LEARNING OUTCOMES

After studying this unit, you will be able to

- Comprehend the objective and scope of this standard
- Define the terms impairment loss, cash-generating unit, corporate assets, recoverable amount etc.
- Examine the criteria for identifying an asset that may be impaired
- Measure the Recoverable Amount
- Recognise and Measure the Impairment loss
- Identify and examine the Cash Generating Unit of the entity and impair the Goodwill
- Allocate and Reverse the Impairment loss
- Disclose the facts as per the requirement of the standard
- Differentiate between Ind AS 36 and AS 28.
Objective
- ensuring that assets are carried at no more than their recoverable amount.
- when an impairment loss should be reversed

Scope:
Applies to all asset except arising from Ind AS 2, 11, 12, 19, 41, 104, 105 and 109

Reversal of Impairment losses

Requirement for impairment review when there are indications for impairment

Requirement for annual review
Intangible assets with an indefinite useful life or not yet available for use.
Goodwill acquired in business combination

Measurement of recoverable amount:
Higher of fair value less costs of disposal and its value in use

Recognition and measurement of an Impairment loss
5.1 OBJECTIVE

The objective of this Standard is to prescribe the methodology that an entity applies to ensure that its assets are not carried at more than their recoverable amount (i.e. the higher of fair value less costs of disposal and value in use). With the exception of goodwill and certain intangible assets for which an annual impairment test is required.

An asset is carried at more than its recoverable amount if its carrying amount exceeds the amount to be recovered through use or sale of the asset. In such case, the asset is described as impaired and the Standard requires the entity to recognise an impairment loss.

The Standard also specifies when an entity shall reverse an impairment loss and prescribes disclosures.

5.2 SCOPE

- This Standard shall be applied in accounting for the impairment of all assets, other than:
  - Inventories (as covered in Ind AS 2)
  - Assets arising from construction contracts (Ind AS 11)
  - Deferred tax assets (Ind AS 12)
  - Assets arising from employees benefits (Ind AS 19)
  - Biological Assets measured at fair value less cost to sell (Ind AS 41)
  - Deferred acquisition costs and intangible assets arising from insurance contracts (Ind AS 104)
  - Non-current assets (or disposal groups) classified as held for sale (as covered in Ind AS 105)
  - Financial Assets (within the scope of Ind AS 109)
This Standard applies to financial assets classified as:

- Subsidiaries, as defined in Ind AS 110, Consolidated Financial Statements
- Associates, as defined in Ind AS 28 Investments in Associates and Joint Ventures
- joint ventures, as defined in Ind AS 111, Joint Arrangements

Impairment of other financial assets shall be accounted as per Ind AS 109, Financial Instruments.

### 5.3 RELEVANT DEFINITIONS

The following are the key terms used in this standard:

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

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.

5. **Depreciable amount** is the cost of an asset, or other amount substituted for cost in the financial statements, less its residual value.

6. **Depreciation (Amortisation)** is the systematic allocation of the depreciable amount of an asset over its useful life.

7. **Fair value** is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (refer Ind AS 113 Fair Value Measurement).

8. An **impairment loss** is the amount by which the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount.
9. The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs of disposal and its value in use.

10. 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.

11. Value in use is the present value of the future cash flows expected to be derived from an asset or cash-generating unit.

5.4 IDENTIFYING AN ASSET THAT MAY BE IMPAIRED

5.4.1 Identifying an asset that may be impaired - General

- An asset is impaired when its carrying amount exceeds its recoverable amount.

- An entity shall assess at the end of each reporting period whether there is any indication that an asset may be impaired. If any such indication exists, the entity is required to estimate the recoverable amount of the asset.

- Irrespective of whether there is any indication of impairment, an entity is required to test following items for impairment at least annually:
For above three assets, the entity should not have wait for Impairment indicators, rather there is mandate of impairment testing. We will discuss this aspect in detail in the next section.

5.4.2 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:

5.4.2.1 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 capitalisation.

5.4.2.2 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. Such evidence may include:
(i) cash flows for acquiring the asset, or subsequent cash needs for operating or maintaining it, that are significantly higher than those originally budgeted;

(ii) actual net cash flows or operating profit or loss flowing from the asset that are significantly worse than those budgeted;

(iii) a significant decline in budgeted net cash flows or operating profit, or a significant increase in budgeted loss, flowing from the asset; or

(iv) operating losses or net cash outflows for the asset, when current period amounts are aggregated with budgeted amounts for the future.

