IndAs 36- Impairment

1. Step 1 :- Impair Testing

CA = ₹250 lakhs

RA :-

FVLCTS = 200-13 = 187 lakhs
Value in use = 200 lakhs
} Higher ↓ 200 lakhs

∴ CA > RA, Imp. Loss is there

Step 2:- Imp. Loss = CA = RA
= 250 - 200 → ₹50 lakhs

2. Step 1 : Impair Testing

CA = 500 lakhs

RA :-

FVLCTS = 375 lakh
Value in use = 400 lakhs
} Higher = ₹400 lakhs

∴ CA > RA, imp loss

Step 2: I. Loss = CA - RA
= 100 lacs

Step 3:- JE

I. Loss	100	
To asset		100
P&L	100	
To Imp. Loss		100

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3. Step 1:- Imp testing

CA = 27·30 lakhs

RA = 12 lakhs

∵ CA > RA , I·loss

Step 2:- Imp loss = CA − RA

= 27·30 − 12 = ₹15·30 lakhs

Step 3:- Treatment of IL = 15·30

Note:- impairment here is done at beg. of the yr (∵ into CA & RA both beg. of yr given)

Revaluation Surplus (OCI) → ₹14 lakhs.

P&L (b/f) → 1·30 lakhs

Step 4:- RCA = 27·30 − 15·30 = ₹12 lacs

Step 5:- Useful life remaining = 3 years

∴ dep p·a = 12 lacs / 3 = ₹4 lacs p·a.

4. (a) CA on year 2 end (ie. 31·12·year 2)

Cost [year 1 beg]	2,40,000
− Depⁿ for 2 yrs [240000 × 2 / 20]	(24,000)
	2,16,000

Rev. Surplus at year 3 beginning

CA at Y3 beg.	216,000
Rev. Amt (Fair value)	250,000
Rev. Surplus (OCI)	36,000

(b) CA at End of year 3

CA at beg of year 3	250,000
− Dep for year $\left[\frac{250,000}{18}\right]$	(13,889)
	2,36,111

(c) Impairment Loss on beg. of year 4

CA at beg 4	2,36,111
RA	(1,00,000)
Imp Loss	1,36,111

Rev. Surplus (OCI) ↓ 34000 | P&L (b/f) 1,02,111

(d) Depⁿ in year 4

Revised CA at beg. of Y4 (2,36,111 − 136111) 1,00,000

Remaining useful life = 10 years

∴ Depⁿ p.a = $\frac{100,000}{10}$ = ₹ 10,000 p.a.

5. Step 1: Impair Testing 31.3.04

CA =

Cost 1.4.X1	20,000
− depⁿ 3yrs $\left[\frac{20,000-500}{8} \times 3\right]$	(7313)
	12,687

RA

value in use

Yr	CF	PVF @15%	PV
04-05	2000	0.870	
05-06	3000		
06-07	3000		
07-08	4000		
08-09	2000		
Residual value	500		
			9513

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FVLCTS = 1,00,000

So, RA = Higher = ₹10,000

∴ CA > RA

IL is there

Step 2:- IL = ~~12,867~~ 12687 - 10,000

= 2687

Step 3: Not Read

Step 4:- Revised CA = 12687 - 2687 = ₹10,000

Remaining useful life = 5 years [8-3]

∴ Subsequent dep p.a = $\frac{10,000 - 500}{5}$ = ₹1900 p.a.

6.

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7. Calculation of value in use

Particulars	20X3-04 (Y1)	04-05 (Y2)	05-06 (Y3)	06-07 (Y4)	07-08 (Y5)
Qty Sold	10,000	10,500	11025	11576	12,155
Price p.u.	200	206	212	219	225
Sales value (Qty x Price)	20,00,000	21,63,000	2337300	2535144	27,34,875
Net RV	-	-	-	-	80,000
Total inflow [A]	20,00,000	2163,000	23,37,300	25,35,144	28,14,875
Cost p.u.	160	162	165	168	171
Total Cost (Qty x Cost p.u.)	16,00,000	17,01,000	1819125	1944768	2078505
maint. cost	-	-	50,000	-	-
Total Outflow [B]	16,00,000	17,01,000	18,69,125	1944768	2078505
Net Inflow [A-B]	400,000	462,000	4,68,175	590,376	7,36,370
PVF @8%					
PV					

Total PV [VIU] = ₹ 20,73,169

8. Cal^{n} of VIU

Yr	CF	PV@10%	PV($)
2001-02	80		
02-03	100		
03-04	20		
			$170.40

Now, VIU in ₹ = $170.40 × 45 = ₹ 7,668

9. UK entity & Functional currency

Asset = $ Foreign currency (US)

Cost of asset = $ 18,00,000 (CA)

RA = $ 16,20,000

Step 1: Imp testing

~~CA > RA ; IL~~ Since asset in Foreign currency, hence IndAS 21 to be applied for calculating imp. loss

	CA	RA
Foreign	18,00,000 $	$16,20,000
Convert@ in Functional	1£ = $1.60	1£ = $1.80
	⇓	⇓
	$\frac{\$18,00,000}{\$1.60}$ = £11,25,000	£9,00,000

∴ CA > RA IL there

Step 2:- I. loss = 11,25,000 - 9,00,000

= 2,25,000

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Impairment loss = £2,25,000

Impairment component

$18,00,000 − $16,20,000
= $1,80,000 @ 1£ = $1·80

⇒ $1,80,000 / $1·80 = £1,00,000

Exchange Rate component

£ 1,25,000

~~or~~

~~18,00,000 (1·80 − 1·60)~~

18,00,000 / 1·80 − 18,00,000 / 1·60

= 10L − 11·25L

i.e. £1,25,000 due to exchange rate

10. CA = ₹1000
RA = 650
∵ CA > RA, I-loss

I loss = 350
RCA = 1000 − 350 = ₹650 (books)
Tax Base = ₹800 (Income tax)

Since CA (650) < TB (800), so it is deductible Temp diff [800 − 650 = 150]

