

Later when you pay off your o/s

o/s Salary (Payable)
TO ClB

X2-X3

Bonus Payable
TO ClB

Leave Compensation (Paid leaves)

1) Accumulating
(clf is permitted)

Vesting
(can be encashed)

Non-Vesting
(cannot be encashed but
such leaves will be
clf to next year)

2. Non-Accumulating
(clf is Not permitted)

Unused leaves will
lapse.

No Accounting treatment

eg X1-X2 (40 leaves) → 10 availed
→ 30 days clf → Payment next year.
C.F. - 24 days
month.

X1-X2

Employee earns leaves in X1-X2 (i.e. payment has accrued)

J.E. Leave Comp Exp At Cr xx
To Payable/o/s xx
↳ VOB

X2-X3 Payable xx
TO ClB xx

X2-X3 (C.Y. → 40 days → accrued for 40 days)
 P.Y → 30 days → encash)

Sald Exp @cr
 TO LiB @cr.

Sald Exp @cr
 Payable SOL
 TO LiB 6.5cr

Payable Acc Dr SOL
 TO LiB SOL

Non vesting	Vesting
X2-X3 → He avails extra leave	X2-X3 → He does not avail
∴ Payment total @cr he mila	extra leave, instead he encashes it
	∴ Payment total 6.5cr mila.
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>6cr Salary</p> </div> <div style="text-align: center;"> <p>0.5cr ↓ leave comp. payment</p> </div> </div>

Note: when Booking Exp & Liab for leave compensation, we also have to consider estimates regarding how many leaves employee will be able to utilize in future.

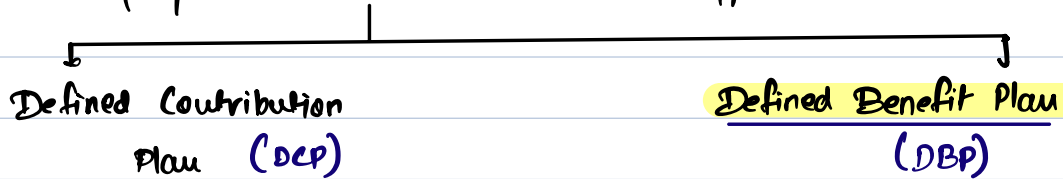
Eg Ak has earned 30 leaves balance in C.Y. . Salary per day 1000. But co. expects that Ak will be able to utilize only 20 days of leaves in future from leaves earned in C.Y.

Solⁿ: In above case company will book leave Comp Exp & prov only for 20 days leaves. J-F leave Comp Exp Acc Dr 20000 } (20 days x £1000)
 TO Prov for leave Comp. 20000

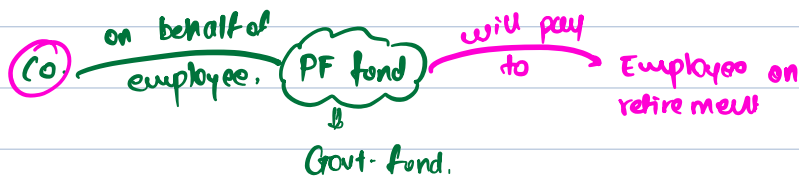
ii] Post Employment Benefits (Retirement Benefits)

→ Post Employment Benefits are those benefits which are paid to the employee on the event of retirement from the company.

→ Post employment Benefits can be of 2 types



i] DCP → These are post employment benefit plans under which an enterprise pays fixed contribution to a separate fund. & that fund will provide the benefit to the employee on retirement.
(eg: Provident fund)



MCS

(Actuarial risk / Investment risk)

After contribution by Co. to the fund, there is no risk on the company.
(agar PF fund dab gaya toh employee ko nuksaan, Co will not do anything)

