Ind AS 36 - Impairment of Assets

i) Impairment loss ⇒ when Carrying Amount Exceeds Recoverable Amount

E.g: C.A. = 500000, R.A. = 420000

∴ Imp. loss = 500000 − 420000 = 80000

Journal

Impairment loss (P/L)	80000	
To Asset		80000

ii) Recoverable Amount = Fair value less cost to sell (420000) OR Value in use (430000) (whichever is Higher)

An Entity shall assess at the end of each reporting Period, whether there is any indication of impairment.
If any such indication exists, Estimate Recoverable Amount.
If Recoverable Amount is less than C.A., Recognise Impairment loss.

Indication of Impairment

External Indication

(i) Asset market value declined significantly more than would be expected due to passage of time on Normal use.

(ii) Significant changes with adverse effect on Technological, market, economic or legal Environment

(iii) Market Interest rate / Market rate of return have increased affecting discount rates.

Internal Indication

(i) Obsolescene on physical damage of an asset.

(ii) Asset becoming idle, plan to discontinue on restructure the operation, Reassessing useful life of asset as finite rather Infinite.

(iii) Evidence indicating Economic performance will be worse than expected

iv) Carrying amount of net asset is more than market capitalisation.

a) cash needs for operating the asset are higher than budgeted.

Eg: Point iii of External Indication

C.A. = 160000

	0m	1st	2nd	3rd	4th
P.V. VIU 165606		50000	50000	50000	50000

market int. rate = 8%

N.A. = 160000
FV-CTS = 140000 < 165606
VIU = 165606
No Imp.

	0m	1st	2nd	3rd	4
P.V. VIU 145685		50000	50000	50000	50000

market interest rate = 16%

CA = 160000
FV-CTS = 160000 > 145685
VIU = 145685
Imp = 14315

Here, value in use of asset decreased due to increase in market rates

Eg: Point iv of External Indication

Carrying Amount of net assets of Business = 1000000
Future Earnings every year = 80000
if market capitalisation rate = 10%.
∴ Fair value of Business = 80000 / 10% = 800000

∴ Indication of Impairment Since Fair value of Business is ₹ 800000 while C.A. of net assets are ₹ 1000000

Discount Rates

Pre tax rates that reflects the current assessment of -
(i) Time value of money. 6%
(ii) Risk specific to the assets. 4%

Risk Adjusted Discount rate = 10%.

E.g.

C.A. of Asset (31.3.2001) —— 500000

Indication of Impairment

Fair value of Asset (As per Ind AS 113) = 350000

Cost to sell = 15000

∴ FV - CTS = 350000 - 15000 = 335000

Future Expected Cash flow to be generated from using the Asset

	1st	2nd	3rd	4th	5th
	100000	100000	100000	100000	100000
					20000

10% Discount rates.

P.V. of all cash flows = 391497

Value in use = 391497 Higher

∴ Recoverable Amount = Higher of Fair value less cost to sell and value in use.

= 391497 (Greater of 391497 and 335000)

∴ Impairment loss = 500000 - 391497 = 108503 (P/L)

Journal Entry

Impairment loss (P/L)	108503	
To Asset (PPE)		108503

Statement of P/L

Impairment loss	(108503)

Balance Sheet

P/L (108503)	PPE - (108503)

Balance sheet (Extracts)

Non Current Asset

PPE (500000 − 108503) 391497

E.g.2 Cost model

Cost of asset = ₹ 1000000

Useful life = 5 years

Residual value = 50000

Recoverable Amount (Higher of VIU or FV − CTS)

2nd yr = 518000 (Residual value : 50000

4th yr = 285000 , At 4th yr end, useful life is reviewed and revised to total 7 years.

P/L (Dep^n)	1st yr	(190000) ✓
P/L (Dep^n)	2nd yr	(190000) ✓
P/L (Imp. loss)	2nd yr	(102000) ✓
P/L (Dep^n)	3rd yr	(156000) ✓
P/L (Dep^n)	4th yr	(156000) ✓
P/L (Reversal)	4th yr	34000 ✓
P/L (Dep^n)	5th yr	80000

B/Sheet

Bank		(1000000)
Asset		1000000
(−) Dep^n (1000000 − 50000 / 5yrs)	1st yr	(190000)
(−) Dep^n	2nd yr	(190000)
C.A. 2nd yr end		620000
(−) Impairment loss		(102000)
R.C.A. 2nd yr end		518000
(−) Dep^n (518000 − 50000 / 3yrs)		(156000)
C.A. 3rd yr end		362000
(−) Dep^n	4th yr	(156000)
C.A. 4th yr end		206000
(+) Reversal of Imp. loss		34000
R.C.A. 4th yr end		240000
(−) Dep^n (240000 − 50000 / 3yrs)		63333 Dep^n every year.

C.A. at 4th yr end had there been no Impairment loss

Cost = 1000000

(-) Dep^n 4 years: 760000 (190000 x 4 yrs)

C.A. (Unimpaired) 240000 → CA had there been no impairment loss.

∴ Maximum Reversal of Impairment – To the extent of ₹ 240000 or ₹ 285000 (whichever is lower)

Also, at 4th yr end → useful life revised to 7 years in total

∴ Remaining useful life = 3 years.

Note

(i) Cost of Asset

(-) Depreciation during the year (Firstly)

(-) Impairment loss (Secondly, if there is indication of Imp)

Revised Carrying Amount

(ii) Impairment loss is charged if R.A. less than C.A

↓ Charged to P/L

↓ Higher of Value in use & Fair value – CTS

Foreign Currency Cash Flows. (Functional Currency – ₹)

To Calculate value in use

0th	1st	2nd	3rd	4th	5th
	500 $	600 $	650 $	700 $	700 $

Discount rate appropriate for $ = 5%

Present value of all CF = $ 2706

Spot ₹ 1 $ = 80

∴ Value in use (₹) = (2706 x 80)

= ₹ 216480

Reversal of Impairment loss (Example)

Cost of Asset (1.4.01) = 1500000 (life 5 years)

(-) Dep^{n} for 2yrs (600000)

C.A. of Asset (31.3.03) 900000 — R.A. (31.3.03) = 630000

(-) Imp. loss 2nd yr. (270000)

R.C.A. of Asset (31.3.03) 630000

(-) 3rd Dep^{n} ($\frac{630000}{3}$) (210000)

