CHIRANJEEV JAIN CLASSES

FOR CA - FINAL COURSE

QUESTION BANK

FOR

FINANCIAL REPORTING

As per the New syllabus of Final issued by
Board of Studies of ICAI

Volume II - 15th Edition

"IT'S TIME TO BE BUSY BECAUSE TODAY WILL BE YESTERDAY VERY SOON"

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REMEMBER

"IN ORDER TO SUCCEED, WE MUST FIRST BELIEVE THAT WE CAN"

Dedicated to
My Father Sri Mool Chand Jain
and
My Mother Smt. Sarala Devi Jain

Think Beyond 90+ IN CA FINAL - Financial Reporting

STOP Memorizing Without Understanding the CONCEPTS

It's Time to Learn Accounts Conceptually

PREFACE

Financial Reporting is Paper 1 in Chartered Accountancy – Final Course. It is rightly so because Accounting is the language of business and without understanding accounting terminology, it is not possible to understand business and commerce. It is, therefore, essential for all CA students to possess knowledge of Financial Reporting concepts and practices.

The approach of the book is examination-oriented problems from ICAI Study Resource and solutions have also been included in all chapters as per ICAI Suggested solution. Examples and Illustration (mostly selected from ICAI Study Modules) have been included in the book to understands the IND AS concepts.

Recent question from ICAI RTP, MTP and Exam papers with answers have been included to help the students. Practical Question from Other Sources are also included in some of the chapters for better understanding of the concepts. Solutions for some of these questions may not be provided for which students may refer our class notes.

Considering the importance of the question bank and its practical implications, care has been taken to solve almost all the problems for the benefit of the students.

We are sure the book will prove extremely useful to CA Final students.

We are Thankful to all my students to have faith on me.

Suggestions from all readers would be highly appreciated and acknowledged.

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All the questions are divided in three categories for REVISION Purpose:

	This colour indicates - such questions are based on direct concept, which can be answered without reading the solution if student retain the concept. Student can ignore such question at the time of revision if they have insufficient time.
	This colour indicates - such questions should be solved at least one time and identify mistake (if any) committed while understanding or solving the questions and such mistakes should be considered while doing revision.
	This colour indicates - such questions are important and requires sufficient practice. Such questions must be revised before Exam. Such Question should be practiced by writing.

Disclaimer: *In Exam, Questions can be asked from any categories.*

Note: *Before Exam CJ Sir will provide a set of expected questions for every attempt in which questions may be from any category. That question should be revised in the last revision before exam along with all the questions which student have marked.*

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"CA IS NOT HARD" IF U "WORK HARD"

CA Final - Paper 1 Financial Reporting

ABC & TREND ANALYSIS

Category	Chapter	M18	N18	M19	N19	N20	J21	M21	D21	M22	N22	M23	N23	M24	N24	M25	S25	J26	Avg
A	*CFS*	25	16	27		10	20	16	5		20	5	20	18	16	11	16	20	14.41
A	*IND AS 32 &109*	16	20	12	14	6	19	19	29	21	17	19	19	20	12	12	16	10	16.53
A	*IND AS 115*	4	10	5	12	18	12	12	10	14	14	12	12	7	7	7	7	13	10.35
A	*IND AS 103*	10	4	8	28	8		5	14	20		15		2	8	14	2		8.12
A	*IND AS 102*	10	8	5	8	5	12	5	6		6		8		6	10	2		5.35
A	*ANALYSIS OF FS*	10	8	16	12	12		8			6	8							4.71
	Total (A)	**75**	**66**	**73**	**74**	**59**	**63**	**65**	**64**	**55**	**63**	**59**	**59**	**47**	**49**	**54**	**43**	**43**	**59.471**
B	*IND AS 116*	12				8	6	4	10		8		8	8	2				3.88
B	*IND AS 16*		8		8		5					8	5	2	15	6		8	3.82
B	*IND AS 12*					6	4		5		6				6			6	1.94
B	*IND AS 19*			8		6				7				8			8	5	2.47
B	*IND AS 21*			5	4			5	5	6			4			2	8	2	2.41
B	*IND AS 36*		15	4		8		6			8					8	5	2	3.29
B	*IND AS 33*					8		8	8	4	8					8	6	2	3.06
B	*IND AS 41*				4		4	9			6	8					2		1.94
B	*IND AS 105*				10					8			8	5				6	2.18
B	*IND AS 108*	10				6	4	8			5	16	8		2				3.47
B	*Professional Duties*														2		2	7	0.65
B	*IND AS 101*							6	8				5	5	7	2	7	5	2.65
B	*IND AS 34*		5	4		6		5	4			6		4	4	4		2	2.59
	Total (B)	**22**	**28**	**21**	**26**	**48**	**23**	**51**	**40**	**25**	**41**	**38**	**38**	**32**	**38**	**30**	**38**	**45**	**34.353**
C	*IND AS 1*			4			5	4		5		5			6	4	6	4	2.53
C	*IND AS 2*	4				4			5			5		2		7	2		1.71
C	*IND AS 7*					8	5		6					2		2	4	2	1.71
C	*IND AS 8*								5		5		5		4		6		1.47
C	*IND AS 10*				8		8					5		4					1.47
C	*IND AS 20*		5	4						8				8	2			8	2.06
C	*IND AS 23*				8					7				4			6		1.47
C	*IND AS 24*											4							0.24
C	*IND AS 37*		4									4		2	2		2	2	0.94
C	*IND AS 38*			5			10						4				2	2	1.35
C	*IND AS 40*									5					8	4			1.00
C	*IND AS 113*		5		8				4	5	5			2		6		4	2.29
C	*Conceptual Framework*			5						6	6	6	6	6	4	4	4		2.76
C	*Accounting & Technology*													5	5	7	5		1.29
C	*IND AS - Intro*													4				8	0.71
	Total (C)	**4**	**14**	**18**	**24**	**12**	**28**	**4**	**20**	**36**	**16**	**29**	**15**	**39**	**31**	**34**	**37**	**30**	**23**
	Total (A+ B+C)	**132**	**124**	**124**	**124**	**124**	**126**	**126**	**124**	**128**	**126**	**126**	**126**	**118**	**118**	**118**	**118**	**118**	115.53

CHAPTER 14
IMPAIRMENT OF ASSETS (IND AS 36)

QUESTIONS FROM ICAI STUDY MATERIAL

Q1: A publisher owns 150 magazine titles of which 70 were purchased and 80 were self-created. The price paid for a purchased magazine title is recognised as an intangible asset. The costs of creating magazine titles and maintaining the existing titles are recognised as an expense when incurred. Cash inflows from direct sales and advertising are identifiable for each magazine title. Titles are managed by customer segments. The level of advertising income for a magazine title depends on the range of titles in the customer segment to which the magazine title relates. Management has a policy to abandon old titles before the end of their economic lives and replace them immediately with new titles for the same customer segment. What is the cash-generating unit?

Ans: It is likely that the recoverable amount of an individual magazine title can be assessed. Even though the level of advertising income for a title is influenced, to a certain extent, by the other titles in the customer segment, cash inflows from direct sales and advertising are identifiable for each title. In addition, although titles are managed by customer segments, decisions to abandon titles are made on an individual title basis.

Therefore, it is likely that individual magazine titles generate cash inflows that are largely independent one from another and that each magazine title is a separate cash-generating unit.

Q2: A mining entity owns a private railway to support its mining activities. The private railway could only be sold for scrap value and it does not generate cash inflows that are largely independent of the cash inflows from the other assets of the mine. Is Private railway is treated as CGU.

Ans: It is not possible to estimate the recoverable amount of the private railway because its value in use cannot be determined and is probably different from scrap value. Consequently, the entity estimates the recoverable amount of the cash-generating unit to which the private railway belongs (ie the mine as a whole).

Q3: A bus company provides services under contract with a municipality that requires minimum service on each of five separate routes. Assets devoted to each route and the cash flows from each route can be identified separately. One of the routes operates at a significant loss. The entity does not have the option to curtail any one bus route. Identify CGU.

Ans: Because the entity does not have the option to curtail any one bus route, the lowest level of identifiable cash inflows that are largely independent of the cash inflows from other assets or groups of assets are the cash inflows generated by the five routes together. The cash-generating unit for each route is the bus company as a whole.

Q4: Apex Ltd. is engaged in manufacturing of steel utensils. It owns a building for its headquarters. The building used to be fully occupied for internal use. However, recently the company has

undertaken a massive downsizing exercise as a result of which 1/3rd of the building became vacant. This vacant portion has now been given of on lease for 6 years. Determine the CGU of the building.

Ans: CGU of the building is Apex Ltd. as a whole as the primary purpose of the building is to serve as a corporate asset.

Q5: A significant raw material used for plant Y's final production is an intermediate product bought from plant X of the same entity. X's products are sold to Y at a transfer price that passes all margins to X. 80% of Y's final production is sold to customers outside of the entity. 60% of X's final production is sold to Y and the remaining 40% is sold to customers outside of the entity. For each of the following cases, evaluate the cash-generating units for X and Y?

a) If X could sell the products it sells to Y in an active market and internal transfer prices are higher than market prices, what are the cash-generating units for X and Y?

b) If there is no active market for the products X sells to Y, what are the cash-generating units for X and Y?

Ans: a) Cash-generating unit for X: X could sell its products in an active market and, so, generate cash inflows that would be largely independent of the cash inflows from Y. Therefore, it is likely that X is a separate cash-generating unit, although part of its production is used by Y.

Cash-generating unit for Y: It is likely that Y is also a separate cash-generating unit. Y sells 80% of its products to customers outside of the entity. Therefore, its cash inflows can be regarded as largely independent.

Effect of internal transfer pricing: Internal transfer prices do not reflect market prices for X's output. Therefore, in determining value in use of both X and Y, the entity adjusts financial budgets/forecasts to reflect management's best estimate of future prices that could be achieved in arm's length transactions for those of X's products that are used internally.

b) Cash-generating units for X and Y: It is likely that the recoverable amount of each plant cannot be assessed independently of the recoverable amount of the other plant because:

i) the majority of X's production is used internally and could not be sold in an active market. So, cash inflows of X depend on demand for Y's products. Therefore, X cannot be considered to generate cash inflows that are largely independent of those of Y.

ii) the two plants are managed together.

As a consequence, it is likely that X and Y together are the smallest group of assets that generates cash inflows that are largely independent.

Q6: XYZ Limited produces a single product and owns plants 1, 2 and 3. Each plant is located in a different country. Plant 1 produces a component that is assembled in either Plant 2 or Plant 3. The combined capacity of Plant 2 and Plant 3 is not fully utilised. XYZ Limited's products are sold worldwide from either Plant 2 or Plant 3, e.g., Plant 2's production can be sold in Plant 3's

country if the products can be delivered faster from Plant 2 than from Plant 3. Utilisation levels of Plant 2 and Plant 3 depend on the allocation of sales between the two sites. If there is no active market for Plant 1's products, evaluate what are the cash-generating units for Plant 1, Plant 2 and Plant 3?

