13 ACCOUNTING STANDARD 28 "IMPAIRMENT OF ASSETS"

Quote:

LEARNING IS A TREASURE THAT WILL FOLLOW ITS OWNER EVERY WHERE.

INDEX

SECTION -A

1. SCOPE

This AS applies to impairment of All Assets except following:

1. Inventories (AS 2)
2. Assets arising under Construction Contracts (AS 7)
3. Deferred Tax Assets (AS 22)
4. Financial Assets including Investments Covered under AS 13
   Examples of Financial Assets are Investment Equity Shares/Derivative Contracts/Other Securities; Trade Receivables/Loans Given etc.

2. NEED FOR IMPAIREMENT OF ASSET

An enterprise should assess at each balance sheet date whether there is any indication that an asset may be impaired. If any such indication exists, the enterprise should estimate the recoverable amount of the asset. An asset is impaired when the carrying amount of the asset exceeds its recoverable amount.

3. INDICATIONS OF IMPAIRMENT

In assessing whether there is any indication that an asset may be impaired, an entity shall consider, as a minimum, the following indications:

A. EXTERNAL SOURCE OF INFORMATION

The following are external source of information which may indicate that an asset is impaired:

a) during the period, an asset's market value has declined significantly more than would be expected as a result of the passage of time or normal use.;
b) significant changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated;
c) market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to affect the discount rate used in calculating an asset's value in use and decrease the asset's recoverable amount materially; and
d) the carrying amount of the net assets of the entity is more than its market capitalization (BV Net Asset > Market Value Net Asset).

MPPS × No. of shares.

B. INTERNAL SOURCE OF INFORMATION

The following are internal source of information which may indicate that an asset is impaired:

a) evidence is available of obsolescence or physical damage of an asset;
b) significant changes with an adverse effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, an asset is used or is expected to be used. These changes include the asset becoming idle, plans to discontinue or

restructure the operation to which an asset belongs, plans to dispose of an asset before the previously expected date, and reassessing the useful life of an asset as finite rather than indefinite;

c) Evidence is available from internal reporting that indicates that the **economic performance of an asset is, or will be, worse than expected.** → Repairs Exp ↑ Cash Flows ↓

Note: The above list is not exhaustive. An entity may identify other indications that an asset may be impaired.

4. RELEVANT DEFINITIONS

1. **Carrying amount** is the amount at which an asset is recognised after deducting any accumulated depreciation (amortisation) and accumulated impairment losses thereon. +/- Revaluations

2. A **Cash-generating unit** is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

3. **Corporate assets** are assets other than goodwill that contribute to the future cash flows of both the cash-generating unit under review and other cash-generating units.

4. **Costs of disposal** are incremental costs directly attributable to the disposal of an asset or cash-generating unit, excluding finance costs and income tax expense. Eg. – Legal Cost, Brokerage. Tender exp Adv.

5. **Net Selling Price** is the amount obtainable from the sale of an asset in an **arm's length transaction** between knowledgeable, willing parties, less the costs of disposal.

6. An **Impairment loss** is the amount by which the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount.

Carrying Amount − Recoverable Amount = Impairment Loss

7. The **Recoverable amount** of an asset or a cash-generating unit is the higher of its ~~fair value less costs of disposal~~ NSP and its value in use.

8. **Useful life** is either: a) the period of time over which an asset is expected to be used by the entity; or b) the number of production or similar units expected to be obtained from the asset by the entity.

9. **Value in use** is the present value of the future cash flows expected to be derived from an asset or cash-generating unit and from its disposal at the end of its useful life. (Disposal at the end of useful life means Terminal Cash Flows) (Annual Cash Flows + Terminal Cash Flows)

5. MEASUREMENT OF IMPAIRMENT LOSS AND RECOVERABLE AMOUNT

Asset is impaired only when Carrying Amount is more than Recoverable Amount

CARRYING AMOUNT – RECOVERABLE AMOUNT = IMPAIRMENT LOSS

RECOVERABLE AMOUNT
Higher of – Net Selling Price and Value in Use

5.1 NET SELLING PRICE

Net Selling Price is the Amount obtainable from the Sale of Asset in an Arm's Length transaction between knowledgeable and willing parties, less Costs of disposal.

Steps for assessing Net Selling Price

⇩

First Preference: Binding sale agreement

⇩

Second Preference: Active market

Current bid price

If current bid prices not available, the price of the most recent transaction

⇩

Third Preference: Best information available at the end of the reporting date

⇩

If all the above are not available: Ignore Net Selling Price, take Value in use only.

• I.T.
• F.C.
• Employee Benefits (Termination)

Excludes.

COST OF DISPOSAL:

Examples of such costs are legal costs, stamp duty and similar transaction taxes, costs of removing the asset, and direct incremental costs to bring an asset into condition for its sale.

However, termination benefits (as defined in ~~Ind AS 19~~ AS 15) and costs associated with reducing or reorganizing a business following the disposal of an asset are not direct incremental costs to dispose of the asset.

5.2 VALUE IN USE:

VALUE IN USE is the present value of the future cash flows expected to be derived from an Continuing use of Asset or cash-generating unit including its disposal

Primarily two key decisions are involved in determining value in use:

Estimating future cash flows + Pre - Tax Discount rate to be used

When estimating expected future cash flows, the following rules apply:

- Reasonable and supportable assumptions of management's best estimates of the economic conditions over the remaining useful life of the asset. Realistic
- Greater weight should be given to external evidence
- most recent financial budgets or forecasts that have been approved by management
- Projections should cover a maximum period five years, unless a longer period can be justified.

☞ The benefit of the future reorganization proposed to be taken place such as Amalgamations and Merger should not be taken into account in calculating value-in-use.

☞ Income tax receipts or payments shall be ignored while estimating future cash flows. Because the discount rate is determined on a pre-tax basis, future cash flows are also estimated on a pre-tax basis.