C.A. of Asset (31.3.04) 420000

Now, Recoverable amount of Asset as 31st March 2004 – Case A = 670000

Case B = 500000

C.A. of Asset had there been no Imp. loss

Cost = 1500000

(-) 3yrs Dep^{n} = (900000)

C.A. 600000 CA had there been no Impairment loss

Case A R.A. 670000 (lower of 600000 or 670000)

∴ Maximum Reversal upto C.A. of ₹ 600000 or Recoverable Amount of ₹ 670000 whichever is lower (i.e. ₹ 600000)

∴ Reversal of Imp. loss = 600000 − 420000

= 180000

Asset A/c Dr. 180000

To Reversal of Imp. loss (P/L) 180000

↳ R.C.A. = 420000 + 180000 = 600000

Case B R.A. 500000 (lower of 600000 or 500000)

Max. Reversal upto C.A. of ₹ 600000 or R.A. of ₹ 500000 whichever is lower

∴ Reversal of Impairment loss = 500000 − 420000 = 80000

Asset A/c Dr 80000

To Reversal of Imp. loss 80000 → R.C.A. = 420000 + 80000 = 500000

Illustration 3 Self

Mars Ltd. gives the following estimates of cash flows relating to property, plant and equipment on 31st March, 20X4. The discount rate is 15%

Year	Cash Flow(₹ in lakh)
20X4-20X5	2,000
20X5-20X6	3,000
20X6-20X7	3,000
20X7-20X8	4,000
20X8-20X9	2,000
Residual Value at 31st March, 20X9	500

Property, plant & equipment was purchased on 1st April, 20X1 for ₹ 20,000 lakh
Useful Life was 8 Years
Residual Value estimated at the end of 8 years ₹ 500 lakh
Fair value less cost to disposal (31.3.04) ₹ 10,000 lakh
Calculate impairment loss, if any on the property, plant and equipment. Also calculate the revised carrying amount and revised depreciation of property, plant and equipment.

Value in use (31.3.04)
9513.8

1st	2nd	3rd	4th	5th
2000	3000	3000	4000	2000
				500

15%

FV - CTS = 10000 l

∴ Recoverable Amt (31.3.04) = Higher of 10000 l or 9513 l
= 10000 l

Cost of Asset (1.4.01) = 20000
(-) Dep^n for 3 yrs $\left\{\frac{20000-500}{8\text{ yrs}} \times 3\right\}$ = (7312.5)
C.A. (31.3.04) 12687.5

2437.5 x 3 yrs

∴ Imp loss = (12687.5 − 10000) = 2687.5 (P/L)

∴ R.C.A. (31.3.04) = 12687.5 − 2687.5
= 10000

∴ Dep^n (current) = $\frac{10000-500}{5\text{ yrs}}$ = 1900

(i) Impr. loss = 2687.5

ii) R.C.A. = 10000

iii) Dep^n (Revised amt) = 1900

Illustration 12

From the following details of an asset, find out:

a) Impairment loss and its treatment.

b) Current year depreciation for the year end.

C.A. = 27.30

R.A. = 12

Imp. loss = 15.30

Reval. Surplus 14

P/L 1.30

To asset 15.30

4

Particulars of assets:

R.C.A. = 12

Cost of asset	₹ 56 lakh
Useful life	10 years
Salvage value	Nil
Carrying value at the beginning of the year	₹ 27.30 lakh
Remaining useful life	3 years
Recoverable amount at the beginning of the year	₹ 12 lakh
Upward revaluation done in last year	₹ 14 lakh

C.A. (Beginning) = 27.30

R.A. (Beginning) = 12

∴ Impairment loss = (27.3 − 12) = 15.30

Impairment loss of ₹ 15.30 firstly charged from Reval^n Surplus balance existing on B/sheet and then remaining charged to P/L

Journal

Revaluation Surplus (OCI)	14	
P/L	1.3	
To Asset		15.30

Not Required

Statement of P/L (Extract)

Imp. loss	1.30
Other Comprehensive Income	
Imp. loss	14

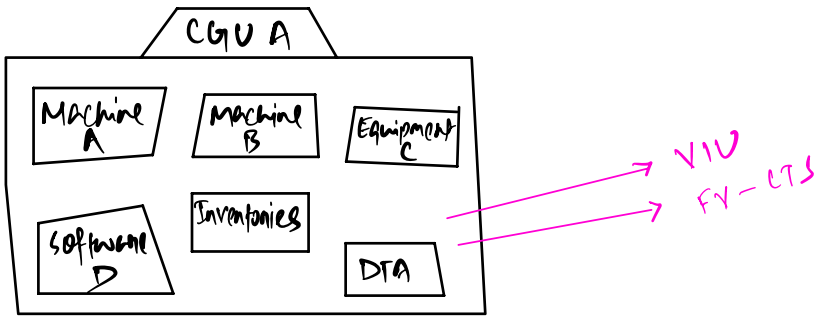
∴ R.C.A. after impairment = 27.3 − 15.3 = 12 l

useful life remaining = 3 years.

∴ Dep^{n} next year = $\frac{12\,l}{3\text{ years}}$ = 4 l

Cash Generating Units (CGU)

A CGU is the smallest identifiable group of assets that generates — cash inflows that are largely independent of cash inflows from other assets or group of assets.



Example Machine B caught fire and got damaged which is an External indication of Impairment.

Suppose, Machine B do not generate cash inflows independently

∴ Value in use of machine B cannot be determined.

In such case, Determine R.A. of C.G.U to which machine B belongs.

Eg: Cash Generating Units 1

Machine A	–	50000
Machine B	–	30000
Software C	–	20000
✗ Inventories	–	40000
✓ DTA	–	5000
C.A.	–	145000

Carrying of B CGU: PPE ⇒ 500000; I.A. ⇒ 200000; I.P. ⇒ 150000; Investment ⇒ 50000 / 900000

P.C = 1000000

Goodwill = 100000

C.A. = 145000

R.A. = 115000 (Entire CGU 1)

∴ Impairment loss = 30000 (P/L)

	C.A.	I.Loss	R.C.A.
Machine A	50000	30000 × 5/10 = 15000	35000
Machine B	30000	30000 × 3/10 = 9000	21000
Software C	20000	30000 × 2/10 = 6000	14000
Inventories	40000	X	40000
DTA	5000	X	5000
	145000		115000

Ind AS 36 Impairment loss not applicable to Inventories, DTA, Financial assets, and any other Current Asset.