Ans: It is likely that the recoverable amount of each plant cannot be assessed independently because:

a) There is no active market for Plant 1's products. Therefore, Plant 1's cash inflows depend on sales of the final product by Plant 2 and Plant 3.

b) Although there is an active market for the products assembled by Plant 2 and Plant 3, cash inflows for Plant 2 and Plant 3 depend on the allocation of production across the two sites. It is unlikely that the future cash inflows for Plant 2 and Plant 3 can be determined individually.

As a consequence, it is likely that Plant 1, Plant 2 and Plant 3 together (i.e., XYZ Limited as a whole) are the smallest identifiable group of assets that generates cash inflows that are largely independent.

Q7: Goodwill had previously been allocated to cash-generating unit A. The goodwill allocated to A cannot be identified or associated with an asset group at a level lower than A, except arbitrarily. A is to be divided and integrated into three other cash-generating units, B, C and D. Recommend how the goodwill should be reallocated to B, C and D.

Ans: Since goodwill allocated to A cannot be non-arbitrarily identified or associated with an asset group at a level lower than A, it is reallocated to units B, C and D on the basis of the relative values of the three portions of A before those portions are integrated with B, C and D.

Q8: A machine has suffered physical damage but is still working, although not as well as before it was damaged. The machine's fair value less costs of disposal is less than its carrying amount. The machine does not generate independent cash inflows. The smallest identifiable group of assets that includes the machine and generates cash inflows that are largely independent of the cash inflows from other assets is the production line to which the machine belongs. The recoverable amount of the production line shows that the production line taken as a whole is not impaired.

Assumption 1: budgets/forecasts approved by management reflect no commitment of management to replace the machine.

Assumption 2: budgets/forecasts approved by management reflect a commitment of management to replace the machine and sell it in the near future. Cash flows from continuing use of the machine until its disposal are estimated to be negligible.

Ans: 1 The recoverable amount of the machine alone cannot be estimated because the machine's value in use:

a) may differ from its fair value less costs of disposal; and

b) can be determined only for the cash-generating unit to which the machine belongs (the production line).

The production line is not impaired. Therefore, no impairment loss is recognised for the machine. Nevertheless, the entity may need to reassess the depreciation period or the depreciation method for the machine. Perhaps a shorter depreciation period or a faster depreciation method is required to reflect the expected remaining useful life of the machine or the pattern in which economic benefits are expected to be consumed by the entity.

2. The machine's value in use can be estimated to be close to its fair value less costs of disposal. Therefore, the recoverable amount of the machine can be determined and no consideration is given to the cash-generating unit to which the machine belongs (i.e. the production line). Because the machine's fair value less costs of disposal is less than its carrying amount, an impairment loss is recognised for the machine.

Q9: Saturn India Ltd is reviewing one of its business segments for impairment. The carrying value of its net assets is 40 million. Management has produced two computations for the value-in-use of the business segment. The first value of ₹ 36 million excludes the benefit to be derived from a future reorganization, but the second value of ₹ 44 million includes the benefits to be derived from the future reorganization. There is not an active market for the sale of the business segments. Whether the business segment needs to be Impaired?

Ans: The benefit of the future reorganization should not be taken into account in calculating value-in-use. Therefore, the net assets of the business segment will be impaired by ₹ 4 million because the value-in-use of ₹ 36 million is lower than the carrying value of ₹ 40 million. The value-in-use can be used as the recoverable amount as there is no active market for the sale of the business segment.

Q10: Mars Ltd. gives the following estimates of cash flows relating to property, plant and equipment on 31-03-20X4. The discount rate is 15%

Year	Cash Flow (INR Lakhs)
20X4-20X5	2,000
20X5-20X6	3,000
20X6-20X7	3,000
20X7-20X8	4,000
20X8-20X9	2,000
Residual Value at 31.03.20X9	500

Property, plant & equipment was purchased on 1.04.20X1 for ₹ 20,000 lakhs

Useful Life was 8 Years

Residual Value estimated at the end of 8 years ₹ 500 lakhs

Fair value less cost to disposal ₹ 10,000 lakhs.

Calculate Impairment loss and revised depreciation

Ans:

(a) Calculation of Carrying Amount on 31st March, 20X4 (` in lakh)

Particular	Amount
Original Cost on 1st April, 20X1	20,000
Less: Depreciation $\frac{(20000 - 500)}{8}3$	(7,313)
Carrying Amount	12,687

(b) Calculation of Value in Use

Year	Cash Flows	*P.V.*	Amount
20X4-20X5	2,000	.869	1,738
20X5-20X6	3,000	.756	2,268
20X6-20X7	3,000	.658	1,974
20X7-20X8	4,000	.572	2,288
20X8-20X9 (including residual value)	2,500	.497	1,242
Total			**9,510**

(c) Calculation of Recoverable Amount

Particular	Amount
Value in Use	9,510
Fair value less costs of disposal	10,000
Recoverable Amount	10,000

(d) Calculation of Impairment Loss

Carrying Amount – Recoverable Amount 12,687 – 10,000 = 2,687

Calculation of Revised Carrying Amount

Particular	Amount
Carrying Amount	12,687
Less: Impairment Loss	(2,687)
Revised Carrying Amount	10,000

(e) Calculation of Revised Depreciation

(Revised Carrying Amount – Residual Value) / Remaining Life

(10,000 – 500)/ 5 = 1,900

Q11: Jupiter Ltd, a leading manufacturer of steel is having a furnace, which is carried in the balance sheet on 31st March, 20X1 at 250 lakh. As at that date the value in use and fair value is 200 lakh. The cost of disposal is 13 lakh. Calculate the impairment loss to be recognised in the books of the company?

Ans: Calculation of Impairment Loss:

Calculation of Impairment Loss	***in lakh***
Recoverable Amount =	200
Higher of ,	
Fair Value less Cost of Disposal (200 -13)	187
Or	
Value in Use	200
Impairment Loss = Carrying Amount – Recoverable Amount	
= 250 – 200	50

Q12: 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. Identify the impact of impairment loss on related deferred tax asset/ liability against the revised carrying amount of asset. **[MTP May 2025]**

Ans: The effect of impairment loss is as follows:

	Identifiable assets before impairment loss	***Impairment loss***	***Identifiable assets after impairment loss***
Carrying amount	1,000	(350)	650
Tax Base	800	-	800
Taxable (deductible) temporary difference	200	(350)	(150)
Deferred tax liability (asset) at 30%	60	(105)	(45)

In accordance with Ind AS 12, the entity recognises the deferred tax asset to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised.

Q13: On March 31, 20X1, XYZ Ltd. makes following estimate of cash flows for one of its asset located in USA:

Year

Cash flows

20X1-20X2 US $ 80

20X2-20X3	US $ 100	
20X3-20X4	US $ 20	

Following information has been provided:

Particulars	India	USA
Applicable discount rate	15%	10%

Exchange rates are as follows:

As on	Exchange rate
March 31, 20X1	₹ 45/US $
Expected Exchange rate	
March 31, 20X2	₹ 48/US $
March 31, 20X3	₹ 51/US $
March 31, 20X4	₹ 55/US $

Calculate value in use as on March 31, 20X1.

Ans:

Year	Cash flows (US $)	Present value factor @ 10%	Discounted cash flows (US $)
20X1-20X2	80	0.9091	72.73
20X2-20X3	100	0.8264	82.64
20X3-20X4	20	0.7513	15.03
Total Discounted cash flows in			US $ 170.40
Exchange rate as on March 31, 20X1, i.e., date of calculating value in use			₹ 45/US $
Value in use as on March 31, 20X1			₹ 7,668

Q14: Cash flow is ₹ 100, ₹ 200 or ₹ 300 with probabilities of 10%, 60% and 30%, respectively. Calculate expected cash flows.

Ans:

Cash flow	Probability	Expected cash flow
100	10%	10
200	60%	120
300	30%	90
Total		220

The expected cash flow is ₹ 220.

Q15: Cash flow of ₹ 1,000 may be received in one year, two years or three years with probabilities of 10%, 60% and 30%, respectively. Calculate expected cash flows assuming applicable discount rate of 5%, 5.25% and 5.5% in year 1, 2 and 3, respectively.

Ans:

Years	Cash flow	P.V.F.	Present value	Probability	Expected cash flow
1	1,000	0.95238	952.38	10%	95.24
2	1,000	0.90273	902.73	60%	541.64
3	1,000	0.85161	851.61	30%	255.48
Total					892.36

The expected present value is ₹ 892.36.

Q16: Calculate expected cash flows in each of the following cases:

(a) the estimated amount falls somewhere between ₹ 50 and ₹ 250, but no amount in the range is more likely than any other amount.

(b) the estimated amount falls somewhere between ₹ 50 and ₹ 250, and the most likely amount is ₹ 100. However, the probabilities attached to each amount are unknown.

(c) the estimated amount will be ₹ 50 (10 per cent probability), ₹ 250 (30 per cent probability), or ₹ 100 (60 per cent probability).

Ans: (a) the estimated expected cash flow is ₹ 150 [(50 + 250)/2].

(b) the estimated expected cash flow is ₹ 133.33 [(50 + 100 + 250)/3].

(c) the estimated expected cash flow is ₹ 140 [(50 × 0.10) + (250 × 0.30) + (100 × 0.60)].

Q17: A company operates a mine in a country where legislation requires that the owner must restore the site on completion of its mining operations. The cost of restoration includes the replacement of the overburden, which must be removed before mining operations commence. A provision for the costs to replace the overburden was recognised as soon as the overburden was removed. The amount provided was recognised as part of the cost of the mine and is being depreciated over the mine's useful life. The carrying amount of the provision for restoration costs is ₹ 500, which is equal to the present value of the restoration costs.

The entity is testing the mine for impairment. The cash-generating unit for the mine is the mine as a whole. The entity has received various offers to buy the mine at a price of around ₹ 800. This price reflects the fact that the buyer will assume the obligation to restore the overburden. Disposal costs for the mine are negligible. The value in use of the mine is approximately ₹ 1,200, excluding restoration costs. The carrying amount of the mine is ₹ 1,000.

Ans: The cash-generating unit's fair value less costs of disposal is ₹ 800. This amount considers restoration costs that have already been provided for. As a consequence, the value in use for the cash-generating unit is determined after consideration of the restoration costs and is estimated to be ₹ 700 (₹ 1,200 less ₹ 500). The carrying amount of the cash-generating unit is ₹ 500, which is the carrying amount of the mine (₹ 1,000) less the carrying amount of the provision for restoration costs (₹ 500). Therefore, the recoverable amount of the cash-generating unit exceeds its carrying amount.

Q18: Entity A acquires Entity B for ₹ 50 million, of which ₹ 35 million is the fair value of the identifiable assets acquired and liabilities assumed. The acquisition of B Ltd. is to be integrated into two of Entity A's CGUs with the net assets being allocated as follows: **₹ in million**

	CGU 1	CGU 2	Total
Fair value of acquired identifiable tangible and intangible assets	**25**	**10**	**35**

In addition to the net assets acquired that are assigned to CGU 2, the acquiring entity expects CGU 2 to benefit from certain synergies related to the acquisition (e.g., CGU 2 is expected to realise higher sales of its products because of access to the acquired entity's distribution channels). There is no synergistic goodwill attributable to other CGUs.

