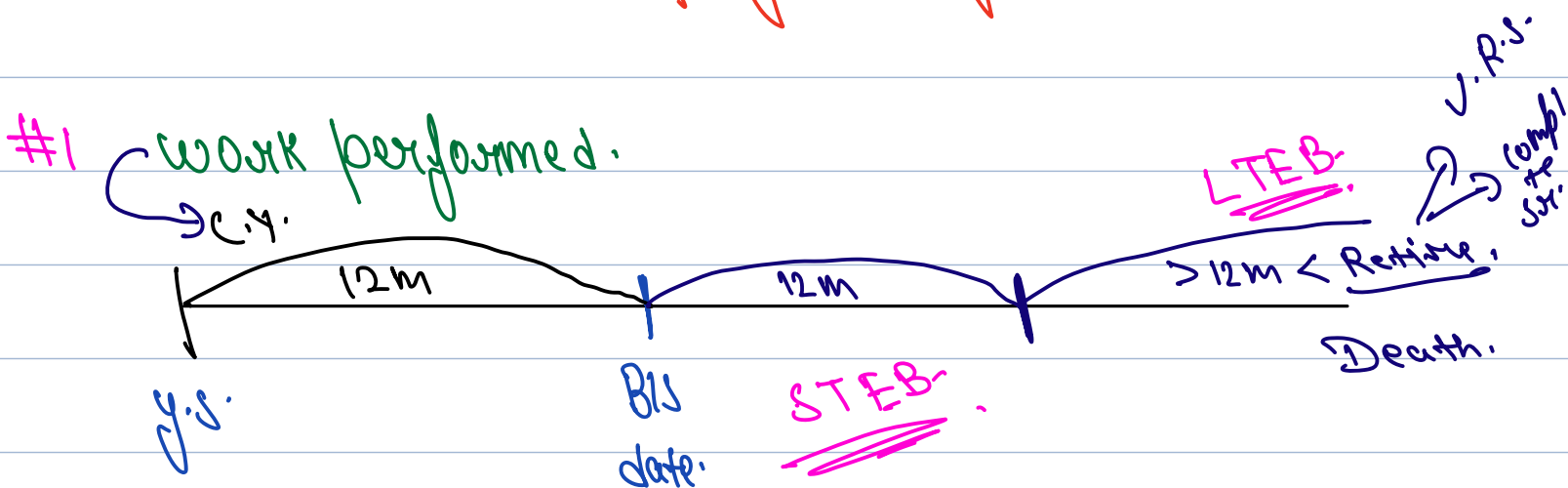




श्री अरुण शर्मा
श्री अरुण शर्मा
श्री अरुण शर्मा



AS-15 Employee benefits.



∴ This standard deals with

- measurement of E.B. of C.Y. and its corresponding Liability.
- Recognition of E.B. in C.Y.

Just to satisfy a crucial matching concept.

#2

who is employee.



→ Employee is any individual who performs service for an organisation on period basis



→ it includes.

- ↳ full time employee
- ↳ Part time employee
- ↳ Permanent employee
- ↳ management personnel.
(Director, manager)
- ↳ Casual worker

it does not include

- ↳ contract worker
- ↳ articles clerk.
- ↳ apprentices.

→ In case of outsourcing we need to check.

Contract of service



In this the contract is directly with the employee and he/she is

Contract for service.



(i) In this contract is with 3rd party to provide employee.



Obligated to work as per order of entity.

② Such employees are not on payroll of entity but on payroll of 3rd party.

③ There is limited control on such employees and employees generally work as per direction of 3rd party.

#3 Employee Benefits ?

Any consideration paid or payable to employee directly or indirectly

Note :- This A.S. does not cover or deal with E.B. based on shares.



(GN-19) → Esop.



why E.B.

- ↳ Formal Agreement (salary / wages)
- ↳ legal binding (Bonus / PF / grat.)
- ↳ Constructive incentive (Diwali Bonus)

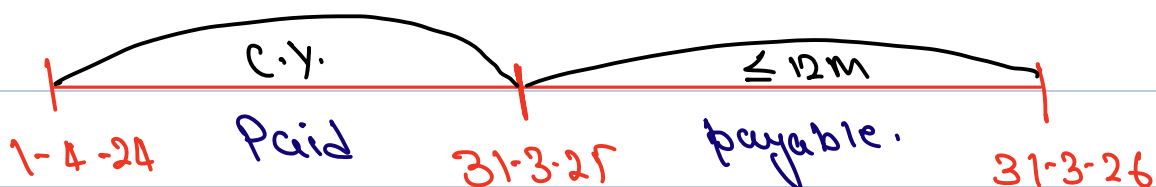
#5 E.B. to whom

- ↳ Directly to employee
- ↳ Indirectly to employee through
 - ↳ spouse
 - ↳ dependant Relative.
 - ↳ any 3rd party org.
(PIF, multiemployer fund.)