eg: PF (Employer's cost) = ₹80000 for the year X1-X2

Case ① It is accrued in X1-X2 & it is to be paid on 15-04-X2

X1-X2 PF Exp 80000
 TO PF Payable 80000

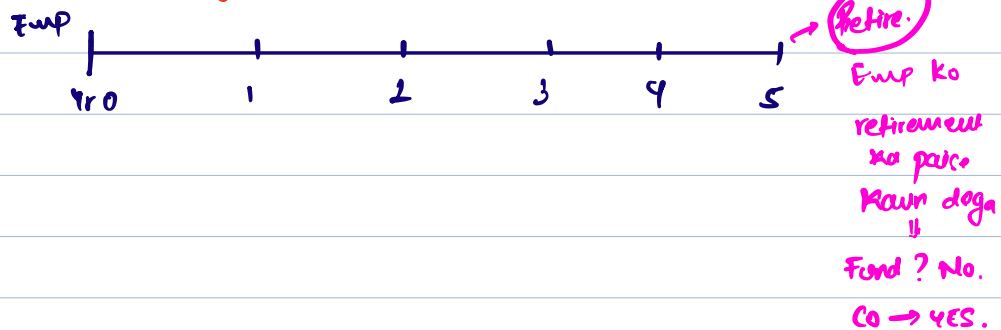
15-04-X2 PF Payable 80000
 TO CB 80000

Case 2 It is received in X1-X2, it is to be paid on 01/04/X3. (D.F @ 10%)

X1-X2
1yr
31/3/X3
01/04/X3

<u>X1-X2</u> PF Exp 72727	} p.v.	21/3/X2 ↓ Accrued	31/3/X3	01/04/X3	↓ Payment
21/3/X2 TO PF Payable 72727		p.v. of 80000			80000
1yr Int. ↓		$(\frac{80000}{1.10})$			
31/3/X3 $(72727 \times 10\%) = 7273$		72727			
Int Exp \rightarrow Plc 7273					
TO PF Payable 7273					
↳ Liab					
21/3/X3 Total Liab $(72727 + 7273) = 80000$					
Iss Payable pe Int for 1yr (unwinding / inflation / Interest)					
<u>01/04/X3</u> PF Payable Alc Da 80000 TO CB 80000					

* Defined Benefit Plan (eg. Gratuity)



There are post employment benefit plans other than Defined (our) plan. In defined Benefit plans, the risk (actuarial risk / investment risk) falls on the company.

MEB

Important issues for Def. Ben. Plan (Accounting done as per PUCM)
(Projected unit credit method)

MCS

1. Current Service Cost → P/L
2. Interest Cost → P/L
2. Defined Benefit obligation (DBO) → Liab
4. Actuarial Gain / loss on DBO → P/L
5. Post Service Cost (vested / unvested) → P/L
6. Plan Assets → Bls (Asset)
7. Expected Return / Int Income on Plan Assets → P/L
8. Actuarial Gain / loss on Plan Assets
9. Curtailment / Settlement.

Eg: BBN Pvt Ltd has an employee AK who has joined the company in current year. Co. promised Gratuity payment on service completion of 3 years.

Gratuity will be paid as per the following calculation:

$$\text{Gratuity} = 1\% \times \text{Final drawn salary p.a.} \times \text{No. of completed years of service}$$

AK's salary = 10L p.a.

No. of years expected to work with Co = 3 yrs.

Expected increment p.a. = 10%

Disc factor = 10%

Solⁿ: Gratuity = 1% × Final drawn salary p.a × No. of completed years of service.

$$= 1\% \times 12,10,000 \times 3 \text{ yrs.}$$

$$(10L + 10\% + 10\%)$$

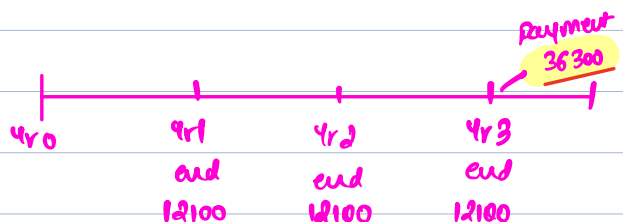
3 yrs mein
hoga 2 baar
increment

$$= \textcircled{1} 36300$$

To be paid after 3 yrs.
Accrue over the period of 3 years.

Gratuity each year = $\frac{36300}{3 \text{ yrs.}}$

$$= \textcircled{2} 12100 \text{ p.a.}$$



③ Current Service Cost

Calculation of Exp each year @ PV

$(\frac{1}{1.10})$ pres = 2 times

Yr end	Exp accrued	Df @ 10%	PV
1	12100 (payable after 2yrs)	0.826	10000
2	12100 (payable after 1yr)	0.909	11000
3	12100 (payable after 0 year)	1	12100

④ Calculation of Interest Each year on DBO

Yr	Opn Bal	Int @ 10%	Exp Booked in C.F.	Clb (DBO)
1	-	-	10000	10000
2	10000	1000	11000	22000
3	22000	2200		