5.4.2.3 Dividend from a subsidiary, jointly controlled entity or associate

For an investment in a subsidiary, jointly controlled entity or associate, the investor recognises a dividend from the investment and evidence is available that:

(i) the carrying amount of the investment in the separate financial statements exceeds the carrying amounts in the consolidated financial statements of the investee’s net assets, including associated goodwill; or

(ii) the dividend exceeds the total comprehensive income of the subsidiary, jointly controlled entity or associate in the period the dividend is declared.

The above list is not exhaustive. An entity may identify other indications that an asset may be impaired and these would also require the entity to determine the asset’s recoverable amount or, in the case of goodwill, perform an impairment test.

If market interest rates or other market rates of return on investments have increased during the period, an entity is not required to make a formal estimate of an asset’s recoverable amount in the following cases:

a) if the discount rate used in calculating the asset’s value in use is unlikely to be affected by the increase in these market rates. For example, increases in short-term interest rates may not have a material effect on the discount rate used for an asset that has a long remaining useful life; or

b) if the discount rate used in calculating the asset’s value in use is likely to be affected by the increase in these market rates but previous sensitivity analysis of recoverable amount shows that:

   (i) it is unlikely that there will be a material decrease in recoverable amount because future cash flows are also likely to increase (e.g. in some cases, an entity may be able to demonstrate that it adjusts its revenues to compensate for any increase in market rates); or

   (ii) the decrease in recoverable amount is unlikely to result in a material impairment loss.
5.5 REQUIREMENT FOR ANNUAL REVIEW

5.5.1 Items required to be tested for impairment at least annually

Irrespective of whether there is any indication of impairment, an entity is required to test following items for impairment at least annually:

a) intangible asset with an indefinite useful life;

b) intangible asset not yet available for use; and

c) goodwill acquired in a business combination for impairment.
5.5.2 Intangible assets required to be tested for impairment at least annually

Intangible asset with an indefinite useful life and intangible assets not yet available for use to be tested for impairment

a) annually; and

b) and whenever there is an indication, at the end of a reporting period, that the asset may be impaired

by comparing its carrying amount with its recoverable amount, irrespective of whether there is any indication that it may be impaired.

- This impairment test may be performed at any time during an annual period, provided it is performed at the same time every year and whenever there is an indication, at the end of a reporting period, that the asset may be impaired.

**For example:**

Intellectual Property rights (IPR) having Indefinite useful life has been tested for Impairment in the first quarter of FY 20X1-20X2. Impairment testing on such assets needs to be mandatory done in the same time frame i.e first quarter of FY 20X2-20X3. Suppose, there is indication of impairment in third quarter of FY 20X2-20X3, in such case, the company needs to do impairment testing in third quarter apart from mandatory annual review.

- Different intangible assets may be tested for impairment at different times. However, if such an intangible asset was initially recognised during the current annual period, that intangible asset shall be tested for impairment before the end of the current annual period

- However, the most recent detailed calculation of such an asset’s recoverable amount made in a preceding period may be used in the impairment test for that asset in the current period, provided all of the following criteria are met:

  a) if the intangible asset does not generate cash inflows from continuing use that are largely independent of those from other assets or groups of assets and is therefore tested for impairment as part of the cash-generating unit to which it belongs, the assets and liabilities making up that unit have not changed significantly since the most recent recoverable amount calculation;

  b) the most recent recoverable amount calculation resulted in an amount that exceeded the asset’s carrying amount by a substantial margin; and

  c) based on an analysis of events that have occurred and circumstances that have changed since the most recent recoverable amount calculation, the likelihood that a current recoverable amount determination would be less than the asset’s carrying amount is remote.
5.5.3 Goodwill

5.5.3.1 CGUs to which goodwill has been allocated

A cash-generating unit to which goodwill has been allocated is tested for impairment both:

a) annually, and

b) whenever there is an indication that the unit may be impaired,

by comparing the carrying amount of the unit, including the goodwill, with the recoverable amount of the unit. If the recoverable amount of the unit exceeds the carrying amount of the unit, the unit and the goodwill allocated to that unit shall be regarded as not impaired. If the carrying amount of the unit exceeds the recoverable amount of the unit, the entity recognises an impairment loss in accordance with the requirement of this standard.