#6 Types of E.B.

I) Short term E.B. (STERB)

paid in c.y. or payable within 12m from end of c.y.

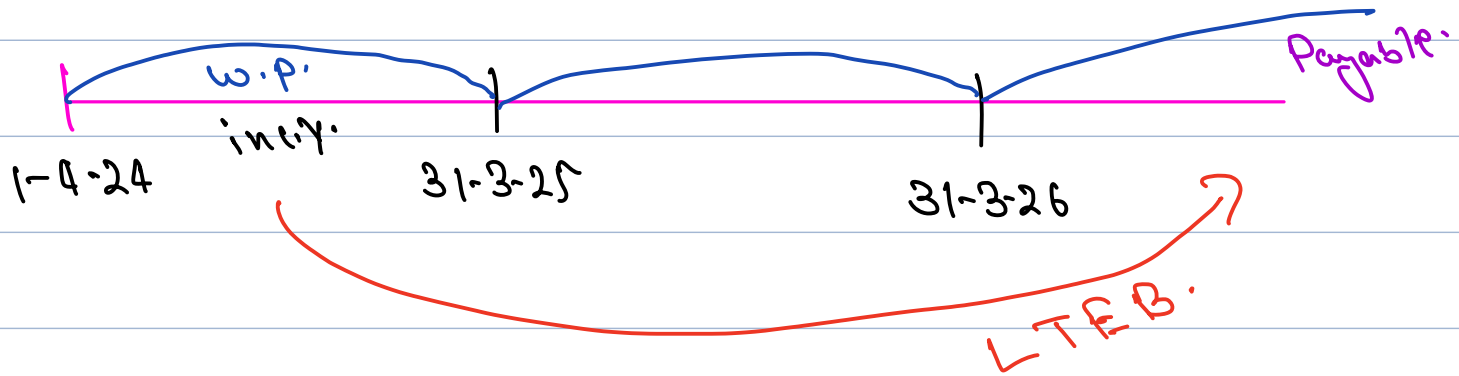


STEP.



II Long term E.B. (LTEB)

payable after 12m from end of c.y.



III Post employment E.B. (PEEB) payable on retirement

IV Termination Benefits. VRS / Terminated from Job.

#7 Objective of standard.

To measure and recognise those E.B. which accrued in c.y. (work performed in c.y.) & its corresponding liability

Journal

E.B.E. Dr

To Cash/bank/payable.



paid by entity in C.Y.

payable by entity in C.Y.

recd. by employee in C.Y.

recd. by employee on retirement

recd. by employee in next year

recd. by employee beyond 12m from end of C.Y.

wages/ salary.

P.F (Third party org.)

Old salary
Bonus
profit sharing

Pension
Gratuity

leave encashment.

Disability Bonus.

Defined Contribution Plan (DCP)

Defined Benefit obligation

(D.B.O.)

(involves TVM)

(Tention with 3rd party not with employer.)

(Tention is with employer.)

#8 STEB.



These are those E.B. which are either paid in C.Y. or payable within 12 m from end of C.Y.



Journal.

C.Y. EBF Dr
 To CIB. (paid)
 To provision for EBF (payable)

N.Y. Provision for EBF Dr
 To Cash/bank (if paid in cash)
 To EBF (if adj. against EBF)

#9 Leave encashments (L.E.)

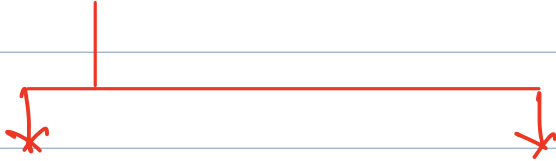
In case of L.E., provision should be made for **Expected Compensation payable.**

Accing

Accumulating



means leaves availed in C.Y.
will accumulate & compensated
in Next year



Vested



Comp. in cash
(cash against
leave)



make 100% provision
for unavailed leave



unavailed leave x
100% x
Salary per day

Unvested



Comp. in
leave.
(leave against
leave)



make Partial provision
for unavailed leave.



unavailed leave
x prob. factor
x salary p. day.