J-E-

Yr 1 end Current Service Cost (CSC)

Gratuity Exp	10000
TO Gratuity Payable	10000

Defined Benefit obligation (DBO)

<u>Yr 2 end</u> Int Exp	1000
TO DBO	1000

<u>Yr 2 end</u> CSC	11000
TO DBO	11000

<u>Yr 3 end</u> Int Exp	2200
TO DBO	2200

<u>Yr 3 end</u> CSC	12100
TO DBO	12100

After 3 years

Payment of	DBO A/c Dr	36300
Gratuity	TO CB	36300

Illus 9 (LDR)

- ① Total Defined Benefit Plan Amt
- ② Defined Benefit Amt p.a.
- ③ Calculation of PV of CSC
- ④ Calculation of Int cost each year.

as per ques take 5 increments

① Total Defined Benefit obligation = 25% × last drawn salary × No. of completed years of service

= 25% × 24,00,000 × 5 yrs.

= 30,00,000.
 ↳ To be paid after 5 yrs
 Accrue over the period of 5 yrs.

last drawn salary = 14,90,210 + 10% + 10% + 10% + 10% + 10%

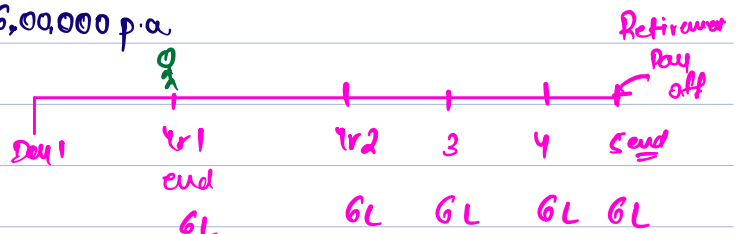
or

1490210 × 110% × 110% × 110% × 110% × 110%

= 24,00,000 approx

② Defined Benefit cost p.a. = $\frac{30,00,000}{5 \text{ yrs}}$

= 6,00,000 p.a.



③ Calculation of Current Service Cost p.a.

1/108 press = 4 time

Yr	Amount	DF @ 8%	PV (CSC)
1	600000 (payable after 4 years)	0.735	441000
2	600000 (3 yrs)	0.794	476400
3	600000 (2 yrs)	0.857	514200
4	600000 (1 yr)	0.926	555600
5	600000 (0 yrs)	1	600000

④ Calculation of Interest cost each year:

Year	Opn Bal of DBO	Int @ 8%	C.Y Exp (csc)	CL (DBO)
1	-	-	441000	441000
2	441000	35280	476400	952680
3	952680	76214	514200	1543094
4	1543094	123448	5,55,600	22,22,142
5	22,22,142	1,77,771	600000	29,99,913

(+) 87% rounding off
30L approx } 87 diff

4. Actuarial Gain/Loss on DBO

↳ These are gains/losses in DBO which result from changes in estimates (eg change in % increment, completed years of service, Disc Rate, No. of emp etc.)

1) PV of DBO increases

Actuarial loss on DBO (P/L) EBE
TO DBO (↑ liab)

2) PV of DBO decreases

DBO Atc Dn (↓ liab)
To Actuarial Gain on DBO (P/L)
↳ other EBE Inform (-ve)

5. Post Service Cost

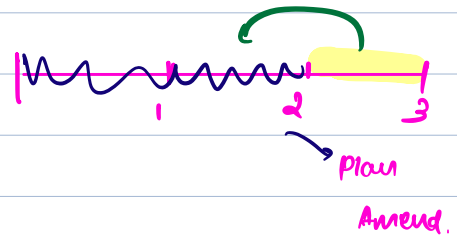
↳ This results from Plan Amendment (eg: Gratuity % increases from 1% to 2%
The Balance of DBO will also increase due to Plan Amendment. decrease is rare from 25% to 30%)

eg. Due to Plan Amendment DBO calculation is revised & it resulted in a increase of ₹ 10L (vested 7L, unvested 3L)

vested PSC (PL) 7L

Unvested PSC (Recognize in Asset) ₹ 3L
 TO DBO 10L
 & rollout over the remaining period.