☞ Foreign currency future cash flows:

Future cash flows are estimated in the currency in which they will be generated and then discounted using a discount rate appropriate for that currency. An entity translates the present value using the spot exchange rate at the date of the value in use calculation. Refer Ex in Notes

☞ Discount rate:

The discount rate should be a pre-tax market rate that reflects current market assessments of the: • Time Value of Money • Risks specific to the Assets	When an asset-specific rate is not directly available from the market, the entity uses surrogates to estimate the discount rates. • Entity's weighted average cost of capital WACC • Entity's incremental borrowing rate and • Other market borrowing rates

RBI Rate Base = 7%
+1%
8%

B/S
11.5% 14% ESC 500 Cr.
11% PSC 100 Cr.
Debts 10% 800 Cr.

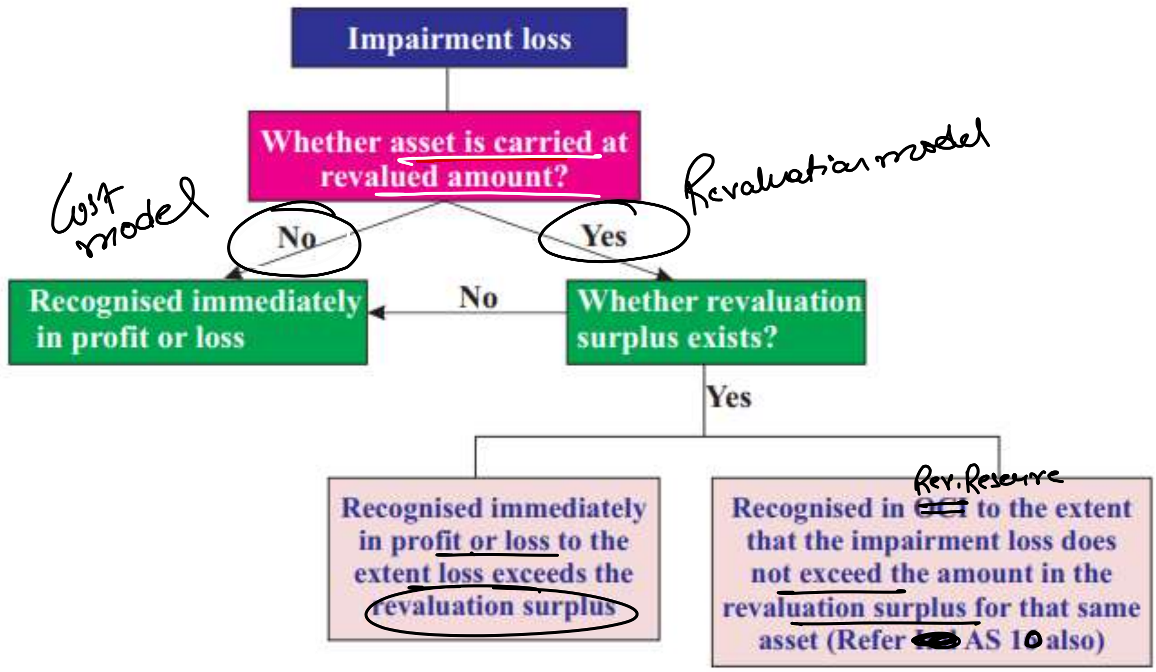
Note:

It is not always necessary to determine both an asset's net selling price and its value in use. For example, if either of these amounts exceeds the asset's carrying amount, the asset is not impaired, and it is not necessary to estimate the other amount.

It may be possible to determine net selling price, even if an asset is not traded in an active market. However, sometimes it will not be possible to determine net selling price because there is no basis for making a reliable estimate of the amount obtainable from the sale of the asset in an arm's length transaction between knowledgeable and willing parties. In this case, the recoverable amount of the asset may be taken to be its value in use.

6. RECOGNISING AND MEASURING AN IMPAIRMENT LOSS

CHARGE TO P&L	CHARGE TO REVALUATION SURPLUS	IF IL IS MORE THAN CA	DEPRECIATION AFTER IMPAIRMENT	DEFERRED TAX Pending AS 22
Impairment loss shall always be recognised in SPL in case of Assets not subject to Revaluation.	Impairment loss of Assets carried at Revaluation Model (e.g. AS 10) shall be treated as Revaluation Decrease. Impairment loss is first recognised in Revaluation Reserve to the extent it does not exceed the revaluation surplus on the same asset. Remaining IL if any would be transferred to SPL.	If Impairment loss exceeds the carrying amount of asset then the Liability should be recognised in accordance with any related AS (eg. AS 29) Entire CA shall be w/off.	Depreciation or Amortisation after Impairment should be charged on Revised CA less residual value on systematic basis over its remaining useful life.	DTA/DTL should be worked out as per AS 22 by comparing Revised CA with its Tax Base. Because of Impairment Loss, Either earlier DTL would be decreased or a New DTA would be created.



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7. IMPAIRMENT LOSS OF A CASH-GENERATING UNIT (CGU)

A *cash-generating unit* is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

- Always try to impair Individual Asset first for which indication of impairment exist and estimate the recoverable amount of that individual asset.
- If it is not possible to estimate the recoverable amount of the individual asset, an entity is required to determine the recoverable amount of the cash-generating unit to which the asset belongs (the asset's cash-generating unit).
- When recoverable amount of asset can-not be determined for individual asset – NSP
  a) the asset's value in use cannot be estimated to be close to its fair value less costs of disposal (for example, when the future cash flows from continuing use of the asset cannot be estimated to be negligible); and
  b) the asset does not generate cash inflows that are largely independent of those from other assets.

> **Note:**
> Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows from continuing use that are largely independent of those from other assets or groups of assets. If this is the case, recoverable amount is determined for the cash-generating unit to which the asset belongs, unless either:
> a) The asset's net selling price is higher than its carrying amount; or
> b) The asset's value in use can be estimated to be close to its net selling price and net selling price can be determined.