Non Accumulating



No compensation



No entry.

Note 1 :- C.Y. leaves should be exhausted first.



Note 2 :-
$$\text{Salary p-day} = \frac{\text{Salary p-a.}}{365 - \text{weekends} - \text{leave granted}}$$

Question# 1

Leave granted = 20 days.

Leave taken = 15 days in c.y.

Salary p-day = ₹ 1

Solⁿ :- Leave unavailed = $20 - 15 = 5$ day.

Case 1 Vested

C.Y.

EBE Dr 365
To CIB 365

N.Y.

EBE Dr 365
To CIB 365

EBE Dr 5
To provision 5
(5d. x 100% x ₹1)

Prov. for EBE Dr 5
To CIB 5

PIL Dr 370
To EBE 370

PIL Dr 365
To EBE 365

Case 2 Unvested & prob. factor 80%.



C.Y.

EBE Dr 365
To RIB 365

N.Y.

EBE Dr 365
To CIB 365

EBE Dr 4
To prov. 4
(₹1 x 5 x 80%)

Prov. for EBE Dr 4
To EBE 4

PIL Dr 369
To EBE 369

PIL Dr 361
To EBE 361

Question# 2

1. Allowed leaves 15 days per annum
 2. Availed 3 days
 3. Salary ₹ 1000 per day
 4. Employee can take leave next year for unavailed leaves in CY
 5. It is 50% probable that will avail the accumulated leave.
- Journalise the above transaction in CY and NY

Solⁿ :-

C.Y.

EBE Dr 6000
To prov. 6000
(12 days x 50% x ₹1000)

N.Y.

Provision Dr 6000
To EBE 6000

Question# 3

- | | |
|------------------------------|-------------------|
| 1. Salary | ₹ 3,65,000 |
| 2. Leave granted | 30 days per annum |
| 3. Leave availed | 20 days |
| 4. Year | 365 days ✓ |
| 5. Working days | 5 days per week ✓ |
| 6. His leave is accumulating | |

CASE - 1 – VESTED

CASE - 2 – UNVESTED.

Probability factor is 60%

Solⁿ :-

$$\begin{aligned} \text{Salary per day} &= \frac{365000}{365 - (52 \text{ w} \times 2) - 30} \\ &= 1580 \text{ ₹ per day.} \end{aligned}$$

Case 1 Vested.

	C.Y.	N.Y.
EBE Dr	15800	Prov. Dr 15800
To prov	15800	To CIB 15800
	(100% × 1580 × 10)	

Case 2 Unvested.

	C.Y.	N.Y.
EBE Dr	9480	Prov. Dr 9480
To prov	9480	To EBE 9480
	(60% × 1580 × 10)	

Question# 4

A ltd has a policy of giving 10 days leave per annum. Salary is ₹1,000 per day. The company follows accumulating and vesting policy. Details of leaves are

- 50 employee have 7 carried forward leaves
- 30 employee have 4 carried forward leaves
- 20 employee have 2 carried forward leaves

Calculate total provision

Solⁿ :-

no. of employees (a)	no. of unavailed leave (b)	Salary p.d. (c)	Total (a x b x c)
50	7	1000	350000
30	4	1000	120000
20	2	1000	40000
		Total	<u>510000</u>

Question# 5

An entity has 100 employee, leaves are granted 5 days per annum. Leaves are unvested on LIFO basis. Unavailed is 2 leaves per employee. Expectation 92 employee will take 5 days leaves and 8 employees will take 6.5 days leave. How much provision should entity recognise ?

Solⁿ :-

L.Y. leave = 2.

