759850

Add <sup>n</sup> Expense due to change in F.V.			
a) no. of employees exp. to complete v.p.	—	899	897
b) no. of options	—	150	150
c) A Fair Value	—	30	30
d) Period factor	—	$\frac{1}{2}$	$\frac{2}{2}$
Add <sup>n</sup> exp.	—	2022750	4036500
- earlier recogn.	—	—	(2022750)
Add <sup>n</sup> exp. (B)	—	2022750	2013750
Total (A + B)	5837250	7782600	7773600

### QUESTION # 17

### PRACTICE Q.2 {MTP – SERIES I – A P– 2019} / {RTP – NOV – 2019}

A Ltd. had on 1st April, 2021 granted 1,000 share options each to 2,000 employees. The options are due to vest on 31st March, 2024 provided the employee remains in employment till 31st March, 2024.

On 1st April, 2021, the Directors of Company estimated that 1,800 employees would qualify for the option on 31st March, 2024. This estimate was amended to 1,850 employees on 31st March, 2022 and further amended to 1,840 employees on 31st March, 2023. On 1st April, 2021, the fair value of an option was ₹1.20.

The fair value increased to ₹1.30 as on 31st March, 2022 but due to challenging business conditions, the fair value declined thereafter.

In September, 2022, 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, 2023 the fair value of an option was ₹1.25.

A Ltd. decided that additional cost incurred due to repricing of the options on 30th September, 2022 should be spread over the remaining vesting period from 30th September, 2022 to 31st March, 2024.

The Company has requested you to suggest the suitable accounting treatment for these transaction as on 31st March, 2023

Sol<sup>n</sup> :-



Particulars	31-3-22 Yr1	31-3-23 Yr2
a) no. of employees expected to complete V.P.	1850	1840 ✓
b) no. of options per employee	1000	1000
c) f.v. of options (elk I.V. p.sh.)	1.20	1.20
d) Period factor ↳ $\frac{\text{expected period}}{\text{V.P.}}$	$\frac{1}{3}$	$\frac{2}{3}$
Total expenses (a x b x c)	740000	1472000
- exps already recognised	—	(740000)
Expense for C.Y. (A)	740000	732000

Add<sup>n</sup> exp. due to  $\Delta$  in f.v.

a) no. of employees	1840
b) no. of options	1000
c) $\Delta$ in FV of option	0.15
d) P.F.	$\frac{6}{18}$
Exp. (a x b x c x d) (B)	<u>92000</u>