100cr.
— 10
VIU

7.1 ALLOCATION OF ASSETS AND LIABILITIES TO CGU's

CA RA
CGU
Solar plant
20 yrs.
Decomm. 10 lacs

ASSETS	Includes only those assets that are directly attributable or that can be allocated on reasonable basis to CGU. Goodwill and Corporate Assets (head office assets) should also be included if they are allocable to CGU's on reasonable basis.
LIABILITIES	Carrying Amount of Liabilities shall be considered in Carrying Amount of CGU only when the Liability is necessary to be considered to determine the recoverable amount.

Prov. for 2 lacs

☞ **Remember one thing –** Only those Assets and Liabilities should be considered in carrying amount of CGU which are taken into account for determining Recoverable Amount (i.e. basis should be same).

☞ If recoverable amount of CGU is determined after considering liability then such liability must be taken into account while calculating Carrying amount of CGU and VIU of CGU.

EXAMPLES OF CGU

Example 1

A mining enterprise owns a private railway to support its mining activities. The private railway could be sold only for scrap value and the private railway does not generate cash inflows from continuing use that are largely independent of the cash inflows from the other assets of the mine. It is not possible to estimate the recoverable amount of the private railway because the value in use of the private railway cannot be determined and it is probably different from scrap value. Therefore, the enterprise estimates the recoverable amount of the cash-generating unit to which the private railway belongs, that is, the mine as a whole.

Example 2

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.
Since the enterprise does not have the option to curtail any one bus route, the lowest level of identifiable cash inflows from continuing use that are largely independent of the cash inflows from other assets or groups of assets is the cash inflows generated by the five routes together. The cash-generating unit for each route is the bus company as a whole.
If an active market exists for the output produced by an asset or a group of assets, this asset or group of assets should be identified as a separate cash generating unit, even if some or all of the output is used internally.

Example 3

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 ₹ 50,00,000, which is equal to the present value of the restoration costs.

The enterprise is testing the mine for impairment. The cash-generating unit for the mine is the mine as a whole. The enterprise has received various offers to buy the mine at a price of around ₹ 80,00,000; this price encompasses the fact that the buyer will take over the obligation to restore the overburden. Disposal costs for the mine are negligible. The value in use of the mine is approximately ₹ 1,20,00,000 excluding restoration costs. The carrying amount of the mine is ₹ 1,00,00,000.

The net selling price for the cash-generating unit is ₹ 80,00,000. 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 ₹ 70,00,000 (₹ 1,20,00,000 less ₹ 50,00,000). The carrying amount of the cash-generating unit is ₹ 50,00,000, which is the carrying amount of the mine (₹ 1,00,00,000) less the carrying amount of the provision for restoration costs (₹ 50,00,000).

7.2 IMPAIRMENT OF GOODWILL & CORPORATE ASSETS

Goodwill does not generate cash flows independently of other assets or groups of assets and, therefore, it will always be tested for impairment as part of a CGU or a group of CGUs.

Corporate assets are assets other than goodwill that contribute to the future cash flows of both the cash-generating unit under review and other cash-generating units. They do not generate cash inflows independently.

Examples: Building of a headquarters or a division of the entity, EDP equipment or a research center. Just like Goodwill, Corporate Assets can-not be tested for impairment individually because they do not generate separate cash flows.

Therefore, both Goodwill and Corporate Assets are allocated on a reasonable basis to different CGU's. Apply following approach for Goodwill and Corporate Asset:

It is Possible to Allocate Goodwill and Corp. Assets to CGU's	It is not Possible to Allocate Goodwill and Corp. Assets to CGU's
Perform Bottom-up Approach Allocate the Carrying amount of Goodwill and Corporate Assets to CGU's and applying Impairment Testing. Impairment loss shall be first allocated to the Goodwill. Then, the remaining Impairment Loss is apportioned between the assets of CGU and Corp. Assets in the ratio of related Individual Carrying Amount.	Perform Bottom-up and Top-Down Approach both Apply Impairment Testing of CGU without considering carrying amount of un-allocable Goodwill and Corp. Assets i.e. Perform Bottom-up Test first without considering Un-allocable Goodwill and Corp. Assets. Once Assets are tested for Impairment as per Bottom-up Approach, then Compare the RA of entire organization/entity with the CA of all the assets and liabilities including un-allocable Goodwill and Corp. Assets.

	If any IL arise then such IL shall be first attributed to Un-allocable Goodwill and then to the Un-allocable Corporate Assets only.

Remember one more thing we can-not allocate the impairment loss more than the carrying amount of asset. It means after allocating impairment loss the revised carrying amount of asset can at maximum be Zero and not Negative. (Rest Part may be Liability)

No impairment loss is recognised for the asset if the related cash-generating unit is not impaired. This applies even if the asset's fair value less costs of disposal is less than its carrying amount.

7.3 HOW TO ALLOCATE GOODWILL AND CORPORATE ASSET TO DIFFERENT CGUS

Allocation shall be done on reasonable basis. Reasonable basis may be:

1. For Goodwill – in proportion to the Fair Values of CGUs acquired;
2. For Goodwill and Corporate Assets - If Fair Values are missing then reasonable basis can be the amounts calculated by multiplying the Carrying Amount of each CGU with Useful Life thereof (CA x Useful Life).
3. If Useful life of CGUs is missing in the question, then we can take carrying amounts only as proportion for allocation purpose.

HW

G/W = 600

PC

Example 4: (Bottom up and Top Down Approach)

At the end of 20X0, enterprise M acquired 100% of enterprise Z for ₹ 3,000 lakhs. Z has 3 cash-generating units A, B and C with net fair values of ₹ 1,200 lakhs, ₹ 800 lakhs and ₹ 400 lakhs respectively. M recognises goodwill of ₹ 600 lakhs (₹ 3,000 lakhs less ₹ 2,400 lakhs) that relates to Z. At the end of 20X4, A makes significant losses. Its recoverable amount is estimated to be ₹ 1,350 lakhs. Carrying amounts are detailed below (₹ In Lakh)

End of 20x4	A	B	C	Goodwill	Total
Net carrying amount	1300	1200	800	120	3420

Scenario A - Goodwill Can be Allocated on a Reasonable and Consistent Basis

On the date of acquisition of Z, the net fair values of A, B and C are considered a reasonable basis for a pro-rata allocation of the goodwill to A, B and C.