Hence, DTA be created.
∴ DTA = 150 × 30% = ₹45

11. a) Step 1 :- Impairment Test [31.3.X2]

$$CA = 100cr - \frac{100}{5} \times 1 = 80cr.$$

RA :-

Value in use

Yr	CF	PVF @ 10%	PV
X2-X3	15	0.9091	
X3-X4	30		
X4-X5	40		
X5-X6	10		
			75.31 cr

FV of CTS = 70 cr

∴ RA = higher = 75.31 cr

Since CA > RA, IL is there

Step 2 :- I. Loss = CA - RA

= 80 - 75.31 cr = 4.69 cr

Step 3 :- Not Read

Step 4 :- Revised CA = 80 - 4.69 = 75.31 cr

Subseq. dep^n = $\frac{75.31}{4}$ = ₹ 18.83 cr

(b) On 31.3.X3 :-

CA = 75.31 cr - 18.83 cr = ₹ 56.48 cr

RA

Value in use

Yr		
X3-X4	30	0.9091
X4-X5	40	
X5-X6	10	
		67.84

FV of CTS = 40 cr

RA = higher =) 67.84 cr

Since CA > RA, Reversal of I. loss can be there.
But value in use is increased today only due to passage of time.
So, I loss of ₹ 4.69 cr cannot be reversed

12. 31.3.X1

$$CA = 100 - \frac{100}{4} = 75 \text{ lakhs}$$

RA = 60 lakhs

∴ CA > RA, IL

IL = 75 - 60 = 15 lakhs

RCA = 75 lakhs - 15 lakhs = 60 lakhs

31.3.X2

$$CA = 60 - \frac{60}{3} = 40 \text{ lakhs}$$

RA = 40 lakhs

NO IL.

31.3.X3

$$CA = 40 - \frac{40}{2} = 20 \text{ lakhs}$$

RA = 28 lakhs

CA < RA, Reversal of IL.

Step 1 :- CA on 31.3.X3 = 20 lakhs

Step 2: CA at which it to be shown after Reversal

↓ RA = 28L

↓ CA if not impaired

~~100~~

	Cost (1.4.x0)	100 lakh
RA = 28 lakhs	− dep for 3yrs ($\frac{100}{4}$ x 3)	75 lakh
		25 lakh

lower

i.e. ₹25 lakhs

Step3: Reversal of I.L = 25 lakhs − 20 lakhs = 5 lakhs

Step4:- Not read.

Step5:- RCA = 20 lacs + 5 lacs
= 25 lakhs

13 &Step 1: Impairment Test ₹ in million

	CGUA	CGUB
CA of assets	20	30
Corporate Asset [20:30 or 2:3]	4 (10 x 2/5)	6 (10 x 3/5)
CA of CGU	24	36
RA of CGU	18	38
I loss	Yes	No

Step 2:- Impairment loss on CGU_A = 24 − 18 = 6 million

Allocated to all assets in CGU in ratio of CA [20:4 or 5:1]

Other assets → 6 x 5/6 = 5 million

Corp Asset (Building) → 6 x 1/6 = 1 million

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14. Step 1: Impairment Testing

	CGU$_A$	CGU$_B$	CGU$_C$
CA of assets	500	750	1100
Corpate asset [600] 'X'	72	216	312
	(600 × 12%)	(600 × 36%)	(600 × 52%)
CA of CGU	572	966	1412
RA of CGU	600	900	1400
Imp. Loss	NO	yes	yes

WN: Ratio for allocation of corp. asset to CGU

	CGU$_A$	CGU$_B$	CGU$_C$
CA of other assets	500	750	1100
× Useful life	10	20	20
	5000	15000	22000

∴ Ratio = 5000 : 15000 : 22000

i.e. 5 : 15 : 22

CGU$_A$	CGU$_B$	CGU$_C$
$\frac{5}{42} \times 100$	$\frac{15}{42} \times 100$	$\frac{22}{42} \times 100$
= 12%	36%	52%

Step2:- Impairment loss

$CGU_B = 966 - 900 = 66$

↓ in ratio of CA of all asset

[750 : 216]

Other Assets	Corp. Assets
$\Rightarrow \frac{66 \times 750}{966} = 51$	$\Rightarrow \frac{66 \times 216}{966} = 15$

$CGU_C = 1412 - 1400 = 12$

↓ in all assets in ratio of CA

1100 : 312

Other assets	Corp. asset 'X'
$12 \times \frac{1100}{1412}$	$12 \times \frac{312}{1412}$
$= 9$ cr	$= 3$ cr

Step3: Impairment loss on unallocable corp Asset 'Y'

	CGU A	CGU B	CGU C	Corp. 'Y'	Total
CA	572	966	1412	200	3150
- I. loss on CGU	-	(66)	(12)	—	(78)
Revised CA (A)	572	900	1400	200	3072
RA (as a whole) (B)					3200

Since CA of ABC Ltd (3072) < RA (3200)

So, no I. loss on corp. asset 'Y'

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15. Allocation of G|W

	CGU$_1$	CGU$_2$	Total (million)
PC	33	17	50
– NA	(25)	(10)	(35)
G|W	8	7	15

16. Step 1: Impairment testing [31.3.02]

CA of CGU (₹ in cr)

Plant A [1000 − 1000/10 (dep^n) × 1] = 900

Goodwill = 200

= 1100

RA of CGU = 600

∴ CA > RA, imp. Loss ie. 1100 − 600 = 500 cr

Firstly to G/W → 200 cr

Remaining I. loss to other asset (Plant A) ie 500 − 200 = 300 cr

Step 2: Not App

Step 3: – Not Reqd

Step 4: – Revised CA

	G|W	Plant A other asset	Total of CGU
CA	200	900	1100
– I. Loss	(200)	(300)	(500)
	Nil	600	600

17. Cal^{n} of g|w on Acquisition

		₹'000
PC	[8,00,000 × 2/5 = 3.20L shares × 4]	1280
+ NCI	[84/80% × 20% = 2L shares × 1.40]	280
− NA	[1.3 million]	(1300)
	g|w	260