Entity A allocated the purchase consideration of the acquired business to CGU 1 and CGU 2 as ₹ 33 million and ₹ 17 million respectively.

Determine the allocation of goodwill to each CGU?

Ans: If goodwill is allocated to the CGUs based on the difference between the purchase consideration and the fair value of net assets acquired ie direct method, the allocation would be as follows:(All figures are ₹ in million, unless otherwise specified)

	CGU 1	CGU 2	Total
Allocation of Purchase consideration	33	17	50
Less: Acquired identifiable tangible and intangible assets	(25)	(10)	(35)
Goodwill assigned to CGUs	8	7	15

Q19: Earth Infra Ltd has two cash-generating units, X and Y. There is no goodwill within the units' carrying values. The carrying values of the CGUs are CGU A for ₹ 20 million and CGU B for ₹ 30 million. The company has an office building which it is using as a office headquarter has not been included in the above values and can be allocated to the units on the basis of their carrying values. The office building has a carrying value of ₹ 10 million. The recoverable amounts are based on value-in-use of ₹ 18 million for CGU A and ₹ 38 million for CGU B.

Required: Determine whether the carrying values of CGU A and B are impaired.

Ans: The office building is a corporate asset which needs to be allocated to CGU A and B on a reasonable and consistent basis:

	A	B	Total
Carrying value of CGUs	20	30	50
Allocation of office building	4	6	10
(office building is allocated in the ratio of			
Carrying value of CGU's			
Carrying value of CGU after Allocation of			

corporate asset	24	36	60
Recoverable Amount	18	38	56
Impairment Loss	6	-	-

The impairment loss will be allocated on the basis of 4/24 against the building (₹ 1 million) and 20/24 against the other assets (₹ 5 million).

Q20: At the end of 2000 an entity tests a machine for impairment. The machine was bought five years earlier for ₹ 300,000, when its useful life was estimated to be 15 years and the estimated residual value was nil. At 31 December 2000, after recognising the depreciation charge for 2000, the machine's carrying amount was ₹ 200,000 and its remaining useful life was estimated at 10 years. The machine's value in use calculated using a pre-tax discount rate of 14 per cent per year is ₹ 179,310. Management believes "fair value less cost to sell" is lower than the value in use.

At 31 December 2004, management has reassessed the future cash flows based on changed circumstances since the end of 2000 and determined value in use at the end of 2004 to be ₹ 122,072 at 31 December 2004. Management believes "fair value less costs to sell" is less than value in use. Calculate impairment loss at the end of 2000 and reversal of impairment loss at the end of 2004.

Ans:

End of 2000	**Machine**
Carrying amount before impairment loss	₹ 200,000
Less: Recoverable amount	(₹179,310)
Impairment loss	₹ 20,690
Carrying amount after impairment loss (ie recoverable amount)	₹ 179,310

Note: In this case, in subsequent periods (ie 2001–2010), assuming all variables remain the same as at the end of 2000, the depreciable amount will be ₹ 179,310, so the depreciation charge will be ₹ 17,931 per year (ie ₹ 179,310 ÷ 10 years).

End of 2004

Recoverable amount		₹ 122,072
Carrying amount, before the reversal of the impairment loss recognised at 31/12/04		
Carrying amount as on 01/01/2001	₹1,79,310	
Less: Accumulated depreciation till 2004 (17,931 x 4)	₹71,724	₹ 107,586
Difference		₹ 14,486

The difference is only an indication of the amount of the reversal because the reversal cannot increase the carrying amount of the asset above the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years.

End of 20X4	**Machine**
Cost	300,000

Less Notional depreciation since acquisition until 31/12/20X4 [3,00,000/15 x 9]	(180,000)
Notional carrying amount at 31/12/20X4 if no impairment loss been Recognised for the asset in 2000	120,000
Less: Carrying amount at the year ended 31/12/2004, before the reversal of the impairment loss recognised in prior reporting periods	107,586
Maximum Reversal of prior year's impairment loss	12,414

Note: In subsequent periods (ie 2005–2010), assuming that all variables remain the same as at the end of 2004, the depreciable amount will be ₹ 120,000, so the annual depreciation charge will be ₹ 20,000 (ie ₹ 120,000 depreciable amount ÷ 6 years remaining useful life).

Q21: 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 on 31st 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 Sell is expected to be ₹ 2,90,000. Calculation of Impairment loss and its Reversal.

[Exam May 2025 (8 Marks)]

Ans: Since the fair value less costs of disposal is not determinable the recoverable amount of the CGU is its value in use. The carrying amount of the assets of the CGU on 31st March 20X3 is as follows:

Calculation of Impairment loss **INR**

	Goodwill	Other assets	Total
Historical Cost	80,000	3,20,000	4,00,000
Accumulated Depreciation (3,20,000/20) x 2	-	(32,000)	(32,000)
Carrying Amount	80,000	2,88,000	3,68,000
Impairment Loss	(80,000)	(76,000)	(1,56,000)

Revised Carrying Amount

Impairment Loss = Carrying Amount – Recoverable Amount (₹ 3,68,000 - ₹ 2,12,000) = ₹ 1,56,000 is charged in statement of profit and loss for the period ending 31st March 20X3 as impairment loss.

Impairment loss is allocated first to goodwill ₹ 80,000 and remaining loss of ₹ 76,000 (₹ 1,56,000 – ₹ 80,000) is allocated to the other assets.

Reversal of Impairment loss

Reversal of impairment loss is recognised subject to:-

The impairment loss on goodwill cannot be reversed.

The increased carrying amount of an asset after reversal of an impairment loss not to exceed the carrying amount that would have been determined had no impairment loss been recognised in prior years.

Calculation of carrying amount of identifiable assets had no impairment loss is recognised

	INR
Historical Cost	3,20,000
Accumulated Depreciation for 4 years (3,20,000/20) x 4	(64,000)
Carrying amount had no impairment loss is recognised on 31st March 20X5	2,56,000
Carrying amount of other assets after recognition of impairment loss	INR
Carrying amount on 31st March 20X3	2,12,000
Accumulated Depreciation for 2 years (2,12,000/18) x 2	(24,000)
[rounded off to nearest thousand for ease of calculation]	
Carrying amount on 31st March 20X5	1,88,000

The impairment loss recognised previously can be reversed only to the extent of lower of re-estimated recoverable amount is ₹3,04,000 (higher of fair value less costs of disposal ₹ 2,90,000 and value in use ₹ 3,04,000) the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior periods ie., ₹ 2,56,000

Impairment loss reversal will be ₹ 68,000 i.e. (₹ 2,56,000 – ₹ 1,88,000). This amount is recognised as income in the statement of profit and loss for the year ended 31st March 20X5.

The carrying amount of other assets at 31st March 20X5 after reversal of impairment loss will be ₹ 2,56,000.

From 1st April 20X5 the depreciation charge will be ₹ 16,000 i.e. (₹ 2,56,000/16)

Q22: From the following details of an asset, compute:

a) Impairment loss and its treatment.

b) Current year depreciation for the year end. Particulars of assets:

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 (at the year end)	14 lakh

Ans: **Impairment loss**

Impairment loss = Carrying amount of the asset – Recoverable amount

= 27.30 lakh – 12 lakh = 15.30 lakh

Treatment of impairment loss

As per Ind AS 36, impairment loss (whether of an individual asset of a CGU) is recognised in the following manner:

Impairment loss of a revalued asset: It is recognised in other comprehensive income to the extent that the impairment loss does not exceed the amount held in the revaluation surplus for that same asset. The balance, if any, is recognised as an expense in the statement of profit and loss.

Impairment loss of other assets: Impairment loss of any other asset should be recognised as an expense in the statement of profit and loss.

Since, the asset in question has been revalued upwards, the impairment loss will be adjusted first against the revaluation surplus of 14 lakh. The balance amount of 1.30 lakh will be recognised as an expense in the profit and loss account.

Current year depreciation

Revised carrying amount (after recognising impairment loss)	12 lakh
Remaining useful life	3 years
Salvage value	Nil
Annual depreciation (12/3)	4 lakh

Q23: Venus Ltd. has an asset, which is carried in the Balance Sheet on 31st March, 20X1 at 500 lakh. As at that date the value in use is 400 lakh and the fair value less costs to sells is 375 lakh. From the above data:

(a) Calculate impairment loss.

(b) Prepare journal entries for adjustment of impairment loss.

Ans: According to Ind AS 36, Impairment of Assets, impairment loss is the excess of 'Carrying amount of the asset' over 'Recoverable Amount'.

In the present case, the impairment loss can be computed in the following manner:

Step 1: Fair value less costs to sell: 375 lakh

Step 2: Value in use: 400 lakh

Step 3: Recoverable amount, i.e., higher of 'fair value less costs to sell' & 'value in use'.

Thus, recoverable amount is 400 lakh

Step 4: Carrying amount of the asset 500 lakh

Step 5: Impairment loss, i.e., excess of amount computed in step 4 over amount computed in Step 3. (being the difference between 500 lakh and 400 lakh). 100 lakh

According to Ind AS 36, an impairment loss should be recognised as an expense in the statement of profit and loss immediately, unless the asset is carried at revalued amount in accordance with another Accounting Standard. Assuming, that the asset is not carried at revalued amount, the impairment loss of 100 lakh will be charged to Profit & Loss Account.

Date	Particulars		Dr.	Cr.
				in lakh
31.3.20X1	Impairment Loss A/c	Dr.	100	
	To Assets A/c			100
	(Being impairment loss on an asset recognised)			
31.3.20X1	Statement of Profit & Loss	Dr.	100	
	To Impairment Loss A/c			100
	(Being impairment loss transferred to statement of profit and loss)			

Q24: XYZ Limited has a cash-generating unit 'Plant A' as on April 1, 20X1 having a carrying amount of ₹ 1,000 crores. Plant A was acquired under a business combination and goodwill of ₹ 200 crores were allocated to it. It is depreciated on straight line basis. Plant A has a useful life of 10 years with no residual value. On March 31, 20X2, Plant A has a recoverable amount of ₹ 600 crores. Calculate the impairment loss on Plant A. Also, prescribe its allocation as per Ind AS 36.

Ans: **(₹ in crores)**

Particulars	Goodwill	Identifiable Assets	Total
Historical cost	200	1,000	1,200
Depreciation (20X1-20X2)	-	(100)	(100)
Carrying amount	200	900	1,100

Since, the recoverable amount is ₹ 600 crores, there is an impairment loss of ₹ 500 crores. The impairment loss of ₹ 500 crores should be allocated to goodwill first, and then to the other identifiable assets, i.e., ₹ 200 crores to goodwill and ₹ 300 crores to identifiable assets of Plant A.

(₹ in crores)

Particulars	Goodwill	Identifiable Assets	Total
Impairment loss	(200)	(300)	(500)
Carrying amount after impairment loss	-	600	600

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Q25: ABC Ltd. has three cash-generating units: A, B and C, the carrying amounts of which as on March 31, 20X1 are as follows:

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

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

Corporate asset	Carrying amount (₹ in crore)
X	600
Y	200

Remarks

a) The carrying amount of X can be allocated on a reasonable basis (i.e., pro rata basis) to the individual cash-generating units.

b) The carrying amount of Y cannot be allocated on a reasonable basis to the individual cash- generating units.