Allocation of goodwill at the end of 20X4:

	A	B	C	Goodwill
End of 20x0				
Net fair values	1200	800	400	2400
Pro-Rata	50%	33%	17%	100%
End of 20x4				
Net carrying amount	1300	1200	800	3300

Allocation of goodwill (Using pro rate above)	60	40	20	120
Net carrying amount (After goodwill)	1360	1240	820	3420

In accordance with the 'bottom-up' test in paragraph 78(a) of AS 28, M compares A's recoverable amount to its carrying amount after the allocation of the carrying amount of goodwill:

End of 20×4	A (Rs. In Lakh)
Carrying amount after allocation of goodwill	1360
Recoverable amount	1350
Impairment loss	10

M recognises an impairment loss of ₹ 10 lakhs for A. The impairment loss is fully allocated to the goodwill in accordance with paragraph 87 of AS 28.

Scenario B – Goodwill Cannot be Allocated on a Reasonable and Consistent Basis

There is no reasonable way to allocate the goodwill that arose on the acquisition of Z to A, B and C. At the end of 20X4, Z's recoverable amount is estimated to be ₹3,400 lakhs.

At the end of 20X4, M first applies the 'bottom-up' test in accordance with paragraph 78(a) of this Statement. It compares A's recoverable amount to its carrying amount excluding the goodwill.

End of 20X4	A (Rs. In Lakh)
Carrying amount Recoverable amount	1300 1350
Impairment loss	0

Therefore, no impairment loss is recognised for A as a result of the 'bottom-up' test.

Since the goodwill could not be allocated on a reasonable and consistent basis to A, M also performs a 'top-down' test in accordance with paragraph 78(b) of AS 28. It compares the carrying amount of Z as a whole to its recoverable amount (Z as a whole is the smallest cash-generating unit that includes A and to which goodwill can be allocated on a reasonable and consistent basis)

Application of the 'top-down' test (Amount in ₹ lakhs)

End of 20×4	A	B	C	Goodwill	Total
Carrying amount	1300	1200	800	120	3420
Impairment loss arising from the 'bottom-up' test	0	-	-	-	0
Carrying amount after the 'bottom-up' test	1300	1200	800	120	3420
Recoverable amount					
Impairment loss arising from 'topdown' test	-	-	-	-	3400
	-	-	-	-	20

Therefore, M recognises an impairment loss of ₹ 20 lakhs that it allocates fully to goodwill in accordance with AS 28.

8. REVERSAL OF IMPIRMENT LOSS

GOODWILL – An impairment loss recognised for goodwill shall not be reversed in a subsequent period unless the impairment loss was caused by a specific external event of exceptional nature that is not expected to recur.
ASSETS other than Goodwill – If there is an Indication that shows Impairment Loss recognised earlier may no longer exists or may have decreased, then entity shall revers the impairment loss and accordingly recoverable amount is to be determined.
CONDITIONS OF REVERSAL OF IL: Change in Estimate used to determine the Asset's recoverable amount since the last impairment was recognised. Such change in estimate may include: • Change in estimate of **components of Fair Value less cost of disposal** (if recoverable amount was based on Fair Value) • Change in the **amount or timing of estimated future cash flows or in the discount rate** (if recoverable amount was based on Value in use)
INDICATORS OF REVERSAL OF IMPAIRMENT LOSS: *External –* • Asset's value has increased significantly during the period; • Significant changes with a favorable effect on the entity have taken place during the period, or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which the asset is dedicated; and • Market Interest rates or other market rates of return on investments have decreased during the period, and it is directly affecting the discount rate used in calculating the asset's value in use and increase the asset's recoverable amount materially. *Internal –* • Asset's performance has been significantly improved or will be improved which is favourable for the enity. It may be **because of Cost incurred during the period to improve or enhance the performance or Cost incurred to restructured the operation** during the period. Positive • Evidence is available from internal reporting that indicates that the **economic performance of the asset is, or will be, better than expected.**
MAXIMUM AMOUNT OF REVERSAL OF IMPAIRMENT LOSS: In allocating a reversal of an impairment loss, the carrying amount of an asset should not be increased above the lower of: • its Recoverable Amount; and • 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.
RECOGNITION OF IMPAIRMENT LOSS: **Assets under Cost Model** – Recognise immediately in Profit and Loss.

Assets under Revalued Model – Treat it as Revaluation Increase and recognise it in Revaluation Reserve, to the extent that it was adjusted earlier, and any surplus is recognized in Profit and Loss Account.

REVERSAL OF IL OF CGU:

A reversal of an impairment loss for a cash-generating unit should be allocated to increase the carrying amount of the assets of the unit in the following order:

- **First, assets other than goodwill** on a pro-rata basis based on the carrying amount of each asset in the unit; and
- Then, to goodwill allocated to the cash-generating unit (if any).

REVIEW OF USEFUL LIFE, DEPRECIATION METHOD AND RESIDUAL VALUE:

Due to the indications existed as above it may be possible that there is change in estimated useful life of assets, change in depreciation (amortization) method used, or change in estimated residual value. So be very careful in this respect and we have to review such elements even if no impairment loss is reversed.

EXAMPLE 5: (REVERSAL OF IMPAIRMENT OF LOSS)

Cost 1/4/2001 Rs. 10,00,000, Depreciation SLM life 10 years. On 31/3/2005, Recoverable Amount is. 3,00,000. On 311/3/2007, Recoverable Amount is 2,20,000. Calculate Impairment Loss and its Reversal.

MCQ

9. IMPAIRMENT IN CASE OF DISCONTINUING OPERATIONS

The approval and announcement of a plan for discontinuance is an indication that the assets attributable to the discontinuing operation may be impaired or that an impairment loss previously recognised for those assets should be increased or reversed.