C.Y. leave = 5

no. of employee = 100

	92	8
exp. leave	5	6.5
out of C.Y.	(5)	5
	<u>10</u>	<u>1.5</u>



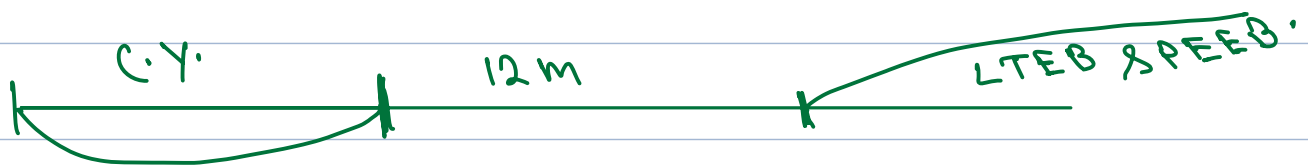
∴ Out of 2 unavailed leaves it is expected that 8 emp. will take 1.5 days of leave.



$$\begin{aligned} \therefore \text{provision} &= 8 \text{ emps} \times 1.5 \text{ days} \times \text{N.A.} \\ &= 12 \text{ days.} \end{aligned}$$

(due to lack of inf. in Q. we cannot calculate exact amount of provision)

10 LTERB & PEEB



There are 2 Types of LTERB & PEEB.

- i) DCP
- ii) DBO

i) **Defined Contribution plan** :- In this employer contributes fixed amount to third party.
eg → pension fund, ins. policy fund etc.

This is **unfunded liability** means any fund is not created by company but it is.