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

Cash-generating units	Recoverable amount (₹ in crore)
A	600
B	900
C	1400
ABC Ltd.	3200

Calculate the impairment loss, if any. Ignore decimals. **[Exam Nov 2018 (10 Marks)]**

Ans: Allocation of corporate assets

The carrying amount of X is allocated to the carrying amount of each individual cash- generating unit. A weighted allocation basis is used because the estimated remaining useful life of A's cash-generating unit is 10 years, whereas the estimated remaining useful lives of B and C's cash-generating units are 20 years.

Particulars	A	B	C	Total
Carrying amount	500	750	1,100	2,350
Useful life	10 years	20 years	20 years	—

Weight based on useful life	1	2	2	—
Carrying amount (after assigning weight)	500	1,500	2,200	4,200
Pro-rata allocation of X	12% (500/4,200)	36% (1,500/4,200)	52% (2,200/4,200)	100%
Allocation of carrying amount of X	72	216	312	600
Carrying amount (after allocation of X)	572	966	1,412	2,950

Calculation of impairment loss

Step I: Impairment losses for individual cash-generating units and its allocation

(a) Impairment loss of each cash-generating units (₹ in crore)			
Particulars	A	B	C
Carrying amount (after allocation of X)	572	966	1,412
Recoverable amount	600	900	1400
Impairment loss	-	66	12

(b) Allocation of the impairment loss (₹ in crore)				
Allocation to	B		C	
X	15	(66 x 216/966)	3	(12 x 312/1,412)
Other assets in cash- generating units	51	(66 x 750/ 966)	9	(12 x 1,100/
Impairment loss	66		12	1,412)

Step II: Impairment losses for the larger cash-generating unit, i.e., ABC Ltd. as a whole

Particulars	**A**	**B**	**C**	**X**	**Y**	**ABC Ltd.**
Carrying amount	500	750	1,100	600	200	3,150
Impairment loss (Step I)	-	(51)	(9)	(18)	-	(78)
Carrying amount (after Step I)	500	699	1,091	582	200	3,072
Recoverable amount						3,200
Impairment loss for the 'larger' cash-generating unit						Nil

Q26: A Ltd. purchased a machinery of ₹ 100 crore on April 1, 20X1. The machinery has a useful life of 5 years. It has nil residual value. A Ltd. adopts straight line method of depreciation for depreciating the machinery. Following information has been provided as on March 31, 20X2:

Financial year	**Estimated future cash flows (₹ in crore)**
20X2-20X3	15
20X3-20X4	30
20X4-20X5	40
20X5-20X6	10

Discount rate applicable : 10%

Fair value less costs to sell as on March 31, 20X2 : ₹ 70 crore

Calculate the impairment loss, if any.

Ans: Value in use of the machinery as on March 31, 20X2 can be calculated as follows:

Financial year	Estimated cash flows (₹ in crore)	Present value factor @ 10%	Present value
20X2-20X3	15	0.9091	13.64
20X3-20X4	30	0.8264	24.79
20X4-20X5	40	0.7513	30.05
20X5-20X6	10	0.6830	6.83
			75.31

The recoverable amount of the machinery is ₹ 75.31 crore (higher of value in use of ₹ 75.31 crore and fair value less costs to sell of ₹ 70 crore). Carrying amount of the machinery is ₹ 80 crore (after providing for one year depreciation @ ₹ 20 crore). Therefore, the impairment loss of ₹ 4.69 crore should be provided in the books.

Q27: Assuming in the above question, as on 31st March, 20X3, there is no change in the estimated future cash flows and discount rate. Fair value less costs to sell as on 31st March, 20X3 is 40 crore. Advise, how it should deal with under Ind AS 36.

Ans: Value in use of the machinery as on March 31,20X3 can be calculated as follows:

Financial year	Estimated cash flows (in crore)	Present value factor @10%	Present value
20X3-20X4	30	0.9091	27.27
20X4-20X5	40	0.8264	33.06
20X5-20X6	10	0.7513	7.51
			67.84

The recoverable amount of the machinery is 67.84 crore (higher of value in use of 67.84 crore and fair value less costs to sell of 40 crore). Carrying amount of the machinery at the end of the year 20X2 is 56.48 crore (after providing for two years depreciation (100 – 20 - 4.69) - 18.83).

However, as per paragraph 116 of Ind AS 36, an impairment loss is not reversed just because of the passage of time (sometimes called the 'unwinding' of the discount), even if the recoverable amount of the asset becomes higher than its carrying amount. Reason being, the underlying reasons for the original impairment have not been removed, and the service potential of the asset has not increased.

Therefore, the impairment loss of 4.69 crore should not be reversed.

Q28: A Ltd. purchased an asset of ₹ 100 lakh on April 1, 20X0. It has useful life of 4 years with no residual value. Recoverable amount of the asset is as follows:

As on Recoverable amount

March 31, 20X1	₹ 60 lakh
March 31, 20X2	₹ 40 lakh
March 31, 20X3	₹ 28 lakh

Calculate the amount of impairment loss or its reversal, if any, on March 31, 20X1, March 31, 20X2 and March 31, 20X3. **[Exam JULY 2021 (6 Marks); MTP SEP 2025]**

Ans: **As on March 31, 20X1**

Carrying amount of the asset (opening balance)	₹ 100 lakh
Depreciation (₹ 100 lakh /4 years)	₹ 25 lakh
Carrying amount of the asset (closing balance)	₹ 75 lakh
Recoverable amount (given)	₹ 60 lakh

Therefore, an impairment loss of ₹ 15 lakh should be recognised as on March 31, 20X1. Depreciation for subsequent years should be charged on the carrying amount of the asset (after providing for impairment loss), i.e., ₹ 60 lakh.

As on March 31, 20X2

Carrying amount of the asset (opening balance)	₹ 60 lakh
Depreciation (₹ 60 lakh /3 years)	₹ 20 lakh
Carrying amount of the asset (closing balance)	₹ 40 lakh

Therefore, no impairment loss should be recognised as on March 31, 20X2.

As on March 31, 20X3

Carrying amount of the asset (opening balance)	₹ 40 lakh
Depreciation (₹ 40 lakh / 2 years)	₹ 20 lakh
Carrying amount of the asset (closing balance)	₹ 20 lakh
Recoverable amount (given)	₹ 28 lakh

Since, the recoverable amount of the asset exceeds the carrying amount of the asset by ₹ 8 lakh, impairment loss recognised earlier should be reversed. However, reversal of an impairment loss should not exceed the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior years.

Carrying amount as on March 31, 20X3 had no impairment loss being recognised would have been ₹ 25 lakh. Therefore, the reversal of an impairment loss of ₹ 5 lakh should be done as on March 31, 20X3.

Q29: 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 (excluding Residual Value)	1,00,000
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 in accordance with 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.

[RTP May 2019; Exam Nov 22 (8 Marks)]

Ans:

(a) Computation of impairment loss and carrying value of each of the asset in CGU after impairment loss

(i) Calculation of carrying value of Machinery A and B before impairment

	Machinery A		
	Cost	(A)	₹ 10,00,000
	Residual Value		₹ 50,000
	Useful life		10 years
	Useful life already elapsed		5 years
	Yearly depreciation	(B)	₹ 95,000
	WDV as at 31st March, 2018 [A- (B x 5)]		₹ 5,25,000
	Machinery B		
	Cost	(C)	₹ 5,00,000
	Residual Value		-
	Useful life		10 years
	Useful life already elapsed		3 years
	Yearly depreciation	(D)	₹ 50,000
	WDV as at 31st March, 2018 [C- (D x 3)]		₹ 3,50,000

(ii) Calculation of Value-in-use of Machinery A

Period	Cash Flows (₹)	PVF	PV
1	1,50,000	0.909	1,36,350
2	1,00,000	0.826	82,600
3	1,00,000	0.751	75,100
4	1,50,000	0.683	1,02,450
5	1,00,000	0.621	62,100
5	50,000	0.621	31,050
Value in use			4,89,650

(iii)	**Calculation of Fair Value less cost of disposal of Machinery A**	₹
	Fair Value	7,00,000
	Less: Dismantling cost	(1,50,000)
	Packaging cost	(25,000)
	Legal Fees	(75,000)
	Fair value less cost of disposal	4,50,000
(iv)	**Calculation of Impairment loss on Machinery A**	₹
	Carrying Value	5,25,000

Less: Recoverable Value ie higher of Value-in-use and

Fair value less cost of disposal	4,89,650
Impairment Loss	35,350

(v) Calculation of Impairment loss of CGU

1. First goodwill will be impaired fully and then the remaining impairment loss of ₹ 75,000 will be allocated to Machinery A and B.

2. If we allocate remaining impairment loss to Machinery A and B on pro-rata basis, it would come to ₹ 45,000 on Machinery A. However, the impairment loss of Machinery A cannot exceed ₹ 35,350.Hence, impairment to CGU will be as follows:

	Carrying value before impairment loss	Impairment loss	Carrying value after impairment loss
	₹	₹	₹
Machinery A	5,25,000	35,350	4,89,650
Machinery B	3,50,000	39,650*	3,10,350
Inventory	2,00,000	-	2,00,000
Goodwill	1,50,000	1,50,000	-
Total	12,25,000	2,25,000	10,00,000

* Balancing figure.

(b) Carrying value after adjustment of depreciation ₹

Machinery A [4,89,650 – {(4,89,650-50,000)/5}]	4,01,720
Machinery B [3,10,350 – (3,10,350/7)]	2,66,014
Inventory	2,00,000
Goodwill	-
Total	8,67,734

(c) Calculation of carrying value of CGU as on 31st March, 2019

The revised value of CGU is ₹ 11 Lakh. However, impaired goodwill cannot be reversed. Further, the individual assets cannot be increased by lower of recoverable value or Carrying Value as if the assets were never impaired.

Accordingly, the carrying value as on 31st March, 2019 assuming that the impairment loss had never incurred, will be:

	Carrying Value on 31st March 2019 if the assets were never impaired (A)	**Recoverable Value as on 31st March 2019 (B)**	**Revised CV as at 31st Mar 2019 [Lower of A and B]**
Machinery A	[10,00,000 – (95,000 X 6)]	4,50,000	4,30,000

	4,30,000		
Machinery B	[5,00,000 – (50,000 X 4)] 3,00,000	(7,60,000 – 4,50,000) 3,10,000	3,00,000
Inventory	2,00,000	2,00,000	2,00,000
Goodwill	-		
Total	9,30,000	9,60,000	9,30,000

Hence the impairment loss to be reversed will be limited to ₹62,266 only (₹ 9,30,000 – ₹ 8,67,734).

Q30: East Ltd. (East) owns a machine used in the manufacture of steering wheels, which are sold directly to major car manufacturers.