Allocated Goodwill to CGU (Goodwill acquired on Business Combination)

Total Goodwill = 500000, Goodwill allocated to CGU A is 30%.

CGU A

Goodwill ✓	150000
PPE ✓	200000
I.Asset ✓	100000
Inventories ✗	120000
Receivables ✗	70000
DTA ✗	30000
C.A.	670000
R.A. of CGU =	405000

∴ Impairment loss first entirely allocated to Goodwill.
Then Balance to other assets on a pro rata basis

	C.A.	I.Loss	R.C.A.
Gwill	150000	(150000)	NIL
PPE	200000	(76667) 115000 × 2/3	123333
I.Asset	100000	(38333) 115000 × 1/3	61667
Inventories	120000	X	120000
Receivables	70000	X	70000
D.T.A.	30000	X	30000
			405000

∴ I.loss

670000 − 405000

= 265000

Allocating Corporate Assets to CGU (⇒ Office Asset)

Corporate Assets ÷ Head Quarters or a Division of the entity or a research Centre. Corporate Assets do not generate Separate Cash Flows and they are tested for impairment in the context of CGU.

Eg. Imp.

Sharafi Ltd has 3 cash Generating Units ÷

CGU 1	CGU 2	CGU 3
Machine A - 15000	Machine C - 45000	Machine E = 40000
Machine B - 35000	Machine D - 5000	I.Asset = 25000
Furniture - 15000	Furniture - 25000	Inventories = 15000 X
Receivables - 5000 X	Inventories - 25000 X	
⇓	⇓	⇓
R.A. = 85000	R.A. = 70000	R.A. = 70000

CGU 1

FV - CTS = 1500, VIU = Nil

Machine A is physically damaged and cannot be further used. ₹ 2000 expected to be realised from sale of machine as scrap. selling cost = ₹ 500.

CGU 2

Machine C is a separate CGU and its value in use is estimated to be to ₹ 40000. FV - CTS = 38000. ∴ R.A. of machine C = 40000

There is a office building whose C.A. is ₹ 100000 which can be allocated to CGU 1, CGU 2 and CGU 3 in the ratio of 2:2:1

Sol^n

1. Imp. loss = 110000 − 85000 = 25000

CGU 1	C.A.	I. loss (Independently Impaired)	R.C.A.
Machine A	15000	13500	1500
Machine B	35000	11500 × 35/90 = 4472	30528
Furniture	15000	11500 × 15/90 = 1917	13083
Receivables	5000	X	5000
Building (2/5)	40000	11500 × 40/90 = 5111	34889
	110000		85000

R.C.A.

2. Imp. loss = 140000 − 70000 = 70000

CGU 2	C.A.	I. loss (Independently Impaired)	R.C.A
Machine C	45000	5000	40000
Machine D	5000	65000 × 5/70 = 4643	357
Furniture	25000	65000 × 25/70 = 23214	1786
Inventories X	25000	X	25000
Building (2/5)	40000	65000 × 40/70 = 37143	2857
	140000		70000

3. Imp. loss = 100000 − 70000 = 30000

CGU's	C.A.	I. loss	R.C.A
Machine E.	= 40000 ✓	30000 × 28/85 = 14118	25882
I-Assets	= 25000 ✓	30000 × 25/85 = 8823	16177
Inventories X	= 15000 X	X	15000
Building (Rs)	= 20000 ✓	30000 × 12/85 = 7059	12941
	100000		70000

To determine whether Asset generate cash inflows that are largely independent of cash inflows from other Assets

Asset A produces output which is transferred to Asset B

Asset B produces output which is transferred to Independent third Party.

Case 1 : Active Market exists for A's output

Asset A is a separate cash generating unit because it is capable of generating cash flows even if it is not generating cash flows.

Case 2 : Active market doesn't exist for A's output

Asset A is not a separate CGU because it is not capable of generating cash Flows. A & B together forms a CGU.

If Cash Flows generated by Asset/CGU are affected by Internal transfer Pricing.

↓

Entity shall use best estimate of future Prices that could be achieved in ARM'S LENGTH TRANSACTION.

This standard shall not apply to

1. Inventories (Write down to NRV as per Ind AS 2)
2. Deferred tax asset (Ind AS 12)
3. Plan asset (Ind AS 19)
4. Biological Asset measured at FV - CTS.
5. Financial Asset (Ind AS 109)
6. Non Current asset held for sale (Impairment as per Ind AS 105)
7. Contract Asset.

An Entity is regd. to test following items for Impairment at least annually irrespective of whether there is any indication of impairment

1. Intangible asset with an Indefinite useful life.
2. Intangible Asset not yet available for use.
3. Goodwill acquired in a Business combination.

} Mandatory Annual Impairment testing whether indication exist or not.

↓

Required to test for Impairment Annually and whenever there is any indication that Asset/Goodwill may be impaired.

Circumstances in which it is not necessary to calculate both an Asset's Fair value less cost to sell and its value in use.

(i) If Either of these Amounts Exceeds Asset's Carrying Amount, it is not necessary to estimate the other Amount.

(ii) If there is No basis for making reliable estimate of Fair value less cost to sell, R.A. is measured by reference to value in use.

Determining Value in use

VIU = Future cash Flows Pulled to Present value using Pre tax Discount rates.

Estimates of Future cash Flows Includes

1. Cash Inflows Projections from Continuing use. of the Asset
2. Cash outflows necessary to generate cash Inflows from Continuing use.
3. Cash outflows includes day to day servicing costs. of the Asset
4. Terminal values

Estimates of Future cash Flows Excludes

F. Cost
Tax
Future Restructuring

1. Excludes Receivables, Payables, Provisions, Pensions etc.
2. Cash Inflows/outflows from financing activities.
3. Income tax Receipts and Payments.
4. Future Restructuring to which entity is not yet committed.
5. Future Improvements or Enhancement of Asset's performance.
   i.e. Future cash Flows should be forecasted on the basis of current condition and not future condition.

Future cash Flows Estimated may vary unless justified.

Reversal of Impairment loss

Impairment loss recognised earlier can be reversed if there is an indication of Reversal of Impairment loss.

External Indication

1. Asset's market value has **increased** significantly.
2. Significant changes with **favourable** effect on Technological, market, economic on legal environment.
3. **market interest rates** / market rate of return have **decreased** during the period and those decrease likely to reduce discount rates.