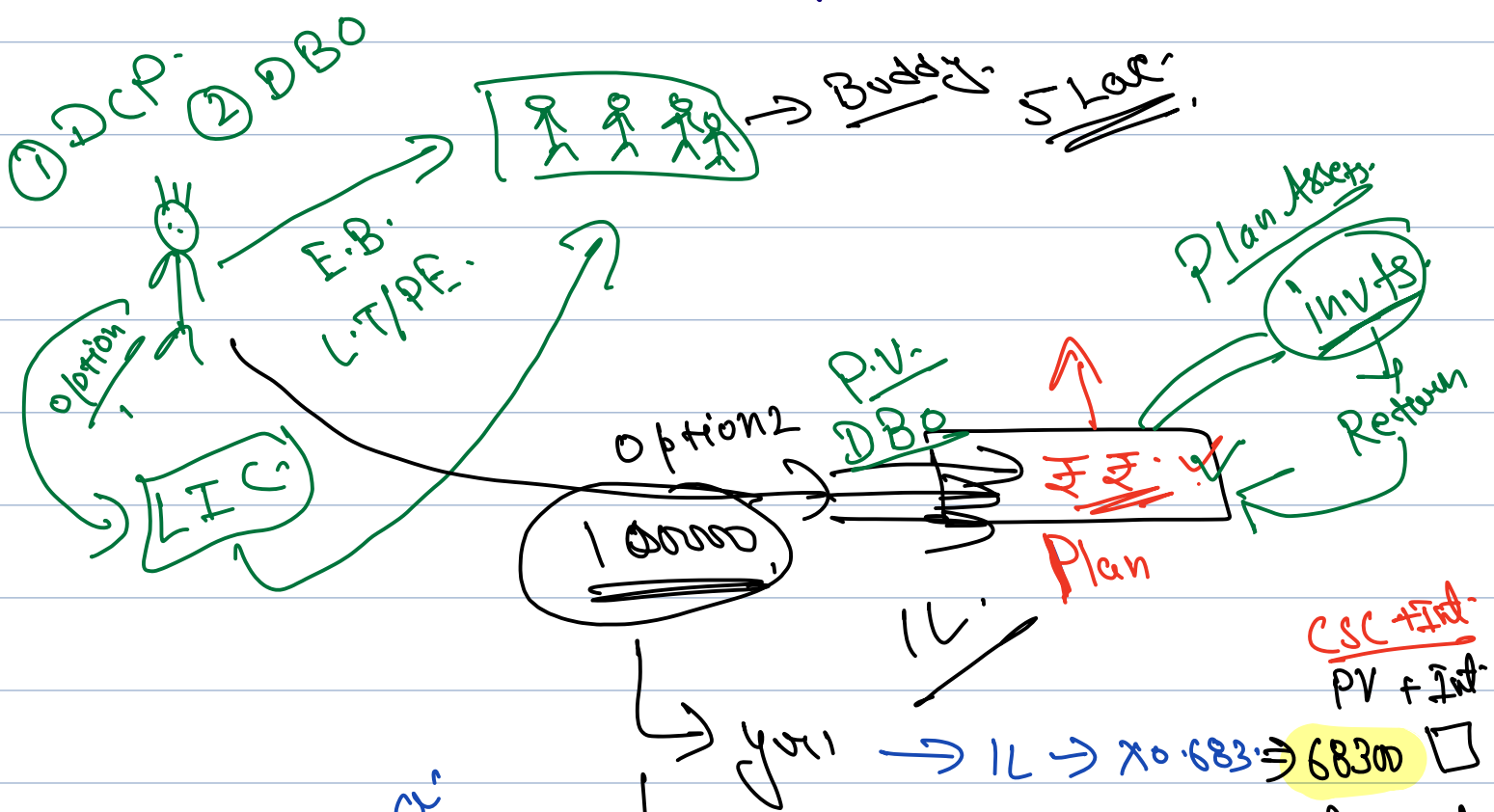


∴ these payments should be recorded @ P.V. of future cashflows or future liability known as Current Service Cost (CSC).

d) These C.S.C. should be unwound every year with interest.

e) Agreed benefits depends upon various variables such as

- ↳ length of ser.
- ↳ Salary last drawn
- ↳ employee to ratio





~~10.1.6.0~~

\rightarrow Year 2 \rightarrow IL $\rightarrow 0.7513 \Rightarrow$ 75130 \square PV + Int
 \rightarrow Year 3 \rightarrow IL $\rightarrow 0.826 \rightarrow$ 82600 \square PV + Int
 \rightarrow Year 4 \rightarrow IL $\rightarrow 0.9091 \Rightarrow$ 90910 \square PV + Int
 \rightarrow Year 5 \rightarrow IL \rightarrow 100000

500000

PIL	BLS
Exp. EB \rightarrow CSC 68300	NCL. PV DBO 68300

\therefore these funds are funded & funds are invested.
 So they are known as **Plan assets**.

Now we will see pricing of

- i) DBO
- ii) Plan assets

Part - I
 DBO (pricing)



We will study it in 4 parts.

- a) Basic understanding of project unit credit method (PUCM)
- b) changes in actuarial assumptions
- c) modifications in DBO
- d) curtailment of DBO

a) PUCM.

eg:- HD Ltd made a DBO plan payable after 6 years of service. amount of Bonus will be 30% of salary last drawn for each completed year of service. Salary @ year 0 (day 1) = ₹ 40000 p.a.

escalation rate = 8%. On 1st day of each year S.D.F = 10%.

Solⁿ :- step 1 Salary last drawn



$$\Rightarrow 40000 \times 1.08 \times 1.08 \times 1.08 \times 1.08 \times 1.08$$

5 times.



$$\Rightarrow 58773$$

Step 2 Bonus (DBO)

$$\Rightarrow \text{Salary last drawn} \times 30\% \times 6 \text{ years}$$

$$\Rightarrow 58773 \times 30\% \times 6$$

$$= 105792$$



This amount is payable after 6 years.

$$\therefore \text{each year Bonus} = \frac{105792}{6}$$

$$= 17632$$

Step 3 Calcⁿ of C.S.C.

Year	Amount (a)	PV @10% (b)	P.S.C. (a x b)
1	17632	0.6209	10948
2	17632	0.683	12043
3	17632	0.7513	13247
4	17632	0.826	14564
5	17632	0.9091	16029



Step 4 Liability sheet of DBO

Yr end	Op Bal	+ Int@10%	+ CSC	= Cl. bal.
1	-	-	10948	10948
2	10948	1095	12043	24086
3	24086	2409	13247	39741
4	39741	3974	14564	58279
5	58279	5828	16029	80136
6	80136	8024	17632	105792

Bif.
 ↓ last annual DBO
 ↓ Total DBO

Step 5 Journal

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
CSC Dr	10948	-	-	-	-	-
To PVD BO	10948	-	-	-	-	-
PIL Dr	11	-	-	-	-	-
To CSC						

CSC Dr	-	12043	13247	14564	16029	17632
Int. Dr	-	1095	2409	3974	5820	8024
To PVDBO	-	13138	15656	18538	21857	25656

PVDBO Dr	-	-	-	-	-	105792
To bank	-	-	-	-	-	105792

Steps

PVDBO (Ledger) (Liability)

Year 1	To CID	10948	Year 1	By CSC	10948
		=			=
Year 2	To CID.	24086	Year 2	By Bal. B/d	10948
				By CSC	12043
				By Int.	1095
		=			=
			Year 3	By Bal. B/d	24086

An employee Roshan has joined a company XYZ Ltd. in the year 20X1. The annual emoluments of Roshan as decided is ₹ 14,90,210. The company also has a policy of giving a lump sum payment of 25% of the last drawn annual salary of the employee for each completed year of service if the employee retires after completing minimum 5 years of service. The salary of the Roshan is expected to grow @ 10% per annum.