5.5.3.2 Timing of impairment tests

- The annual impairment test for a cash-generating unit to which goodwill has been allocated may be performed at any time during an annual period, provided the test is performed at the same time every year. Different cash-generating units may be tested for impairment at different times.

- However, if some or all of the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual period, that unit shall be tested for impairment before the end of the current annual period.

5.5.3.3 Individual assets to be tested before CGU to which goodwill has been allocated

- If the assets constituting the CGU to which goodwill has been allocated are tested for impairment at the same time as the unit containing the goodwill, they shall be tested for impairment before the unit containing the goodwill.

- Similarly, if the CGUs constituting a group of CGUs to which goodwill has been allocated are tested for impairment at the same time as the group of units containing the goodwill, the individual units shall be tested for impairment before the group of units containing the goodwill.

- At the time of impairment testing a CGU to which goodwill has been allocated, there may be an indication of an impairment of an asset within the unit containing the goodwill. In such circumstances, the entity tests the asset for impairment first, and recognises any impairment loss for that asset before testing for impairment the cash-generating unit containing the goodwill.

- Similarly, there may be an indication of an impairment of a cash-generating unit within a group of units containing the goodwill. In such circumstances, the entity tests the cash-generating unit for impairment first, and recognises any impairment loss for that unit, before testing for impairment the group of units to which the goodwill is allocated.
5.5.3.4 Rolling forward detailed calculations from a preceding period

The most recent detailed calculation made in a preceding period of the recoverable amount of a cash-generating unit to which goodwill has been allocated may be used in the impairment test of that unit in the current period provided all of the following criteria are met:

a) the assets and liabilities making up the unit have not changed significantly since the most recent recoverable amount calculation;

b) the most recent recoverable amount calculation resulted in an amount that exceeded the carrying amount of the unit by a substantial margin; and

c) based on an analysis of events that have occurred and circumstances that have changed since the most recent recoverable amount calculation, the likelihood that a current recoverable amount determination would be less than the current carrying amount of the unit is remote.

5.5.3.5 CGUs to which it has not been possible to allocate goodwill

- When goodwill relates to a CGU but has not been allocated to that unit, the unit shall be tested for impairment, whenever there is an indication that the unit may be impaired, by comparing the unit’s carrying amount, excluding any goodwill, with its recoverable amount. Any impairment loss is recognised in accordance with the requirement of this standard.

- If a CGU as described above includes in its carrying amount an intangible asset that has an indefinite useful life or is not yet available for use and that asset can be tested for impairment only as part of the CGU, the unit also to be tested for impairment annually.

5.6 MEASUREMENT OF RECOVERABLE AMOUNT

5.6.1 Recoverable amount

The recoverable amount of an asset or a CGU is the higher of its fair value less costs of disposal and its value in use.
Illustration 1
The carrying value of a building in the books of Sun Ltd. as at Mar 31, 20X1 is ₹ 300 lakhs. As on that date the value in use is ₹ 250 lakhs and fair value less cost of disposal is ₹ 238 lakhs. Calculate the Recoverable Amount.

Solution
Recoverable Amount : Higher of Fair Value less Costs of disposal and Value in Use
Fair Value less costs of disposal : ₹ 250 Lakhs
Value in Use : ₹ 238 Lakhs
Therefore, Recoverable value will be ₹ 250 lakhs

5.6.2 Circumstances in which it is not necessary to calculate both an asset’s fair value less costs of disposal and its value in use
- 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.
- If there is no basis for making a reliable estimate of fair value less costs of disposal, recoverable amount is measured by reference to value in use alone.
- In some cases, estimates, averages and computational short cuts may provide reasonable approximations of the detailed computations illustrated in this Standard for determining fair value less costs of disposal or value in use.

5.6.3 Circumstances in which recoverable amount is determined in the context of CGU
Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows 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 (refer paragraphs 65–103), unless either:

a) the asset’s fair value less costs of disposal is higher than its carrying amount; or
b) the asset’s value in use can be estimated to be close to its fair value less costs of disposal and fair value less costs of disposal can be determined.