Cal. of Impairment loss

Step 1: Impairment testing

	CGU$_A$	CGU$_B$	CGU$_C$
CA of other assets	600	550	450
g|w allocation [2:2:1]	104 (260 × 2/5)	104 (260 × 2/5)	52 (260 × 1/5)
CA of CGU	704	654	502
RA of CGU	740	650	400
I. loss	NO	yes	yes

Step 2:- Impairment loss

CGU$_B$ = 654 − 650 = 4

⇓

It will be borne by g|w only

CGU$_C$ = 502 − 400 = 102

- Firstly by g|w ⇓ 52
- Remaining in other asset ⇓ 102 − 52 = 50

(i) CA of GIW after impairment ie. (RCA of GIW)

GIW on acq.	260
– Total imp of GIW [4+52]	(56)
	204

(ii) Total I. loss :-

CGU_B	4
CGU_C	102
	106

or

GIW (4+52)	56
Other asset	50
	106

Impairment loss borne by NCI = 106 × 20%
= ₹21.2

20.

Goodwill acquired on BC [1.4.X1 → 80%] :-

PC	2,100
+ NCI (1500 × 20%) PSNA	300
– NA taken over	(1500)
Partial GIW	900

Allocation to multiple CGUs

CGU of Parent → ₹500

CGU of Subsi° → ₹900 – 500 = ₹400

Cal of imp. loss on CGU of subsidiary :-

Step 1 :- Imp Testing

	G/w	Other assets	Total
CA in books	400	1350	1750
+ unrecog. g/w of NCI $\left[\frac{400}{80\%} \times 20\%\right]$	100	-	100
CA of CGU	500	1350	1850
RA of CGU			1000

∴ CA > RA , I. Loss is there

Step 2 :- I. Loss = 1850 - 1000 = 850

G/w → 500

Remaing to Other assets → 850 - 500 = 350

Step 4 :- Revised CA

	G/w	NA	Total
CA	500	1350	1850
- I. Loss	500	350	850
	-	1000	1000

2)

Refer Eg. 5 of notebook Pg 84-85

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Goodwill acquired on BC

		'000
PC		3200
+ NCI	(3000 × 20%)	600
- NA takenover		(3000)
Partial G/W		800

Cal^{n} of I. loss on B Ltd's assets

	G/W	Other Assets	Total
CA	800	2700	3500
+ unrecog. g/w of NCI [800/80% × 20%]	200		
CA of B Ltd	1000	2700	3700
RA of B Ltd			2000
I. loss			1500

Allocation of I. loss

	Parent	NCI
on G/W	800 (1000×80%)	-
on other assets	560 (700×80%)	140 (700×20%)
	1360	140

Case (ii) If RA is 2800 thousand

	Goodwill	Other asset	total
CA	800	2700	3500
+Unrecog. g/w of NCI	200		
CA of B Ltd	1000	2700	3700
RA of B Ltd			2800
Total I. loss.			900
Allocation of I. loss	(900)		(900)
Revised CA in books	100	2700	2800

Since only g/w attributable to Parent recorded in books =)

Revised CA	80 (100 x 80%)	2700	2780

	Parent	NCI
I. loss allocation to		
→ G/w	720 (900 x 80%)	-
→ Other Assets	-	-
	720	-

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22.

~~20.~~

Goodwill acquired in BC (80% → 31.3.X1)

	₹ in Million
PC	190
+ NCI [200 X 20%]	40
− NA taken over	(200)
Partial Goodwill	30

Cal of I. loss

Step 1 : Imp. testing of CGU of Mission Ltd

	CGU$_A$	CGU$_B$	CGU$_C$
CA of assets	170	90	100
RA	180	66	104
I. loss	NO	Yes	~~Yes~~ NO

Step 2:- Cal^n of I. loss on (GU$_B$)

= 90 − 66 = 24

Allocate to Intangible asset & PPE in ratio of CA [10 : 50 or 1 : 5]

IA

$24 \times \frac{1}{6} = 4$

PPE

$24 \times \frac{5}{6} = 20$

Step 3 :- Cal of IL on unallocable GIW :-

	CGU A	CGU B	CGU C	unallocable GIW	Total
CA	170	90	100	30	390
+ unrecog. GIW of NCI [30/80% X 20%]				7.5	7.5
CA	170	90	100	7.5	397.5
- I. Loss	-	(24)	-	-	(24)
Revised CA of Entity	170	66	100	37.5	373.5
- RA of Entity					350

~~∴ CA > RA of~~ ∴ CA of entity > RA of Entity

~~of C~~ I. loss there on unallocated GIW

Impairment loss on unallocated GIW

= 373.5 - 350 = 23.50

=

IL to be booked on GIW

= 23.50 X 80% = 18.80 million

Revised CA of GIW in books

= 30 - 18.80 = 11.20 million

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ALTERNATIVE PRESENTATION :-

Total q|w	37.5
− Total I-loss on q|w	23.5
	14

Revised CA in books (14 X 80%) 11.20

IL borne by parent ⇒ 23.50 X 80%
= 18.80

18

21. Impairment Loss [31.3.X3]

Step 1: Impairment testing of CGU of Saturn

CA of Other Assets = 320,000 − [3,20,000 / 20 X 2] = 288000

(20 ↑ Depⁿ)

CA of q|w	80,000
CA of CGU	3,68,000
RA of CGU	2,12,000

∴ CA > RA I. Loss ✓

Step 2:- I-Loss = 3,68,000 − 2,12,000
= 1,56,000

Firstly to q|w	Remaining to other assets
↓	↓
80,000	156,000 − 80,000
	= 76,000

Step 3:- NA

Step 4: Not Reqd.