The company has inducted Roshan in the beginning of the year and it is expected that he will complete the minimum five year term before retiring. Thus he will get 5 yearly increment.

What is the amount the company should charge in its Profit and Loss account every year as cost for the Defined Benefit obligation? Also calculate the current service cost and the interest cost to be charged per year assuming a discount rate of 8%.

(P.V factor for 8% - 0.735, 0.794, 0.857, 0.926, 1)

Solⁿ:-

Step 1 Last Drawn Salary

$$= 1490210 \times 1.1 \times 1.1 \times 1.1 \times 1.1 \times 1.1$$

$$= 2400000$$

Step 2 DBO

$$= \text{Last drawn salary} \times 25\% \times 5$$

$$= 2400000 \times 25\% \times 5$$

$$= 3000000$$

$$\text{Annual DBO} = \frac{3000000}{5 \text{ yrs.}} = 600000$$

Step 3 CSC

Year	Amount	PV @ 8%	PV
------	--------	---------	----



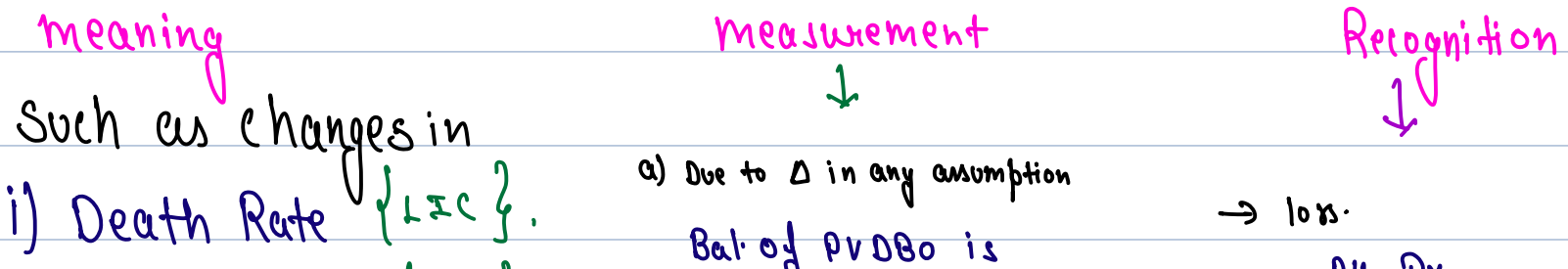
1	600000	0.735	441000
2	600000	0.794	476400
3	600000	0.857	514200
4	600000	0.926	555600
5	600000	1	600000

Step 4 Liability sheet of DBO

year	Op. bal	+ Int @ 8%	+ csc	= Cl. bal.
1	—	—	441000	441000
2	441000	35280	476400	952680
3	952680	76214	514200	1543095
4	1543095	123447	555600	2222141
5	2222141	177859	600000	3000000

(BI)

Issue-2: Δ in actuarial Assumptions



- ii) employee Ho { R.R. }
- iii) Salary inc. Rate { % p.a. }
- iv) Dis. Rate { RBI % }

recomputed as per
 Revised data:
 b) Revised Bal. PVDBO $xxx \rightarrow *$
 Old Bal. of PVDBO $xxx \rightarrow \#$
 Actuarial Cr/L xxx

PIL Dr
 To PVDBO
 PVDBO Dr
 To PIL

→ gain

if $* > \# = \text{loss}$
 & $* < \# = \text{gain}$

Question# 17

1. Final Salary ₹ 1,00,000
2. Gratuity promised 2% for each year of service
3. Period of service 3 years
4. Discounting rate 1st year is 10% and 2nd year revised to 9%

Prepare PVDBO A/c

Solⁿ :-

step 1
 step 2

Salary last drawn = 100000

Gratuity amount
 = Salary last drawn \times 2% \times 3 yrs
 = 100000 \times 2% \times 3
 = 6000

Annual DBO = $\frac{6000}{3} = 2000$

step 3. CSC (important)

Yr	Annual DBO	PV@10%	CSC	PV@9%	CSC
1	2000	0.8264	1653	0.8417	1683
2	2000	0.9091	1818	0.9174	1835
3	2000	1	2000	1	2000

Issue-3 \rightarrow Modification



\rightarrow will lead to benefit to employees

\rightarrow increase in PVOBO

eg \rightarrow PVOBO \rightarrow 20000
+3000 \rightarrow 23000 \rightarrow Post service Cost (PSC)

6 years

2 years (done) 4 years (left)

1000
 \downarrow
immediately
P.L.