Internal Indication

1. Evidence is available from internal reporting that indicates economic performance of the asset will be **better** than expected.
2. Cost incurred to **improve** on **enhance** the asset's performance on restructure the operation to which the asset belongs.

In allocating a Reversal of Impairment loss for an asset on CGU, the C.A. of an asset shall not be increased above the **lower** of :-

(i) Its Recoverable Amount
(ii) the C.A. determined had there been no impairment loss recognised in Prior Periods.

} lower

Note An Impairment loss recognised for Goodwill shall not be reversed in a subsequent period (i.e. **Reversal of Goodwill is Prohibited**)

Note A **Reversal** of an impairment loss for a CGU shall be allocated to the assets of the unit, **except for Goodwill**, **Pro rata** with the carrying amount of those assets.

Note Impairment loss is not reversed just because of the passage of time even if the Recoverable Amount of the Asset becomes higher than its Carrying Amount.

E.g: (TYK 04 & 05)

Cost of Asset (1.4.01) = 100 cr (life 5 years)

∴ Dep^n (1st yr) = (20 cr)

∴ C.A. (31.3.02) 1st yr end = 80 cr

Indication of Impairment

FV - CTS = 70 cr

Future Cash Flows

31.3.03	31.3.04	31.3.05	31.3.06
15 cr	30 cr	40 cr	10 cr
		10%	

∴ Value in use (31.3.02) = 75.31 cr

∴ Recoverable Amount = 75.31

∴ Impairment loss = (80 - 75.31) = 4.69

∴ R.C.A = 75.31 (1st yr end)

Suppose Next year ⇒ 2nd yr End, All Info remain the same.

C.A. after Dep^n = 75.31 - (75.31/4 yrs) = 56.48 (2nd yr End)

∴ Value in use (31.3.03) = 67.84

31.3.04	31.3.05	31.3.06
30 cr	40 cr	10 cr
	10%	

Now, Since VIU is greater than C.A.

But the increase in VIU is just due to passage of time

Hence, Reversal of Impairment loss should not be done.

Illustration 10: Reversal of Impairment Loss

On 1st April 20X1, Venus Ltd acquired 100% of Saturn Ltd for ₹ 4,00,000. The fair value of the net identifiable assets of Saturn Ltd was ₹ 3,20,000 and goodwill was ₹ 80,000. Saturn Ltd is in coal mining business. On 31st March, 20X3, the government has cancelled licenses given to it in few states.

As a result, Saturn's Ltd revenue is estimated to get reduce by 30%. The adverse change in market place and regulatory conditions is an indicator of impairment. As a result, Venus Ltd has to estimate the recoverable amount of goodwill and net assets of Saturn Ltd on31st March, 20X3.

Venus Ltd uses straight line depreciation. The useful life of Saturn's Ltd assets is estimated to be 20 years with no residual value. No independent cash inflows can be identified to any individual assets. So, the entire operation of Saturn Ltd is to be treated as a CGU. Due to the regulatory entangle it is not possible to determine the selling price of Saturn Ltd as a CGU. Its value in use is estimated by the management at ₹ 2,12,000.

Suppose by 31st March, 20X5 the government reinstates the licenses of Saturn Ltd. The management expects a favourable change in net cash flows. This is an indicator that an impairment loss may have reversed. The recoverable amount of Saturn's Ltd net asset is re- estimated. The value in use is expected to be ₹ 3,04,000 and fair value less cost to disposal is expected to be ₹ 2,90,000.
Calculate the impairment loss, if any. Also show the accounting treatment for reversal of impairment loss and the subsequent depreciation thereon.

	Net Assets	Goodwill	Total
1st April 2001	320000	80000	400000
(i) Dep^{n} 2yrs @ 320000/20yrs x2yrs	(32000)	-	(32000)
C.A. 31.3.03	288000	80000	368000
(ii) Impairment loss	(76000)	(80000)	(156000)
R.C.A. (31.3.03)	212000	NIL	212000
(iii) Dep^{n} 2yrs @ 212000/18yrs x2yrs	(23555)		(23555)
C.A. (31.3.05)	188445	-	188445
(iv) Reversal of Imp. loss	67555	-	67555
	256000		256000
(v) Dep^{n} 5yrs @ 256000/16yrs	(16000)		

R.A. = 304000
CA had there been no imp loss = 256000
Lower = 256000

Dep^{n} 67555 x 16/16

Working

C.A. (31.3.03) = 368000
RA (31.3.03) = 212000
I.loss 156000

I.loss of ₹ 156000 firstly allocated to Goodwill and the Balance to other Assets on a pro rata basis.

31.3.05 Reversal

C.A. of Asset had there been no impairment

Cost of F.N.A (1.4.01) = 320000
(-) Depr^n 4yrs $\left\{\frac{320000}{20} \times 4\right\}$ = (64000)
C.A. (31.3.05) 256000 > lower is ₹ 256000
R.A. (31.3.05) 304000

∴ Reversal of Imp. loss = 256000 − 188445
= 67555

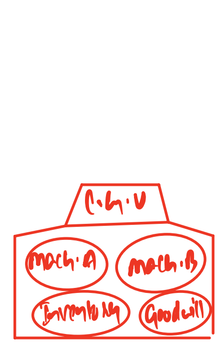
(i) Imp. loss

Goodwill = 80000
Net Asset = 76000
156000

(iii) Reversal = 67555 { 76000 × 16/16 on RA

CA. had no Imp 256000
304000
↓
lower
256000
− 188445
67555

(ii) Depr^n = 256000 / 16 yrs = 16000


C.G.U
Mach. A
Mach. B
Goodwill

Question 11: (RTP May'19)

Elia limited is a manufacturing company which deals in to manufacturing of cold drinks and beverages. It is having various plants across India. There is a Machinery A in the Baroda plant which is used for the purpose of bottling. There is one more machinery which is Machinery B clubbed with Machinery A. Machinery A can individually have an output and also sold independently in the open market. Machinery B cannot be sold in isolation and without clubbing with Machine A it cannot produce output as well. The Company considers this group of assets as a Cash Generating Unit and an Inventory amounting to ₹ 2 Lakh and Goodwill amounting to ₹ 1.50 Lakhs is included in such CGU.