- The machine was purchased on 1st April, 20X1 at a cost of ₹ 500 000 through a vendor financing arrangement on which interest is being charged at the rate of 10 per cent per annum.
- During the year ended 31st March, 20X3, East sold 10 000 steering wheels at a selling price of ₹ 190 per wheel.
- The most recent financial budget approved by East'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-X4, the price rising in later years in line with a forecast inflation of 3 per cent per annum.
- During the year ended 31st March, 20X4, East expects to sell 10,000 steering wheels. The number is forecast to increase by 5 per cent each year until 31st March, 20X8.
- East 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 per cent during 20X4-X5, and then by 2 per cent per annum until 31st March, 20X8.
- During 20X5-X6, the machine will be subject to regular maintenance costing ₹ 50,000.
- In 20X3-X4, East expects to invest in new technology costing ₹ 100 000. 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).
- East 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. East expects to dispose of the machine at the end of March, 20X8.
- East has determined a pre-tax discount rate of 8 per cent, 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? **[MTP May 2023]**

Ans: Calculation of the value in use of the machine owned by East Ltd. (East) includes the projected cash inflow (i.e. sales income) from the continued use of the machine and projected cash outflows that are necessarily incurred to generate those cash inflows (i.e cost of goods sold). Additionally, projected cash inflows include ₹ 80,000 from the disposal of the asset in March, 20X8. Cash outflows include routing capital expenditures of ₹ 50,000 in 20X5-X6

As per Ind AS 36, estimates of future cash flows shall not include:

- Cash inflows from receivables
- Cash outflows from payables
- Cash inflows or outflows expected to arise from future restructuring to which an entity is not yet committed
- Cash inflows or outflows expected to arise from improving or enhancing the asset's performance
- Cash inflows or outflows from financing activities
- Income tax receipts or payments.

Hence in this case, cash flows do not include financing interest (i.e. 10%), tax (i.e. 30%) and capital expenditures to which East has not yet committed (i.e. ₹ 100 000). They also do not include any savings in cash outflows from these capital expenditure, as required by Ind AS 36.

The cash flows (inflows and outflows) are presented below in nominal terms. They include an increase of 3% per annum to the forecast price per unit (B), in line with forecast inflation. The cash flows are discounted by applying a discount rate (8 %) that is also adjusted for inflation.

Note: Figures are calculated on full scale and then rounded off to the nearest absolute value.

Year ended	**20X3-X4**	**20X4-X5**	**20X5-20X6**	**20X6-X7**	**20X7-X8**	**Value in use**
Quantity (A)	10,000	10,500	11,025	11,576	12,155	
Price per unit(B)	₹ 200	₹ 206	₹ 212	₹ 219	₹ 225	
Estimated cash inflows (C=A x B)	₹ 20,00,000	₹ 21,63,000	₹ 23,37,300	₹ 25,35,144	₹ 27,34,875	
Misc. cash inflow disposal proceeds (D)					₹ 80 000	
Total estimated Cash inflows (E=C+D)	₹ 20,00,000	₹ 21,63,000	₹ 23,37,300	₹ 25,35,144	₹ 28,14,875	
Cost per unit (F)	₹ 160	₹ 162	₹ 165	₹ 168	₹ 171	
Estimated cash outflows (G = A x F)	(₹ 16,00,000)	(₹ 17,01,000)	(₹ 18,19,125)	(₹ 19,44,768)	(₹ 20,78,505)	

Misc. cash outflow: maintenance costs (H)			(₹ 50,000)			
Total estimated Cash outflows (I=G+H)	(₹ 16,00,000)	(₹ 17,01,000)	(₹ 18,69,125)	(₹ 19,44,768)	(₹ 20,78,505)	
Net cash flows (J=E-I)	₹ 4,00,000	₹ 4,62,000	₹ 4,68,175	₹ 5,90,376	₹ 7,36,370	
Discount factor 8% (K)	0.9259	0.8573	0.7938	0.7350	0.6806	
Discounted future cash flows (L=J x K)	₹ 3,70,360	₹ 3,96,073	₹ 3,71,637	₹ 4,33,926	₹ 5,01,173	₹20,73,169

Q31: 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 31 st 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 ₹ 660,000. 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? **[RTP May 2020; Exam Sep 2025 (5 Marks); MTP Jan 2026]**

Ans: Carrying amount of asset on 31st March 20X6 =₹ 6,60,000

Calculation of Value in Use:

Year ended	Cash flow ₹	Discount factor @ 9%	Amount ₹
31st March, 20X7	2,76,000	0.9174	2,53,202
31st March, 20X8	1,92,000	0.8417	1,61,606
31st March, 20X9	1,20,000	0.7722	92,664
31st March, 20Y0	1,14,000	0.7084	80,758
Total (Value in Use)			**5,88,230**

Calculation of Recoverable amount:

Particulars	Amount (₹)
Value in use	5,88,230
Fair value less costs of disposal (6,00,000 – 96,000)	5,04,000
Recoverable amount (Higher of value in use and fair value less costs of disposal)	5,88,230

Calculation of Impairment loss:

Particulars	Amount (₹)
Carrying amount	6,60,000
Less: Recoverable amount	(5,88,230)
Impairment loss	71,770

Calculation of Revised carrying amount:

	Amount (₹)
Carrying amount	6,60,000
Less: Impairment loss	(71,770)
Revised carrying amount	5,88,230

Calculation of Revised Depreciation:

Revised carrying amount – Residual value

Remaining life = (5,88,230 - 0) / 4 = ₹ 1,47,058 per annum

Set off of Impairment loss:

The impairment loss of ₹ 71,770 must first be set off against any revaluation surplus in relation to the same asset. Therefore, the revaluation surplus of ₹ 36,000 is eliminated against impairment loss, and the remainder of the impairment loss ₹ 35,770 (₹ 71,770 –

₹ 36,000) is charged to profit and loss.

Treatment of Government compensation:

Any compensation by government would be accounted for as such when it becomes receivable. At this time, the government has only stated that it may reimburse the company and therefore credit should not be taken for any potential government receipt.

Q32: 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.

b) The carrying amount of the machine on 31 December Year 3 (immediately before the impairment).

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 **[MTP Nov 2023]**

Ans:

(a) **Calculation of Carrying amount of machine at the end of Year 2**

	₹
Cost of machine	2,40,000
Accumulated depreciation for 2 years [2 years × (2,40,000 ÷ 20)]	(24,000)
Carrying amount of the machine at the end of Year 2	2,16,000

(b) **Calculation of carrying amount of the machine on 31 December Year 3**

	₹
Carrying amount at the beginning of Year 3	2,16,000
Revaluation done at the beginning of Year 3	2,50,000
Revaluation surplus	34,000

(c) **Calculation of Impairment loss at the end of Year 4**

When machine is revalued on 1 January Year 3, depreciation is charged on the revalued amount over its remaining expected useful life.

Valuation at 1 January (re-valued amount)	2,50,000
Accumulated depreciation in Year 3 (2,50,000 / 18)	(13,889)
Carrying amount of the asset at the end of Year 3	2,36,111

On 1 January Year 4, recoverable amount of the machine	1,00,000
Impairment loss (2,36,111 – 1,00,000)	1,36,111

An impairment loss of ₹ 34,000 will be taken to other comprehensive income (reducing the revaluation surplus for the asset to zero)

The remaining impairment loss of ₹ 1,02,111 (1,36,111 – 34,000) is recognised in the Statement of Profit and Loss for the Year 4.

(d) Calculation of depreciation charge in the Year 4

Carrying value of the machine at the beginning of Year 4	₹ 1,00,000
Estimated remaining useful life	10 years
Depreciation charge is (₹ 1,00,000 / 10 years)	₹ 10,000

NCI MEASUREMENT AND GOODWILL IMPAIRMENT

Q33: 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.

Ans:

1. **Computation of goodwill on acquisition**

Particular	**Amount (₹'000)**
Cost of investment (8,00,000 x 2/5 x ₹4)	1,280
Fair value of non-controlling interest (2,00,000 x ₹1·4)	280
Fair value of identifiable net assets at date of acquisition	(1,300)
So goodwill equals	260

Acquisition costs are not included as part of the fair value of the consideration given under Ind AS 103, Business Combination.

2. Calculation of impairment loss

Unit	**Carrying value**			**Recoverable Amount**	**Impairment Loss**
	Before Allocation	**Allocation of goodwill (2:2:1)**	**After Allocation**		
A	600	104	704	740	Nil
B	550	104	654	650	4
C	400*	52	452	400	52

* After writing down assets in the individual CGU to recoverable amount

3. **Calculation of closing goodwill**

Goodwill arising on acquisition (W1)	260
Impairment loss (W2)	(56)
So closing goodwill equals	204

4. **Calculation of overall impairment loss**

on goodwill (W3)	56
on assets in unit C (450 – 400)	50
So total loss equals	106

₹ 21·2 (20%) of the above is allocated to the NCI with the balance allocated to the shareholders of Sun ltd.

Q34: 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

Ans: Case (i) **₹ in thousand**

Particulars	**Goodwill**	**Other Asset**	**Total**
Carrying amount	800	2,700	**3,500**
Unrecognised NCI (notional) [(800 / 80%) x 20%]	200	-	**200**
Notional Total	1,000	2,700	**3,700**
Recoverable amount	-	-	**2,000**
Total Impairment loss	-	-	**(1,700)**
Impairment loss recognised in CFS	(800)	(700)	**(1,500)**
Carrying amount after impairment	-	2,000	**2,000**

Impairment loss on:	**Parent**	**NCI**
Goodwill	(800)	-
Other assets	(560)	(140)
Total	**(1,360)**	**(140)**

Case (ii)

Particulars	**Goodwill**	**Other Asset**	**Total**
Carrying amount	800	2,700	**3,500**
Unrecognised NCI (notional) (800 / 80% x 20%)	200	-	**200**
Notional Total	**1,000**	**2,700**	**3,700**

Recoverable amount	-	-	**2,800**
Total Impairment loss	-	-	**(900)**
Impairment loss recognised in CFS (900 x 80%)	(720)	-	**(720)**
Carrying amount after impairment (800 – 720)	80	2,700	**2,780**

Impairment loss on:	**Parent**	**NCI**
Goodwill	(720)	-
Other assets	-	-
Total	**(720)**	**-**

It is to be noted that since an entity measures NCI at its proportionate interest in the net identifiable assets of a subsidiary at the acquisition date, rather than at fair value, goodwill attributable to NCI is not recognised in the parent's consolidated financial statements and so the impairment loss on such goodwill not recognised.

Q35: Parent acquires an 80% ownership interest in Subsidiary for ₹ 2,100 on April 1, 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. Because 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 March 31, 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 March 31, 20X2.

Ans: Non-controlling interests is measured as the proportionate interest of Subsidiary's net identifiable assets, i.e., ₹ 300 (20% of ₹ 1,500). Goodwill is the difference between the aggregate of the consideration transferred and the amount of the non-controlling interests (₹ 2,100 + ₹ 300) and the net identifiable assets (₹ 1,500), i.e., ₹ 900.

Since, 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, therefore, Subsidiary is a cash-generating unit. Because 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. Because the cash-generating unit comprising Subsidiary includes goodwill within its carrying amount, it should be tested for impairment annually, or more frequently if there is an indication that it may be impaired.