Step 5: -RCA :-

	G/W	Other Asset	Total CGU
CA	80,000	2,88,000	368,000
- I. Loss	(80000)	(76000)	(156,000)
Revised CA	-	2,12,000	2,12,000

Reversal of I. Loss [31.3.X5]

Step 1:- CA of each asset on 31.3.X5

	G/W	Other asset	Total CGU
CA on 31.3.X5	-	2,12,000	2,12,000
- dep^n $\left[\frac{2,12,000}{18} \times 2\right]$	-	(23556)	(23556)
	-	188444	188444

Step 2 :- Max Reversal of I. loss on CGU

RA of CGU → higher { VIU = 304000 ; FVLCTS = 2,90,000 } 3,04,000

∴ max Reversal = 3,04,000 - 188444 = 115,556

⇓

Reversal to be done in other asset only

Now, CA of other asset if never impaired as on 31.3.05

Cost on 1.4.01	3,20,000
- dep $\left[\frac{3,20,000}{20} \times 4\right]$	(64000)
	256,000

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∴ Reversal to be done in Other Asset

⇒ 256,000 - 188,444

= 67,556

Step 3: - Not Reqd

Step 4:- Revised CA after Reversal

	GW	Other asset	Total CGU
CA before reversal	-	188444	188444
+ Reversal	—	67,556	67,556
	-	2,56,000	2,56,000

Remaining useful life = 20 - 4 = 16

Subsequent Depreciation = $\frac{2,56,000}{16}$ = ₹ 16,000 p.a

19.

Q. (a) Step 1 Impairment Testing in CGU on 31.3.X6

CA of CGU ⇒

Machine A = $10,00,000 - \left[\frac{10,00,000 - 50,000}{10} \times 5\right]$

= 5,25,000

Machine B = $5,00,000 - \left[\frac{5,00,000}{10} \times 3\right]$

= 2,50,000

Inventory	2,00,000
GW	1,50,000
	12,25,000
RA of CGU	10,00,000

∴ CA > RA ; I. Loss

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Step 2:- I. loss = 12,25,000 − 10,00,000
= 2,25,000

Firstly to G/W	Machine A (WN)	Remaining to Machine B
↓	↓	↓
1,50,000	5,25,000 − 489,650 = 35,350	2,25,000 − 1,50,000 − 35,350 = 39,650

WN:- RA of machine A

→ value in use :-

Yr	CF	PVF @ 10%	PV
1	1,50,000		
2	1,00,000		
3	1,00,000		
4	1,50,000		
5	1,00,000 + 50,000		489,650

→ FVLCTS :-

FV	7,00,000
− CTS (1,50,000 + 25,000 + 75000)	(2,50,000)
	4,50,000

Higher ie. 4,89,650

Step 3:- NA

Step 4:- not reqd

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Step5:- RCA

	GW	m_A	m_B	Inventory	Total of CGU
CA	1,50,000	5,25000	3,50,000	2,00,000	12,25,000
- I. loss	(1,50,000)	(35,350)	(39,650)	-	(2,25,000)
RCA of CGU	—	489650	3,10,350	2,00,000	10,00,000

(b) CA of assets after dep^n for X6-X7

	GW	m_A	m_B	Inventory	Total of CGU
RCA of 31.3.06	-	4,89,650	3,10,350	2,00,000	10,00,000
- Dep^n for 1 yr	-	(87,930)	(44,336)	-	(132266)

$$\left[\frac{489650 - 50k}{5}\right] \quad \left[\frac{3,10,350}{7}\right]$$

CA on 31.3.07	-	4,01,720	2,66,014	2,00,000	8,67,734

(c) RCA on 31.3.X7 after Reversal :-

Step1:- CA on 31.3.07

GW	m_A	m_B	Invent	Total of CGU
-	4,01,720	2,66,014	2,00,000	8,67,734

Step2:- Max Reversal of IL on CGU

11,00,000 - 867,734 = 232,266

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₹232,266

Allocation of this Reversal

→ Firstly to assets which has individual RA

Machine A

Individual RA

₹450,000

Individual Reversal of IL

(WN) 4,30,000 - 401720 = 28,280

Machine B

Individual RA

7,60,000 - 4,50,000 = ₹3,10,000

Individual Reversal of IL

3,10,000 - 2,66,014 (WN) = 33,986

WN:- CA if assets were never impaired

m_A

Cost (1.4.X1) 10,00,000

- dep^n $\left[\frac{10L - 50K \times 6}{10}\right]$ (5,70,000)

4,30,000

m_B

Cost (1.4.03) 500,000

- dep^n $\left[\frac{5L \times 4}{10}\right]$ (200,000)

300,000

∴ It can be shown at after Reversal

4,30,000

3,10,000

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Step 3: NA

Step 4: Not Read

Step 5:- Revised CA

	G/w	m_A	m_B	Inventory	total of CGU
CA	-	4,01,720	266014	200,000	867,734
- I. loss Reversal	-	(28,280)	(33986)	-	(62,266)
RCA	-	4,30,000	300,000	2,00,000	9,30,000

IndAS-33 EPS

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1. WANES :-

		no. of shares
op bal of shares (1.4.X1)	$[100000 \times \frac{365}{365}]$	1,00,000
Issue of ES [15.6.X1]	$75,000 \times \frac{290}{365}$	59,589

Both issue date to closing date consider
[i.e. June 16 days + 31+31+30+31+30+31+31+28+31]

Conv. of shares (8.11.X1)	$50,000 \times \frac{144}{365}$	19726
– Buy Back [22.2.X2]	$20,000 \times \frac{38}{365}$	(2082)
		1,77,233

2. WANES

BAF = 1:3 = $\frac{4}{3}$

1st Jan	$10,00,000 \times \frac{4}{3} \times \frac{12}{12}$	13,33,333.33
28 Feb	$2,00,000 \times \frac{4}{3} \times \frac{10}{12}$	2,22,222,22
30 Nov	$2,50,000 \times \frac{1}{12}$	20,833.33
		15,76,389

3. Profit attributable to ES

	20X2-X3	₹'000 20X1-X2
PAT	550	450
– Pref. dividend (500000×10%)	(50)	(50)
	500	400