In applying this Statement to a discontinuing operation, an enterprise determines whether the recoverable amount of an asset of a discontinuing operation is assessed for the individual asset or for the asset's cash-generating unit. For example:

a) If the enterprise sells the discontinuing operation substantially in its entirety, none of the assets of the discontinuing operation generate cash inflows independently from other assets within the discontinuing operation. Therefore, recoverable amount is determined for the discontinuing operation as a whole and an impairment loss, if any, is allocated among the assets of the discontinuing operation in accordance with this Statement;

b) If the enterprise disposes of the discontinuing operation in other ways such as piecemeal sales, the recoverable amount is determined for individual assets, unless the assets are sold in groups; and

c) If the enterprise abandons the discontinuing operation, the recoverable amount is determined for individual assets as set out in this Statement.

10. DISCLOSURES

An entity is required to disclose the following for each class of assets:

(a) the amount of impairment losses recognised in profit or loss during the period and the line item(s) of the statement of profit and loss in which those impairment losses are included;

(b) the amount of reversals of impairment losses recognised in profit or loss during the period and the line item(s) of the statement of profit and loss in which those impairment losses are reversed;

(c) the amount of impairment losses on revalued assets recognised directly in revaluation surplus during the period; and

(d) the amount of reversals of impairment losses on revalued assets recognised directly in revaluation surplus during the period.

SECTION B - QUESTIONS

(Questions of Study Material, RTPs, MTPs and Past Exams to be Practiced in the Class)

SERIES 100 – IMPAIRMENT OF INDIVIDUAL ASSETS

Q.AS28.SM.101

X Ltd. is having a plant (asset) carrying amount of which is ₹ 100 lakhs on 31.3.20X1. Its balance useful life is 5 years and residual value at the end of 5 years is ₹ 5 lakhs. Estimated future cash flow from using the plant in next 5 years are:

For the year ended on	Estimated cash flow (₹ in lakhs)
31.3.20X2	50
31.3.20X3	30
31.3.20X4	30
31.3.20X5	20
31.3.20X6	20 + 5

121.92

Calculate "value in use" for plant if the discount rate is 10% and also calculate the recoverable amount if net selling price of plant on 31.3.20X1 is ₹ 60 lakhs

Solution

PRESENT VALUE OF FUTURE CASH FLOW

Year Ended	Future Cash Flow	Discounting @ 10% Rate	Discounted Cash Flows
31.3.20x2	50	0.909	45.45
31.3.20x3	30	0.826	24.78
31.3.20x4	30	0.751	22.53
31.3.20x5	20	0.683	13.66
31.3.20x6	20	0.620	12.40
			118.82
Present value of residual price on 31.3.20X6 = 5 × 0.620			3.10
Present value of estimated cash flow by use of an asset and residual value, which is called "value in use".			121.92

Q.AS28.SM.102

Ergo Industries Ltd. gives the following estimates of cash flows relating to Property, Plant and Equipment on 31-12-20X1. The discount rate is 15%

RA = 20000

Year	Cash Flow (₹ in lakhs)
20x2	4000
20x3	6000
20x4	6000
20x5	8000
20x6	4000 + 1000

19020.13
VIU

Residual value at the end of 20X6	= ₹ 1000 lakhs Terminal value
Property, Plant and Equipment purchased on 1-1-20XX	= ₹ 40,000 lakh
Useful life	= 8 years
Net selling price on 31-12-20X1	= ₹20,000 lakhs

$$\frac{40000 - 1000}{8} = 4875$$
$\times 3$

$40000 - 14625$

25375 CA

Calculate on 31-12-20X1:

(a) Carrying amount at the end of 20X1

(b) Value in use on 31-12-20X1

(c) Recoverable amount on 31-12-20X1

(d) Impairment loss to be recognized for the year ended 31-12-20X1

(e) Revised carrying amount.

(f) Depreciation charge for 20X2.

Note: The year 20XX is the immediate preceding year before the year 20X0.

Solution:

Calculation of Value in Use

Year	Cash flow	Discount as per 15%	Discounted cash flow
20x2	4,000	0.870	3,480
20x3	6,000	0.756	4,536
20x4	6,000	0.658	3,948
20x5	8,000	0.572	4,576
20x6	4,000	0.497	1,988
20x6	1,000 (Residual)	0.497	497
			19,025

$$\frac{20000 - 1000}{5}$$
3800/- Dep.

a) Calculation of carrying amount:

i. Original cost = ₹ 40,000 lakhs

ii. Depreciation for 3 years = [(40,000-1000)×3/8] = ₹ 14,625 lakhs

iii. Carrying amount on 31-12-20X1 = [40,000-14,625] = ₹ 25,375 lakhs

b) Value in use = ₹ 19,025 lakhs

c) Recoverable amount = higher of value in use and net selling price i.e. ₹ 20,000 lakhs

d) Impairment Loss = ₹ (25,375-20,000) = ₹ 5,375 lakhs

e) Revised carrying amount = ₹ (25,375-5,375) = ₹ 20,000 lakhs

f) Depreciation charge for 20X2 = (20,000-1000)/5 = ₹ 3,800 lakhs

Q.AS28.SM.103

Cost

G Ltd., acquired a machine on 1st April, 20X0 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, 20X4, 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, 20X6, conditions indicating an impairment of the machine existed and the amount recoverable ascertained to be only ₹ 79 lakhs. You are required to calculate the loss on impairment of the machine and show how this loss is to be treated in the books of G Ltd. G Ltd., had followed the policy of writing down the revaluation surplus by the increased charge of depreciation resulting from the revaluation.