Machinery A was purchased on 1st April 2013 for ₹ 10 Lakhs and residual value is ₹ 50 thousands. Machinery B was purchased on 1st April, 2015 for ₹ 5 Lakhs with no residual value. The useful life of both Machine A and B is 10 years. The Company expects following cash flows in the next 5 years pertaining to Machinery A. The incremental borrowing rate of the company is 10%.

Year	Cash Flows from Machinery A
1	1,50,000
2	1,00,000
3	1,00,000
4	1,50,000
5	1,00,000 (excluding Residual Value)
Total	6,00,000

On 31st March, 2018, the professional valuers have estimated that the current market value of Machinery A is ₹ 7 lakhs. The valuation fee was ₹ 1 lakh. There is a need to dismantle the machinery before delivering it to the buyer. Dismantling cost is ₹ 1.50 lakhs. Specialised packaging cost would be ₹ 25 thousand and legal fees would be ₹ 75 thousand.

The Inventory has been valued as per Ind AS 2. The recoverable value of CGU is ₹ 10 Lakh as on 31st March, 2018. In the next year, the company has done the assessment of recoverability of the CGU and found that the value of such CGU is ₹ 11 Lakhs ie on 31st March, 2019. The Recoverable value of Machine A is ₹ 4,50,000 and combined Machine A and B is ₹ 7,60,000 as on 31st March, 2019.

Required:

a) Compute the impairment loss on CGU and carrying value of each asset after charging impairment loss for the year ending 31st March, 2018 by providing all the relevant working notes to arrive at such calculation.

b) Compute the prospective depreciation for the year 2018-2019 on the above assets.

c) Compute the carrying value of CGU as at 31st March, 2019.

31st March 2018

		A	B
Cost of Machinery A & Machinery B		1000000 (1.4.2013)	500000 (1.4.2015)
(-) Dep^n for 5yrs	(1000000 − 50000 / 10yrs × 5yrs)	(475000)	
(-) Dep^n for 3yrs	(500000 / 10yrs × 3yrs)		(150000)
∴ C.A. of Machinery A & B (31.3.2018)		525000	350000

(−) 95000 / 470000   − 50000 / 300000

To calculate Impairment loss

Machinery A

(i) Value in use = P.V. of Future Cash Flows + P.V. of Residual value

	1st	2nd	3rd	4th	5th
∴ Value in use = 489650	150000	100000	100000	150000	100000
					50000 (Remember this.)

10%

(ii) Fair value less cost to sell = 700000 − 150000 − 25000 − 75000
= 450000

∴ Recoverable Amount = 489650 (31.3.18)

∴ Impairment loss of Machinery A (525000 − 489650) = 35350

Entire CGU (31.3.2018)

Imp. loss of CGU = 1225000 − 1000000 = 225000

C.A. of CGU	C.A. (31.3.18)	Impairment loss	R.C.A. (31.3.2018)
Machinery A	525000	35350 (1st Independently)	489650
Machinery B	350000	39650 3rd	310350
Inventories	200000	✗	200000
Goodwill	150000	(150000) 2nd	NIL
	1225000	225000	1000000

(b) Dep. for 2018 − 19

	C.A. (31.3.18)	1 year (Dep.)	C.A. (31.3.2019)
Machinery A	489650	87930	401720
" B	310350	44336	266014
Inventories	200000	−	200000
			867734

(489650 − 50000) / 5 yrs.

310350 / 7 yrs.

C.A. 31.3.2017

(c) C.A. of asset had there been no Impairment loss

	C.A. had there been no Impairment	R.A.	Lower of C.A. & R.A
Machinery A	430000 ✓	450000 ✗	430000
Machinery B	300000 ✓	310000 ✗	300000
~~Inventories~~	~~200000~~	~~200000~~	✗
	930000		

∴ Maximum Reversal of machine A upto ₹ 430000 & machine B upto ₹ 300000

∴ Reversal of Impairment Loss = (430000 − 401720) + (300000 − 266014)

= 28280 + 33986

= 62266

R.C.A. of Machine A (31.3.19) → 430000

R.C.A " " B (31.3.19) → 300000

Question12: (RTP: Nov'19) (MTP Mar'21) Value in use Most important

E Ltd. owns a machine used in the manufacture of steering wheels, which are sold directly to major car manufacturers. Interest Exp. will not form of cash outflows.

- The machine was purchased on 1st April, 20X1 at a cost of ₹ 5,00,000 through a vendor financing arrangement on which interest is being charged at the rate of 10% per annum.
- During the year ended 31st March, 20X3, E Ltd. sold 10,000 steering wheels at a selling price of ₹ 190 per wheel.
- The most recent financial budget approved by E Ltd.'s management, covering the period 1st April, 20X3 – 31st March, 20X8, including that the company expects to sell each steering wheel for ₹ 200 during 20X3-20X4, the price rising in later years in line with a forecast inflation of 3% per annum. 200, 206, 212, 219, 225
- During the year ended 31st March, 20X4, E Ltd. expects to sell 10,000 steering wheels.
- The number is forecast to increase by 5% each year until 31st March, 20X8. 10000, 10500, 11025, 11576, 12155
- E Ltd. estimates that each steering wheel costs ₹ 160 to manufacture, which includes ₹ 110 variable costs, ₹ 30 share of fixed overheads and ₹ 20 transport costs.
- Costs are expected to rise by 1% during 20X4-20X5, and then by 2% per annum until 31st March, 20X8. 160, 162, 165, 168, 171
- During 20X5-20X6, the machine will be subject to regular maintenance costing ₹50,000.
- In 20X3-20X4, E Ltd. expects to invest in new technology costing ₹ 1,00,000. This technology will reduce the variable costs of manufacturing each steering wheel from ₹ 110 to ₹ 100 and the share of fixed overheads from ₹ 30 to ₹ 15 (subject to the availability of technology, which is still under development). ? Not to be considered (Future Restructuring)
- E Ltd. is depreciating the machine using the straight-line method over the machine's 10 year estimated useful life. The current estimate (based on similar assets that have reached the end of their useful lives) of the disposal proceeds from selling the machine is ₹ 80 000 net of disposal costs. E Ltd. expects to dispose of the machine at the end of March, 20X8.
- E Ltd. has determined a pre-tax discount rate of 8%, which reflects the market's assessment of the time value of money and the risks associated with this asset.

Assume a tax rate of 30%. What is the value in use of the machine in accordance with Ind AS 36?