NO. of shares O/S at beg. = $₹ \frac{10,00,00000}{25}$ = 40,00,000 shares

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₹'000

WANES — 20X2-X3 / 20X1-X2

Shares in Beg. — 4000 / 4000

BAF [1+1/4 = 5/4] — × 5/4

= 5000 shares

BEPS of X2-X3 = 500/5000 = ₹0.10 or 10 paise

BEPS of X1-X2 [Original] = 400/4000 = ₹0.10 or 10 paise

BEPS of X1-X2 [Restated] = 400 / (4000 × 5/4) = 400/5,000 = ₹0.80 or 80 paise

4. Profit for ES:-

NP		46,00,000
− Pref. dividend	[(5,00,000 × 1.20) / (1−0.30)]	(4,20,000)
		41,80,000

WANES:-

BAF = 1+5% i.e. 1+0.05 = 1.05

1st April	[30,00,000 − 5,00,000] × 1.05 × 12/12	26,25,000
− 1st May	200,000 × 11/12	(1,83,333.33)
+ 1st Nov	4,00,000 × 5/12	1,66,666.66
		2,60,8333 shares

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BEPS = $\frac{41,80,000}{2,60,833 \text{ shares}}$ = ₹ 1·60 per share.

5. Theoritical Ex Right Price = $\frac{(10,00,000 \times 1) + (2,00,000 \times 0.90)}{10,00,000 + 2,00,000}$

= 0·9833

* Right shares = $10,00,000 \times \frac{1}{5}$ = 2,00,000 shares.

RAF = $\frac{1}{0.9833}$

WANES :-

$\left(10,00,000 \times \frac{1}{0.9833} \times \frac{3}{12}\right) + \left(12,00,000 \times \frac{9}{12}\right)$

= 11,54,246 shares

6. Theoritical Ex-Right Price (20×2) = $\frac{(18,00,000 \times 60) + (4,50,000 \times 30)}{22,50,000}$

= ₹54

* Right shares = $18,00,000 \times \frac{1}{4}$ = 4,50,000 shares

RAF = $\frac{60}{54}$ i.e. $\frac{10}{9}$

WANES (20×2) CY = $\left(18,00,000 \times \frac{10}{9} \times \frac{3}{12}\right) + \left(22,50,000 \times \frac{9}{12}\right)$

= 5,00,000 + 16,87,500

= 21,87,500 shares

For 20×1 (PY) = 18,00,000 shares

Restated for 20×1 (PY) = $18,00,000 \times \frac{10}{9}$ = 20,00,000 shares

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BEPS for 20X2 (CY) = $\frac{8,75,000}{21,87,500}$ = ₹0.40

BEPS for 20X1 (PY) [original] = $\frac{6,30,000}{18,00,000}$ = ₹0.35

BEPS for 20X1 (PY) (Restated) = $\frac{6,30,000}{20,00,000}$ = ₹0.315

7.

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~~Step1:-~~

8. **Undistributed Earnings :-**

PAT	1,00,000
− Pref. dividend [5000×5]	(25000)
	75,000
− Eq. dividend [10000×2]	(20,000)
Undistributed Earnings	55000

Step2:- Allocation per eq. share = x per share

∴ allocation per pref. share = 50% of x ie. 0.50x per share

$55,000 = (10,000 \times x) + (5,000 \times 0.50x)$

$55000 = 10,000x + 2500x$

$\Rightarrow x = \frac{55000}{12500}$ ie. ₹4.40 per share

Pref. share in undistributed earning

= 4.40×50% ie ₹2.20 per share

Verify:-

$(4.40 \times 10,000) + (2.20 \times 5000) = 55000$

Step3:- BEPS for ES = ₹ 2 + 4.40

= ₹ 6.40 per share

Proof & verify no marks just like that

BEPS for Parti. Pref. Sh = 5 + 2.20

= ₹ 7.20

Proof :-

$(6.40 \times 10,000) + (7.20 \times 5000) = 1,00,000$

10. Earnings in Diluted EPS [Numerator]

PAT	BBT	64,000
+ int on deb° [25000 X 1 X 4%.]	1,000	
less: Tax @ 20%.	(200)	800
- Increase in Mgt Bonus (1000 X 1%)	10	
Less: Tax Benefit (10 X 20%.)	(2)	(8)
		64,792

11. Basic EPS = $\frac{5,00,000}{10,00,000}$ = ₹ 0·50 per share.

Adjustment in Earnings due to Potential ES

$\Rightarrow (1000 \times 100 \times 10\%)(1 - 0.21)$

$= 10,000 \times 0.79$

$= ₹ 79,00$

Adj. in shares due to PES

$= 1000 \times 20 = 20,000$ shares

∴ Incremental EPS = $\frac{79000}{20,000}$ = ₹0.395 per share

DEPS = $\frac{5,00,000 + 7900}{10,00,000 + 20,000}$ = ₹ 0·498 per share

FY 1.07. to 30.6.

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BEPS

12. Profit for BEPS	30.6.X3(CY)	30.6.X2(PY)
PBIFT (A)	8,95,000	8,25,000
− Int (B)	(1,00,000)	(75,000)
	[12,50,000×8%.]	[12,50,000×8%.×9/12]
	7,95,000	7,50,000
− Fair value Loss [No Tax Effect]	(2650)	(2500)
PBT	7,92,350	747,500
− Tax @ 33%. on (A−B)	(262350)	(247500)
PAT	5,30,000	5,00,000

WANES :-

	30.6.X3(CY)	30.6.X2(PY)
No. of shares	15,00,000	15,00,000
BEPS	530,000 / 15,00,000 = 35 paise	5,00,000 / 15,09000 = 33paise

DEPS

Adjusted Earnings :-	30.6X3(CY)	30.6.X2(PY)
Profit used in BEPS	5,30,000	5,00,000
+ Int	1,00,000	75,000
− Tax @ 33%. on Int	(33,000)	(24750)
+ FV Loss	2650	2500
	599650	552,750

Adj.