Solution

Statement Showing Impairment Loss

	(₹ in crores)
Carrying amount of the machine as on 1st April, 20X0	7.00
Depreciation for 4 years i.e. 20X0-20X1 to 20X3-20X4 (7 crores / 7 years x 4 years)	(4.00)
Carrying amount as on 31.03.20X4	**3.00**
Add: Upward Revaluation (credited to Revaluation Reserve account)	2.10
Carrying amount of the machine as on 1st April, 20X4 (revalued)	**5.10**
Less: Depreciation for 2 years i.e. 20X4-20X5 & 20X5-20X6 (5.10/3 years x 2 years)	(3.40)
	1.70
	(0.79)

Carrying Amount as on 31.03.20x6	0.91
Less: Recoverable Amount	2.10
Impairment Loss	1.40
Less: Balance in revaluation reserve as on 31.03.20X6:	0.70
Balance in revaluation reserve as on 31.03.20X4:	
Less: Enhanced Depreciation met from revaluation reserve	
20X4-X5 AND 20X5-X6 = [(1.70 – 1.00) X 2 YEARS]	0.70
	0.21
Impairment Loss set off against revaluation reserve balance	
Impairment Loss to be debited to Profit and Loss Account	

Q.AS28.SM.104 Hw

X Ltd. purchased a Property, Plant and Equipment 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, the market price is ₹ 67.50 lakhs and expected disposal costs are ₹ 3 lakhs. What will be the treatment in respect of impairment loss on the basis that fair value for revaluation purpose is determined by market value and the value in use is estimated at ₹ 60 lakhs?

Solution

Treatment of Impairment Loss

As per para 57 of AS 28 "Impairment of assets", if the recoverable amount (higher of net selling price and its value in use) 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, net selling price is ₹ 64.50 lakhs (₹ 67.50 lakhs – ₹ 3 lakhs) and value in use is ₹ 60 lakhs. Therefore, recoverable amount will be ₹ 64.50 lakhs. Impairment loss will be calculated as ₹ 10.50 lakhs [₹ 75 lakhs (Carrying Amount after revaluation - Refer Working Note) less ₹ 64.50 lakhs (Recoverable Amount)]

Thus impairment loss of ₹ 10.50 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 Property, Plant and Equipment at the end of the fourth year on revaluation

	(₹in lakhs)
Purchase price of a Property, Plant and Equipment	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**

Q.AS28.SM.105

Venus Ltd. has a fixed asset, which is carried in the Balance Sheet on 31.3.20X1 at ₹ 500 lakhs. As at that date the value in use is ₹ 400 lakhs and the net selling price is ₹ 375 lakhs.

CA

RA = 400

From the above data:

a) Calculate impairment loss. 100/-
b) Prepare journal entries for adjustment of impairment loss.
c) Show, how impairment loss will be shown in the Balance Sheet.

B/S

Gross	500	400
(-) Prov. for I/L	100	

Solution

- Recoverable amount is higher of value in use ₹400 lakhs and net selling price ₹ 375 lakhs.
- Recoverable amount = ₹400 lakhs
- Impairment loss = Carried Amount – Recoverable amount = ₹500 lakhs – ₹400 lakhs = ₹ 100 lakhs.

JOUNRAL ENTRIES

	Particulars	Dr. Amount (₹ in lakhs)	Cr. Amount (₹ in lakhs)
(i)	Impairment loss account Dr. To Provision for Accumulated Impairment Loss (Being the entry for accounting impairment loss)	100	100
(ii)	Profit and loss account Dr. To Impairment loss (Being the entry to transfer impairment loss to profit and loss account)	100	100

Balance Sheet of Venus Ltd. as on 31.3.20X1

	(₹ in lakhs)
Fixed Asset	500
Asset less depreciation	(100)
Less: Impairment loss	**400**

Q.AS28.SM.106

HW

From the following details of an asset

(i) Find out impairment loss

(ii) Treatment of impairment loss

(iii) Current year depreciation

Particulars of Asset:

Cost of asset	₹ 56 lakhs
Useful life period	10 years
Salvage value	Nil
Current carrying value	₹27.30 lakhs
Useful life remaining	3 years
Recoverable amount	₹12 lakhs
Upward revaluation done in last year	₹14 lakhs

SOLUTION

According to AS 28 "Impairment of Assets", an impairment loss on a revalued asset is recognised as an expense in the statement of profit and loss. However, an impairment loss on a revalued asset is recognised directly against any revaluation surplus for the asset to the extent that the impairment loss does not exceed the amount held in the revaluation surplus for that same asset.

Impairment Loss and its treatment	
Current carrying amount (including revaluation amount of ₹ 14 lakhs)	27,30,000
Less: Current recoverable amount	(12,00,000)
Impairment Loss	**15,30,000**
Impairment loss charged to revaluation Reserve	14,00,000
Impairment loss charged to profit and loss account	1,30,000

After the recognition of an impairment loss, the depreciation (amortization) charge for the asset should be adjusted in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

In the given case, the carrying amount of the asset will be reduced to ₹ 12,00,000 after impairment. This amount is required to be depreciated over remaining useful life of 3 years (including current year). Therefore, the depreciation for the current year will be ₹ 4,00,000.

Q.AS28.SM.107

A plant was acquired 15 years ago at a cost of ₹ 5 crores. Its accumulated depreciation as at 31st March, 20X1 was ₹ 4.15 crores. Depreciation estimated for the financial year 20X1-20X2 is ₹ 25 lakhs. Estimated Net Selling Price as on 31st March, 20X1 was ₹ 30 lakhs, which is expected to decline by 20 percent by the end of the next financial year.

Its value in use has been computed at ₹ 35 lakhs as on 1st April, 20X1, which is expected to decrease by 30 per cent by the end of the financial year.

(i) Assuming that other conditions for applicability of the impairment Accounting Standard are satisfied, what should be the carrying amount of this plant as at 31st March, 20X2?

(ii) How much will be the amount of write off for the financial year ended 31st March, 20X2?

(iii) If the plant had been revalued ten years ago and the current revaluation reserves against this plant were to be ₹ 12 lakhs, how would you answer to questions (i) and (ii) above?

(iv) If the value in use was zero and the enterprise were required to incur a cost of ₹ 2 lakhs to dispose of the plant, what would be your response to questions (i) and (ii) above?