5.7 FAIR VALUE LESS COSTS OF DISPOSAL

5.7.1 Fair value and costs of disposal – definition
Fair value is the price that would be received to sell an asset or paid to transfer a liability in an
orderly transaction between market participants at the measurement date (Ind AS 113 Fair Value Measurement).

**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.

### 5.7.2 Cost of disposal to be deducted

Costs of disposal, other than those that have been recognised as liabilities, are deducted in determining fair value less costs 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) and costs associated with reducing or reorganising a business following the disposal of an asset are not direct incremental costs to dispose of the asset.

**Steps for assessing Fair value less costs to sell**

1. **First Preference:** Binding sale agreement
2. **Second Preference:** Active market
   - Current bid price
   - If current bid prices not available, the price of the most recent transaction
3. **Third Preference:** Best information available at the end of the reporting date
4. **If all the above are not available:** Ignore Fair value less costs to sell, take Value in use only
5.7.3 Contrasting fair value and value in use

Fair value differs from value in use. Fair value reflects the assumptions market participants would use when pricing the asset. In contrast, value in use reflects the effects of factors that may be specific to the entity and not applicable to entities in general. For example, fair value does not reflect any of the following factors to the extent that they would not be generally available to market participants:

a) additional value derived from the grouping of assets (such as the creation of a portfolio of investment properties in different locations);

b) synergies between the asset being measured and other assets;

c) legal rights or legal restrictions that are specific only to the current owner of the asset; and

d) tax benefits or tax burdens that are specific to the current owner of the asset.

5.8 VALUE IN USE

5.8.1 Value in use – general

*Value in use* is the present value of the future cash flows expected to be derived from an asset or cash-generating unit.

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

- **Estimating future cash flows**
- **Discount rate to be used**

5.8.2 Estimation of expected future cash flows

The following elements shall be reflected in the calculation of an asset’s value in use:

a) an estimate of the future cash flows the entity expects to derive from the asset;

b) expectations about possible variations in the amount or timing of those future cash flows;

c) the time value of money, represented by the current market risk-free rate of interest;

d) the price for bearing the uncertainty inherent in the asset; and
e) other factors, such as illiquidity, that market participants would reflect in pricing the future cash flows the entity expects to derive from the asset.

- **Estimating the value in use of an asset involves the following steps:**
  a) estimating the future cash inflows and outflows to be derived from continuing use of the asset and from its ultimate disposal; and
  b) applying the appropriate discount rate to those future cash flows.

- The elements identified above in point (b), (d) and (e) can be reflected either as adjustments to the future cash flows or as adjustments to the discount rate. Whichever approach an entity adopts to reflect expectations about possible variations in the amount or timing of future cash flows, the result shall be to reflect the expected present value of the future cash flows, i.e. the weighted average of all possible outcomes.

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

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

- a) Projections of cash flows shall be based on reasonable and supportable assumptions that represent management’s best estimate of the range of economic conditions that will exist over the remaining useful life of the asset. Greater weight shall be given to external evidence.

  Management assesses the reasonableness of the assumptions on which its current cash flow projections are based by examining the causes of differences between past cash flow projections and actual cash flows. Management shall ensure that the assumptions on which its current cash flow projections are based are consistent with past actual outcomes, provided the effects of subsequent events or circumstances that did not exist when those actual cash flows were generated make this appropriate.
b) Base cash flow projections on the most recent financial budgets/forecasts approved by management, but shall exclude any estimated future cash inflows or outflows expected to arise from future restructurings or from improving or enhancing the asset’s performance. Projections based on these budgets/forecasts shall cover a maximum period of five years, unless a longer period can be justified.

c) Detailed, explicit and reliable financial budgets/forecasts of future cash flows for periods longer than five years are generally not available. For this reason, management’s estimates of future cash flows are based on the most recent budgets/forecasts for a maximum of five years. Management may use cash flow projections based on financial budgets/forecasts over a period longer than five years if it is confident that these projections are reliable and it can demonstrate its ability, based on past experience, to forecast cash flows accurately over that longer period.

d) Estimate cash flow projections beyond the period covered by the most recent budgets/forecasts by extrapolating the projections based on the budgets/forecasts using a steady or declining growth rate for subsequent years, unless an increasing rate can be justified. This growth rate shall not exceed the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market in which the asset is used, unless a higher rate can be justified.