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Adjusted WANES :-

No of shares used in BEPS	15,00,000	15,00,000
No of shares on conversion (max)	1687500	1265625
	$\left[\frac{1250,000}{100} \times 135\right]$	$\left[\frac{1250,000}{100} \times 135 \times \frac{9}{12}\right]$
		Time factor
	3187500	2765625
DEPS	$\frac{599650}{3187500}$	$\frac{552750}{2765625}$
	= 19 paise	= 20 paise

13. $BEPS = \frac{10,00,000}{12,00,000 \text{ shares}}$ = ₹0.83 per share

Adj. in earnings :-

Int Exp. on convertible bond ⇒

Cal^n of liab component in Bond

Yr	CF	PVAF @9%	PV
1-3	1,20,000	2.5313	3,03,756

[20L × 6%]

∴ Remaining is ~~equipo~~ Equity component

= 80,00,000 − 3,03,756

= 16,96,244

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Amortisation Table → P&L

Yr	Op. bal	Int@9%	Actual Pay	Cl. bal
1	303756	27,338	1,20,000	2,11,094

∴ Adjustment in Earning = + 27,338

Adj. in shares = 2000 bonds × 250 shares = 500,000 shares

$$DEPS = \frac{10,00,000 + 27,338}{12,00,000 + 5,00,000} = ₹0.60 \text{ per share}$$

14. $BEPS = \frac{46,00,000}{30,00,000} = ₹ 1.53$

Adjustment in Earnings = 1800 (1 − 0.40) = 1080

Adj. in shares = $\frac{20,00,000}{10}$ = 2,00,000 shares

Inc. EPS = $\frac{1080}{200,000}$ = ₹0.01

$$DEPS = \frac{46,00,000 + 1080}{30,00,000 + 2,00,000} = ₹ 1.44 \text{ per share}$$

15.

$$BEPS = \frac{2,00,000}{\left[10,00,000 \times \frac{12}{12}\right] + \left(30,000 \times \frac{9}{12}\right)} = ₹0.196 \text{ per share}$$

* Bonds converted into shares on 31st march

$$\frac{25000}{100} \times 120 = 30,000 \text{ shares}$$

Adjustment for DEPS

Convertible Bond ⇒ ₹1,00,000 $\left[\frac{100,000}{100} \times 120 = 1,20,000 \text{ shares}\right]$

Unconverted → ₹75000 bonds

ie $\left[\frac{75000}{100} \times 120 = 90,000 \text{ shares}\right]$

Converted [31st March] → ₹25000 bonds

[ie 30,000 shares]

Adj. in Earnings

$$\left[75,000 \times 5\% \times \frac{12}{12}\right](1-0.30)$$

$= ₹2625$

$$\left[25000 \times 5\% \times \frac{3}{12}\right](1-0.30)$$

$= ₹219$

Adj. in shares

$\frac{90,000}{\text{shares}} \times \frac{12}{12} = 90,000$ shares

$\frac{30,000}{\text{shares}} \times \frac{3}{12} = 7500$ shares

$$DEPS = \frac{2,00,000 + 2625 + 219}{10,22,500 + 90,000 + 7500} = ₹0.181 \text{ per share}$$

Jo 30,000 shares (converted wale) wo Jan to March i.e. 3 months Potential ES rahenge and come under DEPS and once converted on 31st march (i.e. for next 9 months) becomes ordinary/normal ES and becomes part of BEPS.

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16. BEPS = $\frac{12,00,000}{5,00,000}$ = ₹ 2.40

DEPS :-

Adj. in Earnings = 0

Adj. in shares = $1,00,000 \times \frac{20-15}{20}$ = 25,000 shares

∴ DEPS = $\frac{12,00,000 + 0}{5,00,000 + 25,000}$ = ₹ 2.29

18.

	20X8 (CY)	20X7 (PY)
PAT	6,00,000	5,00,000
WANES	40,00,000	40,00,000
BEPS	$\frac{6,00,000}{40,00,000}$ = 15 paise.	$\frac{500,000}{40,00,000}$ = 13 paise.
DEPS :-		
~~DEPS~~ Profit	6,00,000	5,00,000
Adj. in Earnings	—	—
Adjusted Earnings	6,00,000	5,00,000
WANES in BEPS	40,00,000	40,00,000
Adj in shares	354,375	262500
	$\left[6,30,000 \times \frac{160-70}{160}\right]$	$\left[6,30,000 \times \frac{120-70}{120}\right]$
Adjusted WANES	43,54,375	42,62,500
DEPS	$\frac{6,00,000}{43,54,375}$ = 14 paise	$\frac{6,00,000}{42,62,500}$ = 14 paise

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FY 1st Jan'01 to 31 Dec'01.

19. **BEPS**

(i) For Quarter 1 [1.1.X1 to 31.3.X1] :-

$$BEPS = \frac{11,00,000}{10,00,000 \times \frac{3}{3}} = ₹1.10$$

(ii) For Quarter 2 [1.4.X1 to 30.6.X1] :-

Profit = 23,00,000 − 11,00,000 = ₹12,00,000

WANES ⇒ Ordinary shares + Retail Site open 1st May'01

$$= 10,00,000 \times \frac{3}{3} + 5,000 \times \frac{2}{3}$$

$$= 10,03,333$$

$$BEPS = \frac{12,00,000}{10,03,333} = ₹1.20$$

(iii) for Quarter 3 [1.7.X1 to 30.9.X1]

Profit = 19,00,000 − 23,00,000 = (₹4,00,000)

WANES = Ordinary shares + shares issued on Retail Site opened on 1st May + Retail Site open 1st Sept'01

$$= 10,00,000 \times \frac{3}{3} + 5,000 \times \frac{3}{3} + 5000 \times \frac{1}{3}$$

$$= 10,06,667$$

$$BEPS = \frac{(400,000)}{10,06,667} = (₹0.40)$$

Note:- Profit > 20L, then shares issue → This condⁿ fulfil or not 31.12 ko can know, so actual issue of shares next yr. so not part of BEPS.