Negative NSP

SOLUTION

As per AS 28 "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 and that reduction is an impairment loss. An impairment loss on a revalued asset is recognized as an expense in the statement of profit and loss. However, an impairment loss on a revalued asset is recognised directly against any revaluation surplus for the asset to the extent that the impairment loss does not exceed the amount held in the revaluation surplus for that same asset. In the given case, recoverable amount (higher of asset's net selling price and value in use) will be ₹ 24.5 lakhs on 31.3.20X2 according to the provisions of AS 28 [Refer working note].

		(₹ in lakhs)
(i)	Carrying amount of plant (after impairment) as on 31st March, 20X2	24.50
(ii)	Amount of write off (impairment loss) for the financial year ended 31st March, 20X2 [₹ 60 lakhs – ₹ 24.5 lakhs]	35.50
(iii)	If the plant had been revalued ten years ago	
	Debit to revaluation reserve	12.00
	Amount charged to profit and loss account (₹ 35.50 lakhs – ₹ 12 lakhs)	23.50
(iv)	If Value in use is zero	
	Value in use (a)	Nil
	Net selling price (b)	(-)2.00
	Recoverable amount [higher of (a) and (b)]	Nil
	Carrying amount (closing book value)	Nil
	Amount of write off (impairment loss) (₹ 60 lakhs – Nil)	60.00
	Entire book value of plant will be written off and charged to profit and loss account.	

Working Note:

Calculation of Closing Book Value, Estimated Net Selling Value and Estimated Value in Use of Plant at 31st March, 20X2

	(₹ in lakhs)
Opening book value as on 1.4.20X1 (₹ 500 lakhs – ₹ 415 lakhs)	85
Less: Depreciation for financial year 20X1–20X2	(25)
Closing book value as on 31.3.20X2	**60**
Estimated net selling price as on 1.4.20X1	30
Less: Estimated decrease during the year (20% of ₹ 30 lakhs)	(6)
Estimated net selling price as on 31.3.20X2	**24**
Estimated value in use as on 1.4.20X1	35.0
Less: Estimated decrease during the year (30% of ₹ 35 lakhs)	(10.5)
Estimated value in use as on 31.3.20X2	**24.5**

SERIES 200 – IMPAIRMENT OF CGU INCLUDING GOODWILL AND CORPORATE ASSET

Q.AS28.SM.201 (CGU)

Good Drugs and Pharmaceuticals Ltd. acquired a sachet filling machine on 1 st April, 20X1 for ₹ 60 lakhs. The machine was expected to have a productive life of 6 years. At the end of financial year 20X1-20X2 the carrying amount was ₹ 41 lakhs. A short circuit occurred in this financial year but luckily the machine did not get badly damaged and was still in working order at the close of the financial year. The machine was expected to fetch ₹ 36 lakhs, if sold in the market. The machine by itself is not capable of generating cash flows. However, the smallest group of assets comprising of this machine also, is capable of generating cash flows of ₹ 54 crore per annum and has a carrying amount of ₹ 3.46 crore. All such machines put together could fetch a sum of ₹ 4.44 crore if disposed. Discuss the applicability of Impairment loss.

NSP of CGU

ANSWER:

As per provisions of AS 28 "Impairment of Assets", impairment loss is not to be recognized for a given asset if its cash generating unit (CGU) is not impaired. In the given question, the related cash generating unit which is group of asset to which the damaged machine belongs is not impaired; and the recoverable amount is more than the carrying amount of group of assets. Hence there is no need to provide for impairment loss on the damaged sachet filling machine.

Q.AS28.OM.202 (CA FINAL)

Exam

A Ltd. gives following information

Asset	Carrying Amount	Cash generating unit
A	1,00,000	1
B	2,00,000	3
C	3,00,000	2
D	3,50,000	2
E	70,000	1
F	8,00,000	3
G	2,20,000	2
H	4,50,000	1
Goodwill X	90,000	Allocate in ratio 1:1:1
Goodwill Y	60,000	Unallocable
Corporate:		
Asset P	1,50,000	Allocate in ratio 3:2:1
Asset Q	2,00,000	Unallocable

Recoverable Amount of Cash generating Unit: 1 – 6,70,000; 2 – 8,40,000 and 3 – 10,30,000 Recoverable Amount of Entity: Case A – 25,50,000; Case B – 25,40,000. Calculate impairment loss.

SERIES 300 – REVERSAL OF IMPAIRMENT LOSS

Q.AS28.OM.301 (CA FINAL) Exam

Himalaya Ltd. which is in the business of manufacturing and exporting its product. Sometimes, back at the end of 20X4, the Government put restrictions on export of goods exported by Himalaya Ltd. and due to that restriction Himalaya Ltd. impaired its assets. Himalaya Ltd. acquired identifiable assets worth Rs 5,500 lakhs for Rs 6,000 lakh at the end of the year 20X0. The difference is treated as goodwill. The useful life of identifiable assets is 15 years and depreciated on a straight-line basis. When the Government put the restriction at the end of 20X4, the company recognised the impairment loss by determining the recoverable amount of assets for Rs 3,120 lakh. In 20X6 Government lifted the restriction imposed on the export and due to this favourable change, Himalaya Ltd. re-estimate recoverable amount, which was estimated at Rs 3,420 lakh.

+ assuming End of 20x6

Required:

i. Calculation and allocation of impairment loss in 20X4.

ii. Reversal of impairment loss and its allocation as per AS 28 in 20X6.

Solution

(Assuming goodwill is amortised over 5 years as per AS 14)

(i) Calculation and allocation of impairment loss in 20X4

(Amount in Rs.lakhs)

	Goodwill	Identifiable assets	Total
Historical cost	500	5,500	6,000
Accumulated depreciation/amortization (4 yrs.)	400	(1,467)	(1,467)
Carrying amount before impairment	100	4,033	4,133
Impairment loss*	(100)	(913)	(1013)
Carrying amount after impairment loss	**0**	**3,120**	**3,120**

*Notes:

1. As per AS 28, an impairment loss should be allocated to reduce the carrying amount of the assets of the unit in the following order:
   - first, to goodwill allocated to the cash-generating unit (if any); and
   - then, to the other assets of the unit on a pro-rata basis based on the carrying amount of each asset in the unit.