	2003-04	2004-05	2005-06	2006-07	2007-08
SP/unit	200	206	212	219	225
Quantity	10000 wts	10500 wts	11025 wts	11576 wts	12155 wts
Cost/wt	160	162	165	168	171
Contribution	400000	462000	518175	590376	656170
maintenance			(50000)		
Residual Value					80000
	400000	462000	468175	590376	736370

∴ Value in use = 2073169

Discount rate = 8%.

Question13: (MTP Oct'20) (RTP May'20) Imp

PQR Ltd. is the company which has performed well in the past but one of its major assets, an item of equipment, suffered a significant and unexpected deterioration in performance. Management expects to use the machine for a further four years after 31st March 20X6, but at a reduced level. The equipment will be scrapped after four years. The financial accountant for PQR Ltd. has produced a set of cash-flow projections for the equipment for the next four years, ranging from optimistic to pessimistic. CFO thought that the projections were too conservative, and he intended to use the highest figures each year. These were as follows:

	₹ '000
Year ended 31st March 20X7	276
Year ended 31st March 20X8	192
Year ended 31st March 20X9	120
Year ended 31st March 20Y0	114

The above cash inflows should be assumed to occur on the last day of each financial year. The pre-tax discount rate is 9%. The machine could have been sold at 31st March 20X6 for₹ 6,00,000 and related selling expenses in this regard could have been ₹ 96,000. The machine had been revalued previously, and at 31st March 20X6 an amount of ₹ 36,000 was held in revaluation surplus in respect of the asset. The carrying value of the asset at 31st March 20X6 was ₹6,60,000. The Indian government has indicated that it may compensate the company for any loss in value of the assets up to its recoverable amount.

Calculate impairment loss, if any and revised depreciation of asset. Also suggest how Impairment loss, if any would be set off and how compensation from government be accounted for?

C.A. (31.3.2006) = 6,60,000

F.V. - CTS (31.3.06) = (600000 - 96000) = 504000

value in use

588236

1st	2nd	3rd	4th
276000	192000	120000	114000
	9%		x

∴ R.A. (Higher) = 588236

∴ Impairment loss = 660000 - 588236 = 71764

∴ Out of P.loss of ₹ 71764, ₹ 36000 debited to Revl. Surplus and balance ₹ 35764 charged to P/L.

Journal

Impairment loss 71764
To Asset 71764

Reval^n Surplus 36000
P/L {B.F.G} 35764
To Impairment loss 71764

Revised Depriciation after Imp. loss

R.C.A. (31.3.06)	=	588236
(-) Dep^n next year {588236/4}		(147059)
		441177

Compensation from Govt will be accounted when it becomes receivable

— Calendar Year is F.Y ?

Question 14: 31 Dec Year 1, 31st Dec Year 2

On 1 January Year 1, Entity Q purchased a machine costing ₹ 2,40,000 with an estimated useful life of 20 years and an estimated zero residual value. Depreciation is computed on straight-line basis.

The asset had been re-valued on 1 January Year 3 to ₹ 2,50,000, but with no change in useful life at that date. On 1 January Year 4 an impairment review showed the machine's recoverable amount to be ₹ 1,00,000 and its estimated remaining useful life to be 10 years.

Calculate:

a) The carrying amount of the machine on 31 December Year 2 and the revaluation surplus arising on 1 January Year 3. → 216000, → 34000
b) The carrying amount of the machine on 31 December Year 3 (immediately before the impairment). 236111 — 1 January Year 4: 136111 ← 34000, 102111
c) The impairment loss recognised in the year to ~~31 December Year 4~~ and its treatment thereon
d) The depreciation charge in the year to 31 December Year 4.

Note: During the course of utilization of machine, the company did not opt to transfer part of the revaluation surplus to retained earnings.

1 Jan Year 1 → C.A. = 240000 (20yrs)
Depr for 2 yrs (240000/20yrs × 2yrs) = (24000)
31. Dec. Year 2 → C.A. (before Revaln) 216000 (18yrs)
Revaln Gain (OCI) 34000
1 Jan Year 3 R.C.A. (After Revaln) 250000 (18yrs)
Depr for 1 year (250000/18yrs) (13889)
31. Dec. Year 3 C.A. 236111 (17yrs)
Impairment loss* (136111)
R.C.A. 100000 (10yrs at Revaln)
Depr (100000/10yrs) (10000)
90000

Out of Impairment loss of ₹ 136111, Revaln surplus of ₹ 34000 should be debited first and then balance of ₹ 102111 charged to P/L

Imp. loss	136111	Revaln surplus (OCI)	34000
To Asset	136111	P/L	102111
		To Imp. loss	136111

(i) C.A. (31 Dec year 2) 240000 - 12000 - 12000 → 216000

Recvt Supplies (1 Jan year 3) (250000 - 216000) → 34000

ii) C.A. (31 Dec year 3) After Imp. (250000 - 1/18 th of 250000) → 236111

iii) Imp. loss (31 Dec year 3) (236111 - 100000) → 136111

Journal → ① Impairment loss 136111
To Asset 136111

② Recvt Supplies 34000
P/L 102111
To Impairment loss 136111

iv) Dep^n (31 Dec year 4) (1/10 th of 100000) → 10000

Illustration 11 - NCI measurement and Goodwill impairment — After consolidation

A Ltd acquires 80% shares of a subsidiary B Ltd. for ₹ 3,200 thousand. At the date of acquisition, B Ltd.'s identifiable net assets is ₹ 3,000 thousand. A elects to measure NCI at proportionate share of net identifiable assets. It recognizes

	₹ in thousand
Purchase Consideration (80%)	3,200
NCI (3,000 x 20%)	600 800
	3,800
Less: Net Assets	(3,000)
Goodwill (Partial)	800 → 1000

At the end of next financial year, B Ltd.'s carrying amount is reduced to ₹ 2,700 thousand (excluding goodwill). Recoverable amount of B Ltd.'s assets is:
Case (i) ₹ 2,000 thousand,
Case (ii) ₹ 2,800 thousand
Calculate impairment loss allocable to Parent and NCI in both the cases.

Case I

R.A. = 2000 thousand

C.A. = 2700 thousand + 800 thousand (80%) + 200 thousand (20%)
→ Parent Goodwill. → NCI notional Goodwill

= 3700 thousand

Impairment loss = 3700 thousand − 2000 thousand

= 1700 thousand

∴ out of Impl. loss of ₹ 1700 measured, ₹ 1000 measured allocated to both recognised and notional Goodwill & then Balance 700 measured allocated to other NCA assets.