\downarrow
Vested PSC

2000
 \downarrow
remaining period
Amortise
each yr = 500

Unvested PSC



Meaning



It refers to increase in PVDBO bal. due to Δ in plan retrospectively.

eg \Rightarrow earlier employee were entitled to gratuity of 1%. but now they are entitled to 2%.

Vested PSC



\rightarrow It means employee are entitled to the benefits immediately on acc of Δ in the plan.

\rightarrow This vested PSC is w/o Δ immediately

\rightarrow PSC (vested) To PVDBO

\rightarrow PIL To PSC.

Unvested PSC



It means benefit arising on acc of Δ in the plan will be given to employees after employee fulfills certain condition.

\rightarrow PSC (unvested) is charged to PIL on SLM basis over remaining life of PVDBO

\rightarrow PSC (unvested) To PVDBO

\rightarrow PIL Dr To PSC

Journal.

PSC (vested) Dr 1000

PSC (unvested) Dr 2000

To PVDBO 3000

BIS.



PVDBO 23000
- un PSC (2000) 21000

Issue 4. Curtailment of DBO

↓
Due to continuous losses.
DBO is stopped.
it means No further (SC + Int.)

Suppose :-

$$PVDBO = CSC + Int.$$

↓

$$\underline{15000} + ₹ 3000 (P.S.C.)$$

↓
Vested
1000

↓
Unvested
2000
(SLM)

V. PSC 1000

Un. PSC 2000

To PVDBO 18000

Now few years later.



Assume

BIS.

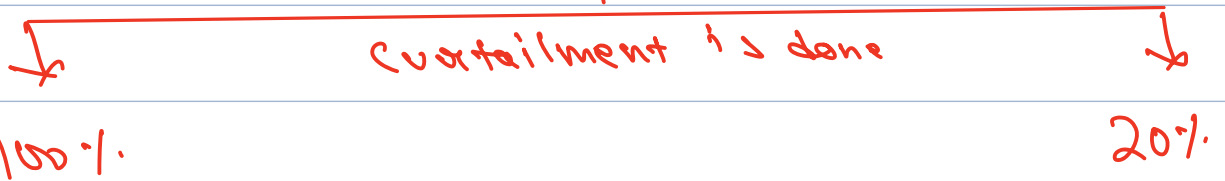


PVDBO 20000

UPSC

1500

Plan Assets 12000



PVDBO Dr 20000

To UPSC 1500

To PIL 18500

gain on Curtailment.

PVDBO Dr 4000

To UPSC 300

To PIL 3700
↓
GOL

BIS.

Non CL
LTP.

PVDBO 16000

- UPSC (1200)

- P. Assets (12000) 2800

Rock Star Ltd. discontinues a business segment. Under the agreement with employee's union, the employees of the discontinued segment will earn no further benefit. This is a curtailment without settlement, because employees will continue to receive benefits for services rendered before discontinuance of the business segment. (Curtailment reduces the gross obligation for various reasons including change in actuarial assumptions made before curtailment. If the benefits are determined based on the last pay drawn by employees, the gross obligation reduces after the curtailment because the last pay earlier assumed is no longer valid.)

Rock Star Ltd. estimates the share of ^{Unvested Post S.C.} unamortized service cost that relates to the part of the obligation at ₹ 18 (10% of ₹ 180). Calculate the gain from curtailment and liability after curtailment to be recognised in the balance sheet of Rock Star Ltd. on the basis of given information:

- (a) Immediately before the curtailment, gross ^{DBO} obligation is estimated at ₹ 6,000 based on current actuarial assumption.
- (b) The fair value of plan assets on the date is estimated at ₹ 5,100.
- (c) The unamortized past service cost is ₹ 180.
- (d) Curtailment reduces the obligation by ₹ 600, which is 10% of the gross obligation.