(iv) For Quarter 4 [1.10.X1 to 31.12.X1]

Profit = 29,00,000 − 19,00,000 = 10,00,000

WANES =

Ordinary shares + Sh. issued on Retail Site 1st May + Sh. issued on Retail Site 1st Sept

$= 10,00,000 \times \frac{3}{3} + 5000 \times \frac{3}{3} + 5000 \times \frac{3}{3}$

$= 10,10,000$

BEPS = $\frac{10,00,000}{10,10,000}$ = ₹0.99 per share

(v) For Full Yr [1.1.X1 to 31.12.X1]

Profit = 29,00,000

WANES = Ordinary shares + Sh. issued on Retail site 1st May + Sh. issued on Retail site 1st Sept

$= 10,00,000 \times \frac{12}{12} + 5000 \times \frac{8}{12} + 5000 \times \frac{4}{12}$

$= 10,05,000$

BEPS = $\frac{29,00,000}{10,05,000}$ = ₹2.89

Note:- When Quarter calⁿ, think 1 quarter as full period
" Year " "

Since there is only conti: Shares as Potential ES, SO, there will be no adj in earnings [Hence only Profit used in BEPS is considered]

DEPS

(i) For Quarter 1 [1·1·X1 to 31·3·X1]

Profit = 11,00,000

WANES = 10,00,000

$$DEPS = \frac{11,00,000}{10,00,000} = ₹ 1·10$$

(ii) For Quarter 2 [1·4·X1 to 30·6·X1]

Profit = ~~Balance~~ 12,00,000

WANES ⇒

Used in BEPS	10,03,333
+ Contingent for Retail site 1st May $[5,000 \times \frac{1}{3}]$	1,667
+ Contingent for Profit exceeding ₹20,00,000 $[3,00,000 \times 3/3]$	3,00,000
	13,05,000

$$DEPS = \frac{12,00,000}{13,05,000} = ₹ 0·92$$

(iii) For Quarter 3 [1·7·X1 to 30·9·X1]

Profit = (4,00,000)

WANES ⇒

Used in BEPS	10,06,667
+ Contingent for Retail site on 1st Sept $[5000 \times \frac{2}{3}]$	3,333
+ Contingent for Profit (Since till date profit < 20,00,000)	–
	10,10,000

TIME STAMP
LC 85
85th min

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DEPS = $\frac{(400,000)}{10,10,000}$ = £(0·40)

(iv) For Quarter 4 [1·10·X1 to 31·12·X1]

Profit = £ 10,00,000

WANES ⇒

Used in BEPS	10,10,000
+ Contingent for retail site (No Retail Site open)	
+ Contingent for Profit exceeding 20,00,000 [9,00,000 × 3/3]	9,00,000
	19,10,000

DEPS = $\frac{10,00,000}{19,10,000}$ = £0·52

(v) For full year [1·1·X1 to 31·12·X1]

Profit = 29,00,000

WANES ⇒

Used in ~~QAND~~ BEPS	10,05,000
+ Contingent for Retail sites opened during year	
1st May [5000 × 4/12]	1,667
1st Sept [5000 × 8/12]	3,333
+ Contingent for profit exceeding 20,00,000 [9,00,000 × 12/12]	900,000
	19,10,000

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$$DEPS = \frac{29,00,000}{19,10,000} = ₹1.52$$

20.

$$BEPS = \frac{90,000}{16,000} = ₹5.625$$

DEPS

Step 1:- Incremental EPS for each PES :-

$$\text{Options} \Rightarrow \frac{0}{900 \times \left(\frac{90-75}{90}\right)} = \frac{0}{150} = 0$$

$$\text{convert. Pref. shares} \Rightarrow \frac{7500 \times 9}{7500 \times 2} = \frac{67500}{15000} = ₹4.50$$

$$\text{Convertible deb}^{n} \Rightarrow \frac{10,00000 \times 10\% \ (1-0.25)}{\frac{10,00,000}{100} \times 4} = \frac{75000}{40,000} = ₹1.875$$

Step 2:- Ranking of PES :-

Options = Rank 1

Convert. deb = Rank 2

Convert. Pref = Rank 3

Step 3:- Diluted EPS by considering each PES one by one on basis of Ranking :-

→ Consider only Rank 1

$$DEPS = \frac{90,000 + 0}{16,000 + 150} = ₹5.572$$

Lowest → consider Rank 1 & Rank 2 Only

$$DEPS = \frac{90,000+0+75000}{16,000+150+40,000} = ₹2.939$$

→ Consider Rank 1, 2 & 3

$$DEPS = \frac{90,000+0+75000+67500}{16,000+150+40,000+15000} = ₹3.268$$

Step 4:- Lowest EPS in step 3 is reported as DEPS
ie. ₹ 2.939

21. a) BEPS:-

Continuing Op = $\frac{30,00,000}{10,00,000}$ = ₹3

Discontinuing Op = $\frac{(36,00,000)}{10,00,000}$ = ₹(3.60)

Total Operations = $\frac{(6,00,000)}{10,00,000}$ = ₹(0.60)

DEPS:-

Continuing Op = $\frac{30,00,000+0}{10,00,000+2,00,000}$ = ₹2.50

Since DEPS of conti Op. is Dilutive (Less than BEPS), so DEPS of DO & TO will be calculated & presented even if it will be anti dilutive

DO = $\frac{(36,00,000)+0}{10,00,000+2,00,000}$ = ₹(3)

TO = $\frac{6,00,000}{10,00,000+2,00,000}$ = ₹(0.50)

BEPS tha (3.60)
DEPS tha (3) i.e. Loss decreased. So, anti dilutive

Don't say anti-dilutive as it appears on to the face of 3.60 se 3 happened. Loss decrease so, dilutive ie. ultimately profit so, Anti-dilutive

b) Loss from CO = (10,00,000)
Income from DO = 36,00,000
Income from TO = ₹ 26,00,000

BEPS :-

$$CO = \frac{(10,00,000)}{10,00,000} = ₹(1)$$

$$DO = \frac{36,00,000}{10,00,000} = ₹ 3.60$$

$$TO = \frac{26,00,000}{10,00,000} = ₹ 2.6$$

~~Extra (for understanding)~~

DEPS :-

$$CO = \frac{(10,00000)+0}{10,00,000+2,00,000} = ₹(0.833)$$

Since DEPS from CO is Anti Dilutive (Because Loss per share is reducing)
So, DEPS will be considered same as BEPS ie. ₹(1)

Further DEPS of DO & TO will also be reported same as their BEPS.