e) Cash flow projections until the end of an asset’s useful life are estimated by extrapolating the cash flow projections based on the financial budgets/forecasts using a growth rate for subsequent years. This rate is steady or declining, unless an increase in the rate matches objective information about patterns over a product or industry lifecycle. If appropriate, the growth rate is zero or negative.

f) Estimates of future cash flows and the discount rate reflect consistent assumptions about price increases attributable to general inflation. Therefore, if the discount rate includes the effect of price increases attributable to general inflation, future cash flows are estimated in nominal terms. If the discount rate excludes the effect of price increases attributable to general inflation, future cash flows are estimated in real terms (but include future specific price increases or decreases).

5.8.2.1 Estimates of future cash flows shall include:

a) projections of cash inflows from the continuing use of the asset;

b) projections of cash outflows that are necessarily incurred to generate the cash inflows from continuing use of the asset (including cash outflows to prepare the asset for use) and can be directly attributed, or allocated on a reasonable and consistent basis, to the asset;

c) net cash flows, if any, to be received (or paid) for the disposal of the asset at the end of its useful life. The estimate of net cash flows to be received (or paid) for the disposal of an asset at the end of its useful life shall be the amount that an entity expects to obtain from the disposal of the asset in an arm’s length transaction between knowledgeable, willing parties, after deducting the estimated costs of disposal.
The estimate of net cash flows to be received (or paid) for the disposal of an asset at the end of its useful life is determined in a similar way to an asset’s fair value less costs of disposal, except that, in estimating those net cash flows:

(i) an entity uses prices prevailing at the date of the estimate for similar assets that have reached the end of their useful life and have operated under conditions similar to those in which the asset will be used; and

(ii) the entity adjusts those prices for the effect of both future price increases due to general inflation and specific future price increases or decreases. However, if estimates of future cash flows from the asset’s continuing use and the discount rate exclude the effect of general inflation, the entity also excludes this effect from the estimate of net cash flows on disposal;

d) projections of cash outflows include those for the day-to-day servicing of the asset as well as future overheads that can be attributed directly, or allocated on a reasonable and consistent basis, to the use of the asset and

e) in the same way that corporate assets can be allocated to a CGU’s carrying value, the CGU’s cash flows shall also include an appropriate apportionment of corporate overheads when calculating value in use. However, care should be taken around internal charges for using the asset.

5.8.2.2 Estimates of future cash flows shall exclude:

- Estimates of future cash flows do not include:

  (b) cash inflows from assets that generate cash inflows that are largely independent of the cash inflows from the asset under review (for example, financial assets such as receivables);

  (c) cash outflows that relate to obligations that have been recognised as liabilities (for example, payables, pensions or provisions);

  (d) future cash outflows or related cost savings (for example reductions in staff costs) or benefits that are expected to arise from a future restructuring to which an entity is not yet committed.

Ind AS 37, Provisions, Contingent Liabilities and Contingent Assets, contains guidance clarifying when an entity is committed to a restructuring.

When an entity becomes committed to a restructuring, some assets are likely to be affected by this restructuring. Once the entity is committed to the restructuring its estimates of future cash inflows and cash outflows for the purpose of determining value in use reflect the cost savings and other benefits from the restructuring (based on the most recent financial budgets/forecasts approved by management) and its estimates of
future cash outflows for the restructuring are included in a restructuring provision in accordance with Ind AS 37;

(e) estimated future cash flows that are expected to arise from improving or enhancing the asset’s performance.

Estimates of future cash flows do include future cash flows necessary to maintain the level of economic benefits expected to arise from the asset in its current condition.

When a cash-generating unit consists of assets with different estimated useful lives, all of which are essential to the ongoing operation of the unit, the replacement of assets with shorter lives is considered to be part of the day-to-day servicing of the unit when estimating the future cash flows associated with the unit. Similarly, when a single asset consists of components with different estimated useful lives, the replacement of components with shorter lives is considered to be part of the day-to-day servicing of the asset when estimating the future cash flows generated by the asset;

(f) cash inflows or outflows from financing activities. Estimated future cash flows reflect assumptions that are consistent with the way the discount rate is determined. Otherwise, the effect of some assumptions will be counted twice or ignored.