	Net Asset	Goodwill (Recognised)	Goodwill (Notional)
C.A.	2700	800	200
(-) Impl. loss	(700) (560 (P/L), 140 (NCI))	(800) ⇒ P/L.	(200)
R.C.A.	2000	NIL	NIL

Impairment loss	Parent (P/L)	NCI
Goodwill	800	~~200~~
Other Asset (700)	560	140
	1360	140

C.A. after Impairment = 2000

Case (ii)

R.A. = 2800 measured

C.A. = 2700 measured + 800 (80%) + 200 (20%)

= 3700 measured

∴ Impl. loss = 3700 − 2800 = 900

₹ 900 impairment loss fully allocated to Goodwill

	Net Asset	Goodwill recognised (80%)	Goodwill Notional (20%)
C.A.	2700	800	200
Impl. loss (900)	—	(720) ⇒ P/L.	(180)
	2700	80	

C.A. after Impairment = 2780

Impairment loss

Goodwill

Other Assets

	Parent	NCI
	720	~~80~~
	-	-
	720	-

Extra Given (NOT for exam)

Illustration 11 - NCI measurement and Goodwill impairment

A Ltd acquires 80% shares of a subsidiary B Ltd. for ₹ 3,200 thousand. At the date of acquisition, B Ltd.'s identifiable net assets is ₹ 3,000 thousand. A elects to measure NCI at proportionate share of net identifiable assets. It recognizes

	₹ in thousand
Purchase Consideration	3,200
NCI (3,000 x 20%)	600
	3,800
Less: Net Assets	(3,000)
Goodwill	800

At the end of next financial year, B Ltd.'s carrying amount is reduced to ₹ 2,700 thousand (excluding goodwill). Recoverable amount of B Ltd.'s assets is:

Case (i) ₹ 2,000 thousand,

Case (ii) ₹ 2,800 thousand

Calculate impairment loss allocable to Parent and NCI in both the cases.

Net Asset → 2700

Goodwill (80%) → 800 (80%)

C.A. 3500

Case I

Goodwill Impaired = (800)

Net Asset Impaired = (700)

	Parent	NCI
	(800)	-
	(560)	(140)
	(1360)	(140)

∴ R.A. = C.A. - Imp

= 3500 - 1500

= 2000

- 100%

Case 2 — FA 2800

Net Asset = 2700

Goodwill (80%) = 800 (80%)

C.A. 3500

Net Asset will not be impaired.

Goodwill should be 100

⇓

Partial Gdwill = 80% of 100

= 80

∴ Imp of Gdwill = 800 (80%) − 80

= 720

R.C.A = Net Asset (2700) + Goodwill (80)

= 2780

500 500 500

Question 2: (PP Nov'18 & Nov'20 Similar) Practice ADA

ABC Ltd. has three cash-generating units: A, B and C, the carrying amounts of which as on31stMarch, 20X1 are as follows:

Cash-generating units	Carrying amount (₹ in crore)	Remaining useful life
A	500	10
B	750	20 Double
C	1,100	20 Double

500 1500 2000 4200

ABC Ltd. also has two corporate assets having a remaining useful life of 20 years.

(₹ in crore)

Corporate asset	Carrying amount	Remarks
X	600 (500/4000, 1500/4000, 2000/4200)	The carrying amount of X can be allocated on a reasonable basis (i.e., pro rata basis) to the individual cash-generating units.
Y	200	The carrying amount of Y cannot be allocated on a reasonable basis to the individual cash-generating units.

Recoverable amount as on 31st March, 20X1 is as follows:

Cash-generating units	Recoverable amount (₹ in crore)
A	600
B	900
C	1,400
ABC Ltd.	3,200

2900 2871 2700

Calculate the impairment loss, if any. Ignore decimals.

	CGU A	CGU B	CGU C
C.A.	500 (10yrs)	750 (20yrs)	1100 (20yrs)
~~Weights~~	~~500~~	~~1500~~	~~2200~~
(f) Allocable Corporate Assets {X = 600}	71	214	315
	$\{600 \times \frac{500}{4200}\}$	$\{600 \times \frac{1500}{4200}\}$	$\{600 \times \frac{2200}{4200}\}$
C.A. of CGU	571	964	1415
R.A. of CGU	600	900	1400
∴ Imp. loss	-	64	15

	CGU B: Other Asset	CGU B: Comp. Asset	CGU C: Other Asset	CGU C: Comp. Asset
	$64 \times \frac{750}{964}$	$64 \times \frac{214}{964}$	$15 \times \frac{1100}{1415}$	$15 \times \frac{315}{1415}$
	= 50	= 14	= 12	= 3

	CGU A	CGU B	CGU C	Comp. X
Revised C.A.	500	700	1088	71
		(750 - 50)	(1100 - 12)	214 - 14 = 200
				315 - 3 = 312
				583

Large CGU (Group of CGU)

	CGU A	CGU B	CGU C	Comp. X	Comp. Y	Total
C.A. of All CGU	500	700	1088	583	200	3071
R.A. of All CGU						3200
						2900

Since R.A. > C.A.

∴ No Further Impairment

500 + 800 + 1000 = 2300

Question 3: After Consolidation

Parent acquires an 80% ownership interest in Subsidiary for ₹ 2,100 on 1st April, 20X1. At that date, Subsidiary's net identifiable assets have a fair value of ₹ 1,500. Parent chooses to measure the non-controlling interests as the proportionate interest of Subsidiary's net identifiable assets. The assets of Subsidiary together are the smallest group of assets that generate cash inflows that are largely independent of the cash inflows from other assets or groups of assets. Since other cash-generating units of Parent are expected to benefit from the synergies of the combination, the goodwill of ₹ 500 related to those synergies has been allocated to other cash-generating units within Parent. On 31st March, 20X2, Parent determines that the recoverable amount of cash-generating unit Subsidiary is ₹ 1,000. The carrying amount of the net assets of Subsidiary, excluding goodwill, is ₹ 1,350. Allocate the impairment loss on 31st March, 20X2.