Isko aaj
 exp book mat karna.



vested PSC → purane years ka exp
 which changed due to amendment in plan

Unvested PSC → Future years ka exp which
 will change due to Plan Amendment

6. Plan Assets

These are investments specifically done to fund our DBO

J-E for contribution in Plan Assets

Plan Assets A/c Dr
 TO CIB A/c

7. Expected Return on Plan Assets (Rate will be same as Disc factor used in DBO for PV)

eg: Op. Bal of Plan Assets = 10L Disc Rate = 10%

Expected Return on P.A = $10L \times 10\% = 1L$

J-E ① ~~CIB A/c Dr~~ 1L
 TO Expected Return 1L

② P.A 1L
 TO ~~CIB~~ 1L

DR (Asset)
 Plan Asset Dr. 1L
 TO Expected Return on P.A 1L
 PL (EBE) -ve

8. Actuarial Gain / loss on Plan Asset

→ Plan Assets are always measured @ Fair value

Eg: Plan Assets (Opn 01.04.11) = 10,000 (Given)

(+) Expected Return on P.A (Disc Rate 10%) 1000 → PA A/c Dr
 ↳ Yr end 31.3.12 TO Expected Return on P.A.

(+) Contribution (31.3.12 - Yr end) 5000 → PA A/c Dr
 TO ClB

(-) withdrawal / Benefits paid (31.3.12) (2000) → ClB 2000
 14000 TO P.A 2000

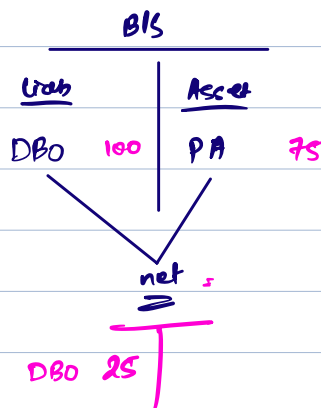
Actuarial Gain on P.A → (PIL) 3000 → Yeh woh return hai jo humne
 Fair Value of Plan Assets on 31.3.12 17000 (Given) expected se bhi zyada
 kamaya.

Note:

$$\begin{aligned}
 \text{Actual Return on Plan Asset} &= \text{Expected Return (+) Actuarial Gain (-) Actuarial loss} \\
 &\quad \text{on P.A} \quad \quad \quad \text{on PA} \quad \quad \quad \text{on P.A} \\
 &= 1000 + 3000 \\
 &= \boxed{4000}
 \end{aligned}$$

1) CSC → P/L	6) Plan Asset → B/S (Asset)
2) Int Cost → P/L	7) Exp. Retn on PA → P/L
3) DBO → B/S Liab	8) Actuarial G/L on PA → P/L
4) Actuarial G/L on DBO → P/L (Est change)	
5) PSC $\begin{cases} \text{vested} \rightarrow \text{P/L} \\ \text{unvested} \rightarrow \text{in future years P/L} \end{cases}$ (Plan Amendment)	

} Actual Return on P.A.



Illus 12

Plan Assets (01.04. x1) Opn Bal.	800,000
(+) Expected Retn (Info not Rate - Disc Rate missing)	
(+) Contribution	200000
(-) Withdrawals / Benefits paid	(200000)
	800000
Actuarial Gain on P.A	260000
FV of Plan Asset on 31.3. x2	1140000 (Given)

$$\begin{aligned}
 \text{Actual Return on PA} &= \text{Expected Return on PA (+) Actual Gain on PA} \\
 &= \text{NA} \quad (+) \quad 260000 \\
 &= \boxed{260000}
 \end{aligned}$$

Ques 7

① Calculation of Expected Return on PA

$$\text{Return on Opn Bal of Plan Assets} \left(100000 \times 10.25\% \times \frac{12m}{12m} \right) = 10250$$

$$\text{Return on Net Contribution made on } 30.04 \times 1 \left(\frac{69000 - 19000}{12} \right) = 1538 \text{ approx}$$

$$= 30000 \times 10.25\% \times \frac{6}{12}$$

Expected Return on PA

11788

OR Alternative ICAI Assumption

Assumption } 6 months as
per half yearly
compounding

$$= (\sqrt{1 + r}) - 1$$

rate

$$= (\sqrt{1 + 0.1025}) - 1$$

$$= 1.05 - 1$$

$$= 0.05 \text{ or } 5\%$$

Half year
rate /

Gm rate.