∴ DEPS of DO = BEPS = ₹ 3.60
DEPS of TO = BEPS ie. ₹ 2.60

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22. (a) FC and Cl. bal of Conv. Debⁿ on 31·3·X3 :-

Cal. of FL :- '000

Yr	CF	PVF@8%	PV
1-4	10,800	3·31	35748
	[18cr x 6%]		
4	180,000	0·74	133200
		FL	168948

∴ Equity component = 1,80,000 − 168948
= ₹11,052

Amortisation Table :-

Yr	Op. bal	+ Int @ 8%	− Actual Pay	= Cl. bal
31·3·02	168948	13515·84	10800	171663·84
31·3·03	171,663·84	13733·11	10,800	174596·95
		Ans		Ans

(b) Cal of EPS [Consolidated FS i.e. Group EPS]

BEPS

Profit Attributable to ES for Parent :-

PAT for Parent Entity	39000
− Dividend on Pref. shar (8cr x 0·05)	(4000)
	35000

WANES :

$$20cr \times \frac{12}{12} + 5cr \times \frac{9}{12}$$

= 237500 shares

$$BEPS = \frac{₹35000}{237500} = ₹0.147$$

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DEPS

Adjusted Profit :-

Profit used in BEPS	35,000
+ Int on debⁿ [13733.11(1-0.25)]	10,299.83
	45,299.83

Adjusted ~~EARNINGS~~ WANES :-

used in BEPS	2,37,500
+ conversion of shares (10k shares)	1,00,000
	3,37,500

DEPS = 45,299.83 / 337500 = ₹ 0.134

23. Calⁿ of DEPS of Subsi :-

Profit (adjusted) :-

	₹
used in BEPS	30,000
Adj. in Earnings	-
	30,000

WANES (adjusted) :-

used in BEPS	10,000
Adj. in shares [1,000 X (50-40)/50]	200
	1200

DEPS of Subsi = ₹30,000 / 1200 = ₹ 2.94

__/__/____

ie. Co. 'P'

Calⁿ of DEPS of Group :-

Profit attributable to ES of Parent [Adjusted] :-

	₹
Parent's Profit used in BEPS	7000
+ Adj. in earnings for Parent's PES (NO PES)	-
+ Share in DEPS of Subsi 2·94 × 1000 shares	26754
	33,754

* Total shares of Subsi (including Diluted) held by parent

No. of ordinary ES held	9000
+ Options held of Subsi $\left[500 \times \frac{50-45}{50}\right]$	100
	10 0 0 shares

WANES [adjusted] :-

Parent WANES used in BEPS	5000
+ Adj. in Sh. of Parent's PES (No PES)	-
	5000

$$\text{DEPS of Group} = \frac{33754}{5000 \text{ shares}} = ₹ 6{\cdot}75$$

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24. * Subsidiary :-

BEPS

	₹
Profit :	
PAT	5400
− Pref. Divi. 1X400	(400)
	5000

WANES :-

1000 shares

$$BEPS = \frac{5000}{1000} = ₹5$$

DEPS (multiple PES)

	₹
Profit (adjusted) :-	
used in BEPS	5000

Step 1 : Incremental EPS for each PES

$$\text{Warants} = \frac{0}{\left[150 \times \left(\frac{20-10}{20}\right)\right]} = \frac{0}{75} = 0$$

$$\text{Convert. PS} = \frac{400}{400 \times 1 ES} = \frac{400}{400} = ₹1$$

Step 2 :- Ranking

Warrants = Rank 1

Convert. PS = Rank 2

__/__/____

Step3 :- Diluted EPS by considering each PES one by one

→ considering Only Rank 1

$$DEPS = \frac{5000+0}{1000+75} = ₹4.65$$

→ considering Rank 1 & 2

$$DEPS = \frac{5000+0+400}{1000+75+400} = ₹3.66$$

Step 4:- DEPS ⇒ lowest of Step 3 ⇒ ₹3.66

*Group

Group's BEPS

Profit attributable to ES of Parent :-

Profit of Parent	12,000
+ Share in BEPS of subsi [₹5 X 800 shares]	4000
+ Dividend recvd from sub. [₹1 X 300 pref. shares]	300
	16,300

WANES :- 10,000 shares

$$BEPS = \frac{16,300}{10,000} = ₹1.63$$

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Group's DEPS

Convertible Pref. shares not added here coz wo aur distri. nahi karega. So convertible pref. shares hai ~~wo added Pref Div in Earnings. NOT distribute shares.~~ So, hypothetically Es if already subsi - adj. kar diya. Had it been normal PS, then taken.

Profit (adjusted)	₹
Profit of Parent used in BEPS	12,000
+ Adj. in Earnings due to Parent's PES	
+ Shares in DEPS of Subsi (NO PES) →	—
[@ ₹3·66 × 1115]	4081
	16,081

* Total sh. of Subsi (including Diluted) held by Parent :-

No of ordinary shares held in Subsi		800
+ Diluted shares in subsi°		
warrants $\left[30 \times \left(\frac{20-10}{20}\right)\right]$	15	
Conv. Pref shares [300 × 1ES]	300	315
		1115

WANES (adjusted)

used in BEPS	10,000
+ Adj. in Shares due to PES of Parent (NO PES)	—
	10,000

$$\text{Group DEPS} = \frac{16,081}{10,000} = ₹1.61$$