Testing Subsidiary (cash-generating unit) for impairment

Goodwill attributable to non-controlling interests is included in Subsidiary's recoverable amount of ₹ 1,000 but has not been recognised in Parent's consolidated financial statements. Therefore, the carrying amount of Subsidiary should be grossed up to include goodwill

attributable to the non-controlling interests, before being compared with the recoverable amount of ₹ 1,000. Goodwill attributable to Parent's 80% interest in Subsidiary at the acquisition date is ₹ 400 after allocating ₹ 500 to other cash-generating units within Parent. Therefore, goodwill attributable to the 20% non-controlling interests in Subsidiary at the acquisition date is ₹ 100.

Testing subsidiary for impairment on March 31, 20X2

On March 31, 20X2	Goodwill of subsidiary (₹)	Net identifiable assets (₹)	Total (₹)
Carrying amount	400	1,350	1,750
Unrecognised non-controlling interests	100	-	100
Adjusted carrying amount	500	1,350	1,850
Recoverable amount			1,000
Impairment loss			850

Allocating the impairment loss

The impairment loss of ₹ 850 should be allocated to the assets in the unit by first reducing the carrying amount of goodwill.

Therefore, ₹ 500 of the ₹ 850 impairment loss for the unit is allocated to the goodwill. If the partially-owned subsidiary is itself a cash-generating unit, the goodwill impairment loss should be allocated to the controlling and non-controlling interests on the same basis as that on which profit or loss is allocated. In this case, profit or loss is allocated on the basis of relative ownership interests. Because the goodwill is recognised only to the extent of Parent's 80% ownership interest in Subsidiary, Parent recognises only 80% of that goodwill impairment loss (i.e., ₹ 400).

The remaining impairment loss of ₹ 350 is recognised by reducing the carrying amounts of Subsidiary's identifiable assets.

Allocation of the impairment loss for Subsidiary on March 31, 20X2

On March 31, 20X2	Goodwill of subsidiary (₹)	Net identifiable assets (₹)	Total (₹)
Carrying amount	400	1,350	1,750
Impairment loss	(400)	(350)	(750)
Carrying amount after impairment loss	-	1,000	1,000

Q36: On 31 March 20X1, Vision Ltd acquired 80% of the equity shares of Mission Ltd for ₹ 190 million. The fair values of the net assets of Mission Ltd that were included in the consolidated statement of financial position of Vision Ltd at 31 March 20X1 were ₹ 200 million. It is the Group's policy to value the non-controlling interest in subsidiaries at the date of acquisition at its proportionate share of the fair value of the subsidiaries' identifiable net assets.

On 31 March 20X4, Vision Ltd carried out its annual review of the goodwill on consolidation of Mission Ltd and found evidence of impairment. No impairment had been evident when the reviews were carried out at 31 March 20X2 and 31 March 20X3. The review involved allocating the assets of Mission Ltd into three cash- generating units and computing the value in use of each unit. The carrying values of the individual units before any impairment adjustments are given below:

	Unit A ₹ in million	Unit B ₹ in million	Unit C ₹ in million
Intangible assets	30	10	-
Property, Plant and Equipment	80	50	60
Current Assets	60	30	40
Total	170	90	100
Value in use of unit	180	66	104

It was not possible to meaningfully allocate the goodwill on consolidation to the individual cash generating units but all the other net assets of Mission Ltd are allocated in the table shown above.

The intangible assets of Mission Ltd have no ascertainable market value but all the current assets have a market value that is at least equal to their carrying value. The value in use of Mission Ltd as a single cash-generating unit on 31 March 20X4 is ₹ 350 million.

Discuss and compute the accounting treatment of impairment of goodwill as per Ind AS 36?

[RTP May 2021; Nov 2023]

Ans: The goodwill on consolidation of Mission Ltd that is recognized in the consolidated balance sheet of Vision Ltd is ₹ 30 million (₹ 190 million – 80% x ₹ 200 million). This can only be reviewed for impairment as part of the cash generating units to which it relates. Since here the goodwill cannot be meaningfully allocated to the units, the impairment review is in two parts.

Units A and C have values in use that are more than their carrying values. However, the value in use of Unit B is less than its carrying amount. This means that the assets of unit B are impaired by ₹ 24 million (₹ 90 million – ₹ 66 million). This impairment loss will be charged to the statement of profit and loss.

Assets of Unit B will be written down on a pro-rata basis as shown in the table below:

(₹ in million)

Asset	Impact on carrying value		
	Existing	Impairment	Revised
Intangible assets	10	(4)	6

Property, plant and equipment	50	(20)	30
Current assets	30	Nil*	30
Total	90	(24)	66

* The current assets are not impaired because they are expected to realize at least their carrying value when disposed of.

Following this review, the three units plus the goodwill are reviewed together i.e. treating Mission Limited as single cash generating Unit. The impact of this is shown in the following table, given that the recoverable amount of the business as a whole is ₹ 350 million:

(₹ in million)

Component	**Impact of impairment review on carrying value**		
	Existing	**Impairment**	**Revised**
Goodwill (see note below)	37.50	(23.50)	14.00
Unit A	170.00	Nil	170.00
Unit B (revised)	66.00	Nil	66.00
Unit C	100.00	Nil	100.00
Total	373.50	(23.50)	350.00

Note: As per Appendix C of Ind AS 36, given that the subsidiary is 80% owned the goodwill must first be grossed up to reflect a notional 100% investment. Therefore, the goodwill will be grossed up to ₹ 37.50 million (₹ 30 million x 100/80).

The impairment loss of ₹ 23.50 million is all allocated to goodwill, leaving the carrying values of the individual units of the business as shown in the table immediately above.

The table shows that the notional goodwill that relates to a 100% interest is written down by ₹ 23.50 million to ₹ 14.00 million. However, in the consolidated financial statements the goodwill that is recognized is based on an 80% interest so the loss that is actually recognized is ₹ 18.80 million (₹ 23.50 million x 80%) and the closing consolidated goodwill figure is ₹ 11.20 million (₹ 14.00 million x 80%) or (₹ 30 million – ₹ 18.80 million).

QUESTIONS FROM OTHER SOURCE

Q37: Great Ltd., acquired a machine on 1st April, 2012 for ₹ 7 crore that had an estimated useful life of 7 years. The machine is depreciated on straight line basis and does not carry any residual value. On 1st April, 2016, the carrying value of the machine was reassessed at ₹ 5.10 crore and the surplus arising out of the revaluation being credited to revaluation reserve. For the year ended March 2018, conditions indicating an impairment of the machine existed and the amount recoverable ascertained to be only ₹ 79 lakhs.

Calculate the loss on impairment of the machine and show how this loss is to be treated in the books of Great Ltd. Great Ltd., had followed the policy of writing down the revaluation surplus by the increased charge of depreciation resulting from the revaluation.

Ans: Statement Showing Impairment Loss

	(₹ in crores)
Carrying amount of the machine as on 1st April, 2012	7.00
Depreciation for 4 years i.e. 2012-2013 to 2015-2016 (7 crores/7 years) ×4 years	(4.00)
Carrying amount as on 31.03.2016	3.00
Add: Upward Revaluation (credited to Revaluation Reserve account)	2.10
Carrying amount of the machine as on 1st April 2016 (revalued)	5.10
Less: Depreciation for 2 years i.e. 2016-2017 & 2017-2018 (5.10 crores/3 years) ×2 years	(3.40)
Carrying amount as on 31.03.2018	1.70
Less: Recoverable amount	(0.79)
Impairment loss	0.91
Less: Balance in revaluation reserve as on 31.03.2018:	
Balance in revaluation reserve as on 31.03.2016 2.10	
Less: Enhanced depreciation met from revaluation reserve	
2016-2017 & 2017-2018 = [(1.70 – 1.00) x 2 years] (1.40)	
Impairment loss set off against revaluation reserve balance as per of IND AS 36 “Impairment of Assets”	(0.70)
Impairment Loss to be debited to profit and loss account	0.21

Q38: On 31-3-1999 A Ltd. acquired B Ltd. for ₹ 600 Lakhs. B Ltd. has three cash generating unit X, Y and Z, net fair values of ₹ 240 lakhs. 160 lakhs and 80 lakhs respectively. A Ltd recognize goodwill of ₹ 120 Lakhs. For the accounting year ended 31-3-2003, X unit incurred substantial losses and its recoverable amount is estimated to be ₹ 270 lakhs Carrying amount of different cash generating units are as under:

X	260 lakhs
Y	240 lakhs
Z	160 lakhs
Goodwill	24 lakhs
Total	684 lakhs

Calculated the impairment loss to be recognized in financial statement

a) if goodwill can be allocated on reasonable and consistent basis to cash generating unit.

b) If it was not possible to meaningfully allocate the goodwill to the individual cash generating units. The recoverable amount of the business as a whole is ₹ 664 lakhs

Ans: Case (a) if goodwill can be allocated on reasonable and consistent basis to cash generating unit.

	Unit X ₹ in Lakhs	Unit Y ₹ in Lakhs	Unit Z ₹ in Lakhs
CA of Identifiable Assets	260	240	160
Allocated CA of Goodwill in the ratio of Fair Value of CGU on the date of acquisition i.e., 3:2:1	12	8	4
Total CA of CGU	272	248	164
Recoverable Amount	270	?	?
Total Impairment Loss	2	Nil	Nil
Allocation Impairment Loss			
- To Goodwill	2	Nil	Nil
- To CGU	Nil	Nil	Nil

Case (b) If it was not possible to meaningfully allocate the goodwill to the individual cash generating units

Since here the goodwill cannot be meaningfully allocated to the units, the impairment review is in two parts.

The Recoverable Amount of Unit X is more than it's carrying amount. This means that the assets of unit X are not impaired.

Following this review, the three units plus the goodwill are reviewed together i.e., treating A Limited as single cash generating Unit. The impact of this is shown in the following table, given that the recoverable amount of the business as a whole is ₹ 664 lakhs:

Component	Impact of impairment review on carrying value (₹ in lakhs)		
	Existing	Impairment	Revised
Goodwill	24	(20)	4
Unit X	260	Nil	260
Unit Y	240	Nil	240
Unit Z	160	Nil	160
Total	684	(20)	664.00

The impairment loss of ₹ 20 lakhs is all allocated to goodwill, leaving the carrying values of the individual units of the business as shown in the table immediately above.

Note: In the given question, CGU Y and Z should also be tested for the impairment. However, in the absence of the information it has been assumed that their recoverable amount is more than their carrying amount.

Q39: At the end of 2000, enterprise F tests a plane for impairment. The plane is a cash-generating unit. It is carried at depreciated historical cost and its carrying amount is ₹ 1,500 lakhs. It has an estimated remaining useful life of 10 years.

It is assumed that the plane's Fair Value less Cost to Sell is not determinable. Value in use is calculated using a pre-tax discount rate of 14%.

Management approved budgets reflect that:

(a) in 2004, capital expenditure of ₹ 250 lakhs will be incurred to renew the engine of the plane; and

(b) this capital expenditure will improve the performance of the plane by decreasing fuel consumption.

At the End of 2000 value in use is estimated at ₹ 1211.28 Lakhs excluding renewal effects and ₹ 1235.66 after including renewal effects.