Hence, first goodwill is impaired at full value and then identifiable assets are impaired to arrive at recoverable value.

(ii) Carrying amount of the assets at the end of 20X6 (Amount in Rs. lakhs)

End of 20X6	Goodwill	Identifiable assets	Total
Carrying amount in 20X6	0	2,553	2,553
Add: Reversal of impairment loss (W.N.2)	-	747	747
Carrying amount after reversal of impairment loss	**-**	**3,300**	**3,300**

Working Note:

1. Calculation of depreciation after impairment till 20X6 and reversal of impairment loss in 20X6

(Amount in Rs lakhs)

	Goodwill	Identifiable assets	Total
A. Carrying amount after impairment loss in 20X4	0	3,120	3,120
B. Additional depreciation (i.e. (3,120/11) x 2)refer Note	–	(567)	(567)
C. Carrying amount	0	2,553	2,553

D. Recoverable amount			3,420
E. Excess of recoverable amount over carrying amount (D-C)			**867**

Note: It is assumed that the restriction by the Government has been lifted at the end of the year 20X6. Therefore, depreciation for 2 years is calculated (2005, 2006).

2. Determination of the amount to be impaired by calculating depreciated historical cost of the identifiable assets without impairment at the end of 20X6

(Amount in Rs lakhs)

End of 20X6	Identifiable assets
Historical cost	5,500
Accumulated depreciation	(366.67 x 6 years) = (2,200)
Depreciated historical cost	3,300
Carrying amount (in W.N. 1)	**2,553**
Amount of reversal of impairment loss	**747**

Notes:

As per AS 28, in allocating a reversal of an impairment loss for a cash-generating unit, the carrying amount of an asset should not be increased above the lower of:

a. its recoverable amount (if determinable); and

b. the carrying amount that would have been determined (net of amortization or depreciation) had no impairment loss been recognised for the asset in prior accounting periods.

Hence impairment loss reversal is restricted to Rs 747 lakhs only.

Note:

Impairment Loss on Goodwill shall not be reversed except certain conditions.

SERIES 400 – MISCELLANEOUS QUESTIONS

Q.AS28.SM.401 HW

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 recognized as an intangible asset. The costs of creating magazine titles and maintaining the existing titles are recognized 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 for an individual magazine title?

Answer:

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 of each other and that each magazine title is a separate cash-generating unit.

Q.AS28.SM.402 HW

An asset does not meet the requirements of environment laws which have been recently enacted. The asset has to be destroyed as per the law. The asset is carried in the Balance Sheet at the year end at ₹ 6,00,000. The estimated cost of destroying the asset is ₹ 70,000. How is the asset to be accounted for?

Answer:

As per AS 28 "Impairment of Assets", impairment loss is the amount by which the carrying amount of an asset exceeds its recoverable amount, where recoverable amount is the higher of an asset's net selling price* and its value in use·. In the given case, recoverable amount will be nil [higher of value in use (nil) and net selling price (negative ₹ 70,000)]. Thus impairment loss will be calculated as ₹ 6,00,000 [carrying amount (₹ 6,00,000) – recoverable amount (nil)].

Therefore, asset is to be fully impaired and impairment loss of ₹ 6,00,000 has to be recognized as an expense immediately in the statement of Profit and Loss as per para 58 of AS 28.

*Net selling price is the amount obtainable from the sale of an asset in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal. In the given case, Net Selling Price = Selling price – Cost of disposal = Nil – ₹ 70,000 = (₹ 70,000)

·Value in use is the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. In the given case, value in use is nil.

Further, as per para 60 of AS 28, When the amount estimated for an impairment loss is greater than the carrying amount of the asset to which it relates, an enterprise should recognise a liability if, and only if, that is required by another Accounting Standard. Hence, the entity should recognize liability for cost of disposal of` 70,000 as per AS 10 & 29.

SECTION C – MCQ's

(MCQ's from ICAI Material)

1) If there is indication that an asset may be impaired but the recoverable amount of the asset is more than the carrying amount of the asset, the following are true:
   a) No further action is required and the company can continue the asset in the books at the book value itself.
   b) The entity should review the remaining useful life, scrap value and method of depreciation and amortization for the purposes of AS 10.
   c) The entity can follow either (a) or (b).
   d) The entity should review the scrap value and method of depreciation and amortization for the purposes of AS 10.

2) In case Goodwill appears in the Balance Sheet of an entity, the following is true:
   a) Apply Bottom up test if goodwill cannot be allocated to CGU (cash generating unit) under review.
   b) Apply Top down test if goodwill cannot be allocated to CGU (cash generating unit) under review.
   c) Apply both Bottom up test and Top down test if goodwill cannot be allocated to CGU (cash generating unit) under review.
   d) Apply either Bottom up test or Top down test if goodwill cannot be allocated to CGU (cash generating unit) under review.

3) In case of Corporate assets in the Balance Sheet of an entity, the following is true:
   a) Apply Bottom up test if corporate assets cannot be allocated to CGU (cash generating unit) under review.
   b) Apply Top down test if corporate assets cannot be allocated to CGU (cash generating unit) under review.
   c) Apply both Bottom up test and Top down test if corporate assets cannot be allocated to CGU (cash generating unit) under review.
   d) Apply either Bottom up test or Top down test if corporate assets cannot be allocated to CGU (cash generating unit) under review.

4) In case of reversal of impairment loss, which statement is true:
   a) Goodwill written off can never be reversed.
   b) Goodwill written off can be reversed without any conditions to be met.
   c) Goodwill written off can be reversed only if certain conditions are met.
   d) Goodwill written off can be reversed.

ANSWERS	1	2	3	4
	b	c	c	c

Student Notes:-

Student Notes:-