∴ we did square
root

IFAT method

① Calculation of Expected Return on P-A

Return on Opn Bal of Plan Assets $(100000 \times 10.25\% \times \frac{12m}{12m}) = 10250$

Return on Net Contribution made on 30.09×1 $(49000 - 19000) = 1500$
 $= 30000 \times 5\% \times \frac{6}{12}$
 already of 6m

11750

② Calculation of Actual Return

		AK s/a
Plan Asset (Opn Bal)	100000	100000
(+) Expected Return (calculated above)	11750	11788
(+) Cont ⁿ	49000	49000
(-) Benefits paid / withdrawals	(19000)	(19000)
	<u>141750</u>	<u>141788</u>
Actuarial Gains on P-A	<u>8250</u>	<u>8212</u>
Fair Value of Plan Asset	1,50,000	150000

Actual Return on P-A = Expected Return on P-A (+) Actuarial Gains on P-A
 $= 11750 (+) 8250$
 $= \boxed{20000}$

OR

AK s/a = $11788 + 8212$
 $= \boxed{20000}$

Data of DBO & Actuarial loss on DBO was irrelevant as nothing was asked relating to that.

9. ^{Am} Curtailment & Settlement

* Cancellation of Plan

Settlement occurs when entity settles the Plan Before due date

eg: ① Total DBO was £12000.

(example: DBO of £1,00,000 which was settled for £90,000)

Co. curtailed DBO worth £1000 without any settlement payment

J.E. ① Withdraw money from Plan Asset

CIB A/c Dr 90,000
TO Plan Assets 90,000

J.E. DBO A/c Dr 1000

TO Gain on Curtailment (P/L) 1000

② Settle DBO

DBO A/c Dr 1,00,000
TO CIB A/c 90,000
TO Gain on Settlement (10000) (P/L)

eg 2:

B/Ls		Asset	
Liab			
DBO	18000	Plan Asset	10000
		Unvested PSC	1200

(unamortised)

The curtailed 10% of DBO i.e.,

DBO will reduce by £1800

without any settlement payment

J.E.	DBO A/c Dr	1800	(18000 x 10%)	}	B/Ls (draft after curtailment)		
	TO unvested PSC	120	(1200 x 10%)		DBO	16200	Plan Asset 10000
	TO Gain on (B/L) Curtailment	1680					Unvested PSC 1080
					<p>Net DBO = 5120 (Liab)</p>		

Illus 8 (cont)

i) Gain on curtailment

Z.F

DBO Atc Os	600	(6000 × 10%)
TO Unamortised PSC	18	(180 × 10%)
TO Gain on Curtailment	582	

ii) Calculation of Net Liab

DBO (after curtailment)	=	5400
less: F.V of P.A	=	(5100)
less: unamortised PSC (after curtailment)	=	(162)
<u>Net Liab to be shown in B/s</u>		<u>138</u>

Rough

<u>B/s (after curtailment)</u>	
DBO 5400 (6000 - 600)	PA 5100 PSC 162 ↓ (180 - 18)
net = 138	

Note:

AS 15 states that Actuarial valuation should be conducted once in every 3 years, provided there are no major changes in estimates.

* Other long term Benefits

→ These are employee Benefits (other than retirement Benefits) which are paid after 12 months from the end of reporting period.

→ Examples:

i) long term compensated absences such as sabbatical leaves

ii) long term disability benefits

iii) Any other compensation to be paid after 12 months.

→ Accounting is same as Defined Benefit Plan

* Termination Benefits (eg. Retrenchment Scheme, Voluntary Retirement Scheme) ^{VRS}

→ Termination Benefits are recog as an expense & liab only when:

a) A detailed formal plan for the termination is duly approved **(AND)**,

b) A reliable estimate can be made of the amount of obligation.

when termination benefits fall due within 12 months after B/s date

↓
Book liab at undiscounted value

eg: Termination Benefit accrued on 31-3-x2, paid on 30-06-x2 ₹80000.

J-E. 31/3/x2 Exp (VRS) Mc Dr, 80K
TO Payable 80K

30/06/x2 Payable 80K
TO CB 80K

when termination benefits fall due after 12 months from B/s date.

↓
Book liab @ discounted value.

eg: Termination Benefit accrued on 31-3-x2, paid on 01-04-x3 ₹80000 (D.F @ 10%)

J-E. 31/3/x2 Exp (VRS) Mc Dr, 72727 } + PV (80000) (1.10)
TO Payable 72727

31/3/x3 Int Exp Dr, 7273 } 72727 x 10%
TO Payable 7273

01/04/x3 Payable 80000
TO CB 80000