At the end of 2004, renewal costs are incurred. The plane's estimated future cash flows reflected in the most recent management approved budgets are ₹ 1220.72 discounted at 14%. This includes estimated benefits from renewal of engine.

Calculate carrying amount of plane account at the end of 2004 after reversal of impairment of loss.

Ans: **At the End of 2000**

The plane's carrying amount is less than its recoverable amount (value in use). Therefore, F recognises an impairment loss for the plane at the end of 2000.

Calculation of the impairment loss at the end of 2000	**(Amount in ₹ lakhs)**
	Plane
Carrying amount before impairment loss	1,500.00
Recoverable amount	1,211.28
Impairment loss	(288.72)
Carrying amount after impairment loss	1,211.28
Impairment of Assets	599

Years 2001-2003

No event occurs that requires the plane's recoverable amount to be re-estimated. Therefore, no calculation of recoverable amount is required to be performed.

At the End of 2004

The capital expenditure is incurred. Therefore, in determining the plane's value in use, the future benefits expected from the renewal of the engine are considered in forecasting cash

flows. This results in an increase in the estimated future cash flows used to determine value in use at the end of 20X0. Therefore, the recoverable amount of the plane is recalculated at the end of 2004.

Calculation of the reversal of the impairment loss at the end of 2004	**(Amount in ₹ lakhs)**
	Plane
Carrying amount at the end of 2000	1,211.28
End of 2004	
Depreciation charge (2001 to 2004)	(484.52)
Renewal expenditure	250.00
Carrying amount before reversal	976.76
Recoverable amount	1,220.72
Maximum impairment loss	243.96

The increased carrying amount of an asset due to a reversal of an impairment loss should not exceed the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior accounting periods.

Maximum impairment loss		243.96
Recoverable amount	1,220.72	
Carrying amount: depreciated historical cost at the end of 2004	1,150.00	
Reversal not allowed		70.72
Reversal of the impairment loss		173.24

Calculation of Carrying amount of plane after reversal at the end of 2004

Carrying amount before reversal at the end of 2004	976.76
Add: Reversal of the impairment loss	173.24
Carrying amount after reversal at the end of 2004	1,150.00

Working Note:

Calculation of depreciated historical cost at the end of 2004

Year	**Depreciated historical cost**
2000	1,500.00
2001	1,350.00
2002	1,200.00
2003	1,050.00
2004	900.00
Add: Renewal Expenditure	250.00
	1,150.00

Q40: At the end of 2000, enterprise K tests a plant for impairment. The plant is a cash-generating unit. The plant's assets are carried at depreciated historical cost. The plant has a carrying amount of ₹ 3,000 lakhs and a remaining useful life of 10 years.

The plant is so specialised that it is not possible to determine its Fair Value less Cost to Sell. Therefore, the plant's recoverable amount is its value in use. Value in use is calculated using a pre-tax discount rate of 14%.

Management approved budgets reflect that:

(a) at the end of 2003, the plant will be restructured at an estimated cost of ₹ 100 lakhs. Since K is not yet committed to the restructuring, a provision has not been recognised for the future restructuring costs; and

(b) there will be future benefits from this restructuring in the form of reduced future cash outflows.

At the End of 2000 value in use is estimated at ₹ 2051 Lakhs excluding renewal effects.

At the end of 2002, K becomes committed to the restructuring. The costs are still estimated to be ₹ 100 lakhs and a provision is recognised accordingly. The plant's estimated future cash flows reflected in the most recent management approved budgets and a current discount rate is the same as at the end of 2000. At the End of 2002 value in use is estimated at ₹ 2162 Lakhs including estimated benefits expected from the restructuring reflected in management budgets.

At the end of 2003, restructuring costs of ₹ 100 lakhs are paid. Again, the plant's estimated future cash flows reflected in the most recent management approved budgets and a current discount rate are the same as those estimated at the end of 2002.

Calculate carrying amount of plane account at the end of 2002 and 2003 after reversal of impairment of loss.

Ans: At the End of 2000

Calculation of the impairment loss at the end of 2000	**(Amount in ₹ lakhs)**
	Plant
Carrying amount before impairment loss	3,000
Recoverable amount	2,051
Impairment loss	(949)
Carrying amount after impairment loss	2,051

At the End of 20X1

No event occurs that requires the plant's recoverable amount to be re estimated. Therefore, no calculation of the recoverable amount is required to be performed.

At the End of 20X2

The enterprise is now committed to the restructuring. Therefore, in determining the plant's value in use, the benefits expected from the restructuring are considered in forecasting cash flows. This results in an increase in the estimated future cash flows used to determine value in use at the end of 20X0. Therefore, the recoverable amount of the plant is re-determined at the end of 2002.

The plant's recoverable amount (value in use) is higher than its carrying amount. Therefore, K reverses the impairment loss recognised for the plant at the end of 2000.

Calculation of the reversal of the impairment loss at the end of 2002	**(Amount in ₹ lakhs)**
	Plant
Carrying amount at the end of 2000	2,051
End of 2002	
Depreciation charge (for 20X1 and 20X2) [2051/10]X2	(410)
Carrying amount before reversal	1,641
Recoverable amount	2,162
Reversal of the impairment loss	521
Carrying amount after reversal	2,162
Carrying amount: depreciated historical cost	2,400

Note: The reversal does not result in the carrying amount of the plant exceeding what its carrying amount would have been at depreciated historical cost. Therefore, the full reversal of the impairment loss is recognised. Hence carrying amount of plant after reversal is ₹ 2,162 lakhs.

At the End of 2003

There is a cash outflow of ₹ 100 lakhs when the restructuring costs are paid. Even though a cash outflow has taken place, there is no change in the estimated future cash flows used to determine value in use at the end of 2002. Therefore, the plant's recoverable amount is not calculated at the end of 2003.

QUESTIONS FROM RTP/MTP/EXAMS

Q41: X Ltd. purchased a fixed asset four years ago for ₹ 150 lakhs and depreciates it at 10% p.a. on straight line method. At the end of the fourth year, it has revalued the asset at ₹ 75 lakhs and has written off the loss on revaluation to the profit and loss account. However, on the date of revaluation, expected disposal costs are ₹ 3 lakhs. What will be the treatment in respect of impairment loss on the basis that the value in use is estimated at ₹ 60 lakhs? **[MTP May 2019]**

Ans: **Treatment of Impairment Loss:** As per **IND AS 36 "Impairment of assets",** if the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset should be reduced to its recoverable amount. In the given case, Fair Value less cost to sell is ₹72 lakhs (₹75 lakhs – ₹3 lakhs) and value in use is ₹60 lakhs.

Therefore, recoverable amount will be ₹72 lakhs. Impairment loss will be calculated as ₹3 lakhs [₹75 lakhs (Carrying Amount after revaluation - Refer Working Note) less ₹72 lakhs (Recoverable Amount)].

Thus, impairment loss of 3 lakhs should be recognised as an expense in the Statement of Profit and Loss immediately since there was downward revaluation of asset which was already charged to Statement of Profit and Loss.

Working Note: Calculation of carrying amount of the fixed asset at the end of the fourth year on revaluation

	(₹ in lakhs)
Purchase price of a fixed asset	150.00
Less: Depreciation for four years [(150 lakhs / 10 years) x 4 years]	(60.00)
Carrying value at the end of fourth year	90.00
Less: Downward revaluation charged to profit and loss account	(15.00)
Revalued carrying amount	75.00

Q42: One of the senior engineers at XYZ has been working on a process to improve manufacturing efficiency and, consequently, reduce manufacturing costs. This is a major project and has the full support of XYZ's board of directors. The senior engineer believes that the cost reductions will exceed the project costs within twenty four months of their implementation. Regulatory testing and health and safety approval was obtained on 1 June 20X5. This removed uncertainties concerning the project, which was finally completed on 20 April 20X6. Costs of ₹ 18,00,000, incurred during the year till 31st March 20X6, have been recognized as an intangible asset. An offer of ₹ 7,80,000 for the new developed technology has been received by potential buyer but it has been rejected by XYZ. Utkarsh believes that the project will be a major success and has the potential to save the company ₹ 12,00,000 in perpetuity. Director of research at XYZ, Neha, who is a qualified electronic engineer, is seriously concerned about the long term prospects of the new process and she is of the opinion that competitors would have developed new technology at some time which would require to replace the new process within four years. She estimates that the present value of future cost savings will be ₹ 9,60,000 over this period. After that, she thinks that there is no certainty about its future. What would be the appropriate accounting treatment of aforesaid issue? **[RTP May 2020: IBS CS 46; MTP May 25]**

Ans: Ind AS 38 'Intangible Assets' requires an intangible asset to be recognised if, and only if, certain criteria are met. Regulatory approval on 1 June 20X5 was the last criterion to be met, the other criteria have been met as follows:

- Intention to complete the asset is apparent as it is a major project with full support from board
- Finance is available as resources are focused on project
- Costs can be reliably measured
- Benefits are expected to exceed costs – (in 2 years)

Amount of ₹ 15,00,000 (₹ 18,00,000 x 10/12) should be capitalised in the Balance sheet of year ending 20X5-20X6 representing expenditure since 1 June 20X5.

The expenditure incurred prior to 1 June 20X5 which is ₹ 3,00,000 (2/12 x ₹ 18,00,000) should be recognised as an expense, retrospective recognition of expense as an asset is not allowed.

Ind AS 36 'Impairment of assets' requires an intangible asset not yet available for use to be tested for impairment annually.

Cash flow of ₹ 12,00,000 in perpetuity would clearly have a present value in excess of ₹ 12,00,000 and hence there would be no impairment. However, the research director is technically qualified, so impairment tests should be based on her estimate of a four-year remaining life and so present value of the future cost savings of ₹ 9,60,000 should be considered in that case.

₹ 9,60,000 is greater than the offer received (fair value less costs to sell) of ₹ 7,80,000 and so ₹ 9,60,000 should be used as the recoverable amount.

So, the carrying amount should be consequently reduced to ₹ 9,60,000.

Calculation of Impairment loss:

Particulars	**Amount ₹**
Carrying amount (Restated)	15,00,000
Less: Recoverable amount	9,60,000
Impairment loss	5,40,000

Impairment loss of ₹ 5,40,000 is to be recognised in the profit and loss for the year 20X5-20X6.

Necessary adjusting entry to correct books of account will be:

		₹	₹
Operating expenses- Development expenditure	Dr.	3,00,000	
Operating expenses–Impairment loss of intangible assets	Dr.	5,40,000	
To Intangible assets – Development expenditure			8,40,000

Q43: Pacific Ocean Railway Ltd. has three Cash Generating units namely Train, Railway station and Railway tracks, the carrying amounts of which as on 31 March 2020 are as follows:

Cash Generating units	**Carrying amount (₹ in crore)**	**Remaining useful life**
Train	1,500	10
Railway station	2,250	20
Railway tracks	3,300	20

Pacific Ocean Railway Ltd. also has two Corporate Assets having a remaining useful life of 20 years.