1/4/01 For Cyear

Consideration (80%) = 2100

NCI (20%) 20% of 1500 = 300

2400

(-) I.N.A. (1500)

Goodwill (partial) 900

Goodwill of ₹ 900

Parent own net ↓ 500 | Subsidiary Asset ↓ 400

Subsidiary I.N.A. = 1500

Subsidiary Goodwill = 400 (partial) } 1/4/01

31st March 2002

Subs. I.N.A. = 1350

" Goodwill = 400 (80%)

1750

For Exam

C.A. of Asset = 1350 + 400 + 100 = 1850

R.A. of Asset = = 1000

∴ Imp. Loss 850

C.A. of Asset

I. Cost

I.N.A.	Goodwill (80%)	Goodwill (20%)
1350	400	~~100~~
(350)	(400)	(~~100~~)
1000		

Parent 280

NCI 70

Imp. Loss

Goodwill

I.N.A (350)

Parent	NCI
400	X
280	70
680	70

1000000

Illustration 21 (MTP Oct'18) (MTP Apr'18) After consolidation

Sun Ltd is an entity with various subsidiaries. The entity closes its books of account at every year ended on 31st March. On 1st July, 20X1, Sun Ltd acquired an 80% interest in Pluto Ltd. Details of the acquisition were as follows:

- Sun ltd acquired 800,000 shares in Pluto Ltd by issuing two equity shares for every five acquired. The fair value of Sun Ltd's share on 1st July, 20X1 was ₹ 4 per share and the fair value of a Pluto's share was ₹ 1.40 per share. The costs of issue were 5% per share.
- Sun Ltd incurred further legal and professional costs of ₹ 100,000 that directly related to the acquisition.
- The fair values of the identifiable net assets of Pluto Ltd at 1st July, 20X1 were measured at₹ 1.3 million. Sun Ltd initially measured the non-controlling interest in Pluto Ltd at fair value. They used the market value of a Pluto Ltd share for this purpose. No impairment of goodwill arising on the acquisition of Pluto Ltd was required at 31st March, 20X2 or 20X3.

Pluto Ltd comprises three cash generating units A, B and C. When Pluto Ltd was acquired the directors of Sun Ltd estimated that the goodwill arising on acquisition could reasonably be allocated to units A: B:C on a 2:2:1 basis. The carrying values of the assets in these cash generating units and their recoverable amounts are as follows:

Unit	Carrying value (before goodwill allocation)	Recoverable amount
	₹ '000	₹ '000
A	600	740
B	550	650
C	450	400

Required:

i. Compute the carrying value of the goodwill arising on acquisition of Pluto Ltd in the consolidated Balance Sheet of Sun ltd at 31st March, 20X4 following the impairment review.

ii. Compute the total impairment loss arising as a result of the impairment review, identifying how much of this loss would be allocated to the non-controlling interests in Pluto ltd.

Consideration (800000/5 × 2 i.e. 320000 Sh × 4/Sh) 1280000

(+) NCI (200000 Sh × 1.4/Sh) 280000

(-) F.V. of I.N.A. (1300000)

Goodwill (Full) 260000

	CGU 1	CGU 2	CGU 3
C.A.	600000	550000	450000
(+) Goodwill (2:2:1)	104000	104000 ✓	52000 ✓
C.A. of CGU after Gloss	704000	654000	502000
R.A.	740000	650000	400000
I.Loss	0	4000	102000

CGU 2 → Entire I.Loss of ₹ 4000 allocated to Goodwill

CGU 3

∴ out of I.Loss of ₹ 102000, Goodwill should be impaired first by ₹ 52000 and then balance 50000 to other assets.

I.Loss allocated to NCI = 106000 × 20% = 21200

Calc of Closing Goodwill

Goodwill	200000
(-) Imp. (4000 + 52000)	(56000)
Goodwill after Impairment	204000

Calc of ENA

C.A. (600000 + 550000 + 450000)	1600000
Imp. Loss (50000)	(50000)
C.A. after Imp.	1550000

Illustration 5 Ind AS 12 CA and TB Self after Ind AS 12

Mercury Ltd. has an identifiable asset with a carrying amount of ₹ 1,000. Its recoverable amount is ₹ 650. The tax rate is 30% and the tax base of the asset is ₹ 800. Impairment losses are not deductible for tax purposes. What would be the impact of impairment loss on related deferred tax asset / liability against the revised carrying amount of asset?

	Before Impairment	Impairment	After Impairment
C.A. of Asset	1000	(350)	650
T.B. of Asset	800	-	800
Taxable Temp. Diff	200	(350)	
Deductible Temp. Diff			150
DTL/(DTA)	60	(105)	(45)

Question 6:(PP July'21 Similar) Solve now

A Ltd. purchased an asset of ₹ 100 lakh on 1st April, 20X0. It has useful life of 4 years with no residual value. Recoverable amount of the asset is as follows:

As on	Recoverable amount
31st March, 20X1	₹ 60 lakh
31st March, 20X2	₹ 40 lakh
31st March, 20X3	₹ 28 lakh (3rd yr End)

CA at 3rd yr End had there been no impairment loss = 100l − 75l = 25l

Calculate the amount of impairment loss or its reversal, if any, on 31st March, 20X1,31st March, 20X2 and 31st March, 20X3.

reversal = 25l

Cost of Asset (1.4.2000)	100l
(-) Dep^{n} 1st yr	(25l)
C.A. of Asset (31.3.01)	75l
± Imp. Loss → P/L	(15l)
R.C.A. (31.3.01)	60l
(-) Dep^{n} 2nd yr	(20l)
C.A. (31.3.02)	40l
(-) Dep^{n} 3rd yr	(20l)
C.A. (31.3.03)	20l

(+) Reversal of Imp. loss — 5l

R.C.A. (31.3.03) — 25l

C.A. of Asset on 31.3.03 had there been no impairment

Cost (1.4.00) → 100l

(-) Dep^n 3 yrs (100/4yrs × 3yrs) — (75l)

C.A. — 25l

R.A. — 28l

∴ Lower is ₹ 25l

∴ Reversal of impairment may to the extent upto C.A. of ₹ 25l

31.3.01

C.A. = ₹5l, R.A. = 60l

∴ Imp. loss = 15l (75 − 60)

() p/l Debit

31.3.02

31.3.03 C.A. = 20

C.A. had there been no Imp. = 25l

R.A = 28l

} Lower is 25l

∴ Reversal of Imp. loss = (25l − 20l)

= 5l → p/l credit