Soln:

$$PV DBO = 6000$$

$$UPSC = 180$$

$$\text{Curtailment} = 10\%$$

$$\text{Plan Assets} = 5100$$

Journal :-

PV DBO Dr 6000

To UPSC 180

To P/L (B/L) 582

B/L (extract)

Non C.L.



a) LTP:

PVDBO	5400	
- UPSC	(162)	
- PA	<u>(5100)</u>	138



Part - II

Plan Assets

i) meaning :- For payment of D.B.O., a Co. invests certain amount (generally CSC + int) in assets on actuary's recommendations or guidance. Such investments are known as plan assets.

ii) measurement :-

a) Plan assets are measured at F.V.

b) any Δ in FV of Plan assets is known as actuarial gain/loss \Rightarrow P12.

c) Return on plan assets:

Dividend & Interest	xxx
Realised / Unrealised gain / loss	xxx
- Tax on returns	(xx)



— Administration cost of P.A.
Exp. return

$$\frac{(xx)}{xxx}$$

Plan Assets.

To Bal. Bld.	xxx	✓ [12 m]
To bank	xxx	✓ [Date of Invt.]
		By Bank xxx (benefit paid)

Note :- It is calculated as under
 \hookrightarrow op. Bal \Rightarrow e% \times op. bal \Rightarrow xx
 \hookrightarrow on net increase \Rightarrow i% \times net increase \Rightarrow xx
Return.

Here net increase = cont. to P.A. - Benefits paid.
 (fresh invt) (Sale of P.A.)

e = R.O. Int. p.a. Compound half yearly.
 i = R.O. Int. for $\frac{1}{2}$ year.

Suppose

op. bal = 100
 Int. @ 5% = 5
 ROI = 10%



+ Int @ 5%.

105
 5.25

 110.25

10.25 %
 ↓
0



$$\rightarrow i = \left(\sqrt[10]{1 + \frac{e}{100}} - 1 \right) \times 100$$

iii) Recognition.

Plan Asset

To bal. bld.	xxx	By Bank	xxx
To Bank	xxx	(Benefits paid)	
(contribution)			

To Reserve.	
@ 1% x op. bal xx	
1% x net inc. <u>xx</u>	xxx

To actuarial gain	xxx
-------------------	-----

↓
 (B/F)

By Bal. c/d.	xxx
--------------	-----

known as
 Return

Act 10

The following data apply to 'X' Ltd. defined benefit pension plan for the year ended 31.03.20X2 calculate the actual return on plan assets:

- Benefits paid	2,00,000
- Employer contribution	2,80,000
- Fair market value of plan assets on 31.03.20X2	11,40,000
- Fair market value of plan assets as on 31.03.20X1	8,00,000

Solⁿ

Plan Assets.

To Bal. b/d.	800000	By Bank	200000
To bank	280000		
To Actual return	260000		
	By Bal. b/d	1140000	

The fair value of plan assets of Anupam Ltd. was ₹ 2,00,000 in respect of employee benefit pension plan as on 1st April, 20X1. On 30th September, 20X1 the plan paid out benefits of ₹ 25,000 and received inward contributions of ₹ 55,000. On 31st March, 20X2 the fair value of plan assets was ₹ 3,00,000. On 1st April, 20X1 the company made the following estimates, based on its market studies and prevailing prices.

	%
Interest and dividend income (after tax) payable by fund	10.25
Realized gains on plan assets (after tax)	3.00
Fund administrative costs	(3.00)
Expected rate of return	10.25

Calculate the expected and actual returns on plan assets as on 31st March, 20X2, as per AS 15.

Soln :-

Plan Assets.



To bal. b/d 20000	By Bank 25000
To bank 55000	
<u>To Return</u>	
→ (2L x 10.25%) 20500	
→ (30000 x 5%) <u>1500</u> 22000	
To Act-gain <u>48000</u>	By Bal. c/d 30000
By.	

Expected Return = 22000

Actual Return = 22000 + 48000
= 70000

#11 Termination benefits :- it refers to those e.b. that are payable as a result of either the enterprise decision to terminate (retrenchment) or employees decision to accept (V.R.S.).

T.B. are recognised as an expense immediately. If this benefits are payable after 1 year then the expense is recognised

at its p.v.