	(₹ in crore)	
Corporate Assets	**Carrying amount**	**Remarks**
Land	1,800	The carrying amount of Land can be allocated on a reasonable basis (i.e., pro rata basis) to the individual cash generating units.
Buildings	600	The carrying amount of Buildings cannot be allocated on

		a reasonable basis to the individual cash-generating units.

Recoverable amount as on 31 March 2020 is as follows:

Cash Generating units	Recoverable Amount (₹ in crore)
Train	1,800
Railway station	2,700
Railway tracks	4,200
Company as a whole	9,600

Calculate the impairment loss, if any. Ignore decimals.

[Exam NOV 2020 (8 Marks); MTP May 22]

Ans: Allocation of corporate assets

The carrying amount of land is allocated to the carrying amount of each individual cash generating unit. A weighted allocation basis is used because the estimated remaining useful life of Train's cash-generating unit is 10 years, whereas the estimated remaining useful lives of Railway station and Railway tracks's cash-generating units are 20 years.

(₹ in crore)

Particulars	Train	Railway station	Railway tracks	Total
Carrying amount (a)	1,500	2,250	3,300	7,050
Useful life	10 years	20 years	20 years	-
Weight based on useful life	1	2	2	-
Carrying amount (after assigning weight)	1,500	4,500	6,600	12,600
Pro-rata allocation of Land	12% (1,500/12,600)	36% (4,500/12,600)	52% (6,600/12,600)	100%
Allocation of carrying amount of Land (b)	216	648	936	1,800
Carrying amount (after allocation of Land) (a+b)	1,716	2,898	4,236	8,850

Calculation of impairment loss

Step I: Impairment losses for individual cash-generating units and its allocation:

(a) Impairment loss of each cash-generating units

			(₹ in crore)
Particulars	**Train**	**Railway station**	**Railway tracks**
Carrying amount (after allocation of land)	1,716	2,898	4,236
Recoverable amount	1,800	2,700	4,200
Impairment loss	-	198	36

(b) Allocation of the impairment loss

				(₹ in crore)
Allocation to	**Railway station**		**Railway tracks**	
Land	44	[198 x (648 / 2,898)]	8	[36 x (936 / 4,236)]
Other assets in cash-generating units	154	[198 x 2,250 / 2,898)]	28	[36 x (3,300/ 4,236)]
Impairment loss	198		36	

Step II: Impairment losses for the larger cash-generating unit, i.e., Pacific Ocean Railway Ltd. as a whole

						(₹ in crore)
Particulars	**Train**	**Railway station**	**Railway tracks**	**Land**	**Building**	**Pacific Ocean Railway Ltd.**
Carrying amount	1,500	2,250	3,300	1,800	600	9,450
Impairment loss (Step I)	-	(154)	(28)	(52)	-	(234)
Carrying amount (after Step I)	1,500	2,096	3,272	1,748	600	9,216
Recoverable amount						9,600
Impairment loss for the 'larger' cash-generating unit						Nil

Q44: H Ltd. constructed a warehouse at a cost of ₹ 10 lakhs in 2015. It first became available for use by H Ltd. on 1st January 2016. On 29th January 2020, H Ltd. discovered that its warehouse was damaged. During early February 2020, an investigation revealed that the damage was due to a

structural fault in the construction of the warehouse. The fault became apparent when the warehouse building leaked severely after heavy rainfall in the week ended 27th January 2020. The discovery of the fault is an indication of impairment. So, H Ltd. was required to estimate the recoverable amount of its warehouse at 31st December 2019. This estimate was ₹ 6,00,000. Furthermore, H Ltd. reassessed the useful life of its warehouse at 20 years from the date that it was ready for use. Before discovering the fault, H Ltd. had depreciated the warehouse on the straight -line method to a nil residual value over its estimated 30-year useful life.

Seepage of rain water through the crack in the warehouse caused damage to inventory worth about ₹ 1,00,000 (cost price) and became un-saleable. The entire damaged inventory was on hand as at 31st December, 2019. H Ltd. has not insured against any of the losses.

It accounts for all its property, plant and equipment under the cost model. H Ltd.'s annual financial statements for the year ended 31st December, 2019 were approved for issue by the Board of Directors on 28th February, 2020.

You are required to :

(i) Prepare accounting entries to record the effects of the events after the end of the reporting period in the accounting records of H Ltd. for the year ended 31st December, 2019. Kindly ignore tax impact;

(ii) Discuss disclosure requirement in above case as per relevant Ind AS; and

(iii) Will your answer be different if there was no structural fault and damage to the warehouse had been caused by an event that occurred after 31 st December, 2019?

[Exam JAN 2021 (8 Marks); RTP Nov 24]

Ans: (i) Journal Entries on 31st December 2019

	₹	₹
Depreciation expense A/c (W.N.1) Dr. To Warehouse or Accumulated depreciation A/c (Being additional depreciation expense recognised for the year ended 31st December 2019 arising from the reassessment of the useful life of the warehouse)	19,608	19,608
Impairment loss A/c (W.N.2) Dr. To Warehouse or Accumulated depreciation A/c (Being impairment loss recognised due to discovery of structural fault in the construction of warehouse at 31st December 2019)	2,47,059	2,47,059

(ii) (a) **The damage to warehouse is an adjusting event** (occurred after the end of the year 2019) for the reporting period 2019, since it provides evidence that the

structural fault existed at the end of the reporting period. It is an adjusting event, in spite of the fact that fault has been discovered after the reporting date.

The effects of the damage to the warehouse are recognised in the year 2019 reporting period. Prior periods will not be adjusted because those financial statements were prepared in good faith (eg regarding estimate of useful life, assessment of impairment indicators etc) and had not affected the financials of prior years.

(b) Damage of inventory due to seepage of rainwater ₹ 1,00,000 occurred during the year 2020**. It is a non-adjusting event** after the end of the 2019 reporting period since the inventory was in good condition at 31st December 2019. Hence, no accounting has been done for it in the year 2019.

H Ltd. must disclose the nature of the event (i.e. rain-damage to inventories) and an estimate of the financial effect (i.e. ₹ 1,00,000 loss) in the notes to its 31st December 2019 annual financial statements.

(iii) If the damage to the warehouse had been caused by an event that occurred after 31st December 2019 and was not due to structural fault, **then it would be considered as a non-adjusting event** after the end of the reporting period 2019 as the warehouse would have been in a good condition at 31st December 2019.

Working Notes:

1. **Calculation of additional depreciation to be charged in the year 2019**

Original depreciation as per SLM already charged during the year 2019 = ₹ 10,00,000/ 30 years = ₹ 33,333.

Carrying value at the end of 2018 = 10,00,000 – (₹ 33,333 x 3 years) = ₹ 9,00,000

Revised depreciation = 9,00,000 / 17 years = ₹ 52,941

Additional depreciation to be recognised in the books in the year 2019 = ₹ 52,941 – ₹ 33,333 = ₹ 19,608

2. **Calculation of impairment loss in the year 2019**

Carrying value after charging depreciation for the year 2019 = ₹ 9,00,000 – ₹ 52,941 = ₹ 8,47,059

Recoverable value of the warehouse = ₹ 6,00,000

Impairment loss = Carrying value - Recoverable value = ₹ 8,47,059 - ₹ 6,00,000 = ₹ 2,47,059

Q45. At 31st March, 20X1, the assets of a CGU are being reviewed for impairment. The carrying value of the CGU's net assets is Rs.65 lakhs (excluding any restructuring provision), and remaining useful economic life of recognised asset is eight years.

Management's approved budgets at 31st March, 20X1 include restructuring costs of Rs.3,50,000 to be incurred in 20X2; the restructuring is expected to generate cost savings of Rs.1,00,000 per annum from 20X3 onwards. Formal budgets have been prepared for the three years to 31st March, 20X4. A zero-growth rate is assumed, because market conditions are extremely competitive, and this is expected to continue for the foreseeable future. The future cash flow estimates are as follows:

Year	With restructuring consideration	Without restructuring consideration
20X1-20X2	5,20,000	8,70,000
20X2-20X3	10,00,000	9,00,000
20X3-20X4	10,50,000	9,50,000
20X4-20X5	10,50,000	9,50,000
20X5-20X6	10,50,000	9,50,000
20X6-20X7	10,50,000	9,50,000
20X7-20X8	10,50,000	9,50,000
20X8-20X9	10,50,000	9,50,000

In 20X2, the net cash flows without restructuring (Rs.8,70,000) exceed the net cash flows with restructuring (Rs.5,20,000) by the amount of the restructuring costs (Rs.3,50,000).

The future cash flows (which exclude inflation) have been discounted at a rate of 4%. For simplicity, it has been assumed that the cash flows arise at the end of each year.

Compute Impairment Loss at 31st March, 20X1 when-

(i) Restructuring costs is recognised in the financial statements at 31st March, 20X1

(Ii) Restructuring costs is not recognised in the financial statements at 31st March, 20X1

[RTP Nov 2024]

Ans: Computation of present value of cash flows under both the following conditions:

(Amount in Rs.)

Year	Discountfactor	With restructuring consideration		Without restructuringconsideration	
		Future netcash flows	Presentvalue	Future net cash flows	Presentvalue
	(a)	(b)	(c)=(a)x(b)	(d)	(e)=(a)x(d)
20X1-20X2	0.962	5,20,000	5,00,000	8,70,000	8,36,000
20X2-20X3	0.925	10,00,000	9,25,000	9,00,000	8,32,000

20X3-20X4	0.889	10,50,000	9,33,000	9,50,000	8,45,000
20X4-20X5	0.855	10,50,000	8,98,000	9,50,000	8,12,000
20X5-20X6	0.822	10,50,000	8,63,000	9,50,000	7,81,000
20X6-20X7	0.790	10,50,000	8,30,000	9,50,000	7,51,000
20X7-20X8	0.760	10,50,000	7,98,000	9,50,000	7,22,000
20X8-20X9	0.730	10,50,000	7,67,000	9,50,000	6,94,000
Value in use			65,14,000		62,73,000

The impairment calculations at 31st March, 20X1 differ according to whether or not provision for the restructuring costs is recognised in the financial statements. This will depend on whether the requirements of Ind AS 37 have been met for recognition.

(i) Provision for restructuring costs recognised at 31st March, 20X1

If provision has been made for restructuring costs, the costs and benefits of the restructuring are taken into account in determining the CGU's value in use. Here, the post – restructuring value in use (Rs.6,514,000) exceeds the CGU's carrying value (Rs.6,500,000 less restructuring provision of Rs.350,000). Hence, there is no impairment of the CGU's assets.

In the year to 31st March, 20X1, the financial statements reflect the following charges.

Restructuring provision	Rs. 350,000
Impairment loss	Nil

(ii) No provision for restructuring costs recognised at 31st March, 20X1

If no provision for restructuring costs is permitted by Ind AS 37, the costs and benefits of the restructuring have to be stripped out of the projections in determining the CGU's value in use. Here, the CGU's carrying value (Rs.65,00,000) exceeds its pre- restructuring value in use (Rs.62,73,000). Therefore, there is an impairment loss of Rs.2,27,000.

In the year to 31st March, 20X1, the financial statements reflect the following charges:

Restructuring provisions	Nil
Impairment loss	Rs.2,27,000

NOTES