Because the time value of money is considered by discounting the estimated future cash flows, these cash flows exclude cash inflows or outflows from financing activities;

(g) income tax receipts or payments. Because the discount rate is determined on a pre-tax basis, future cash flows are also estimated on a pre-tax basis; and

(h) when corporate assets have been allocated to a CGU’s carrying amount, any internal charges incurred by the CGU for using such assets shall not be included in the CGU’s expected future cash flows. To do so would be to double-count the impact of the corporate assets and could result in an impairment loss being recognised incorrectly.

Illustration 2

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?

Solution

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.
5.8.2.3 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.

5.8.3 Discount rate

The discount rate (rates) shall be a pre-tax rate (rates) that reflect(s) current market assessments of:

a) the time value of money; and
b) the risks specific to the asset for which the future cash flow estimates have not been adjusted.

- A rate that reflects current market assessments of the time value of money and the risks specific to the asset is the return that investors would require if they were to choose an investment that would generate cash flows of amounts, timing and risk profile equivalent to those that the entity expects to derive from the asset.

- This rate is estimated from the rate implicit in current market transactions for similar assets or from the weighted average cost of capital of a listed entity that has a single asset (or a portfolio of assets) similar in terms of service potential and risks to the asset under review. However, the discount rate(s) used to measure an asset’s value in use shall not reflect risks for which the future cash flow estimates have been adjusted. Otherwise, the effect of some assumptions will be double-counted.

- When an asset-specific rate is not directly available from the market, an entity uses surrogates to estimate the discount rate. Appendix A provides additional guidance on estimating the discount rate in such circumstances.
Illustration 3

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow (INR Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X4-20X5</td>
<td>2,000</td>
</tr>
<tr>
<td>20X5-20X6</td>
<td>3,000</td>
</tr>
<tr>
<td>20X6-20X7</td>
<td>3,000</td>
</tr>
<tr>
<td>20X7-20X8</td>
<td>4,000</td>
</tr>
<tr>
<td>20X8-20X9</td>
<td>2,000</td>
</tr>
<tr>
<td>Residual Value at 31.03.20X9</td>
<td>500</td>
</tr>
</tbody>
</table>

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

Solution

(a) Calculation of Carrying Amount on 31.03.20X4 (INR lakhs)

<table>
<thead>
<tr>
<th>Particular</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Cost on 1.04.20X1</td>
<td>20,000</td>
</tr>
<tr>
<td>Less Depreciation ( \frac{(20,000 - 500)}{8} \times 3 )</td>
<td>7,313</td>
</tr>
<tr>
<td>Carrying Amount</td>
<td>12,687</td>
</tr>
</tbody>
</table>

(b) Calculation of Value in Use

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flows</th>
<th>P.V.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X4-20X5</td>
<td>2,000</td>
<td>.869</td>
<td>1,738</td>
</tr>
</tbody>
</table>
(c) **Calculation of Recoverable Amount**

<table>
<thead>
<tr>
<th>Particular</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value in Use</td>
<td>9,510</td>
</tr>
<tr>
<td>Fair value less costs of disposal</td>
<td>10,000</td>
</tr>
<tr>
<td>Recoverable Amount</td>
<td>10,000</td>
</tr>
</tbody>
</table>

(d) **Calculation of Impairment Loss**

Carrying Amount – Recoverable Amount

\[
12,687 - 10,000 = 2,687
\]

(e) **Calculation of Revised Carrying Amount**

<table>
<thead>
<tr>
<th>Particular</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying Amount</td>
<td>12,687</td>
</tr>
<tr>
<td>Less: Impairment Loss</td>
<td>2,687</td>
</tr>
<tr>
<td>Revised Carrying Amount</td>
<td>10,000</td>
</tr>
</tbody>
</table>

(f) **Calculation of Revised Depreciation**

Revised Carrying Amount – Residual Value

\[
\text{Remaining Life} = \frac{10,000 - 500}{5} = 1,900
\]
5.9 RECOGNISING AND MEASURING AN IMPAIRMENT LOSS

5.9.1 Recognition and measurement of an impairment loss- Individual Asset

If, and only if, the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable amount. That reduction is an impairment loss.

Illustration 4: Impairment Loss

Jupiter Ltd, a leading manufacturer of steel is having a furnace, which is carried in the balance sheet on 31.03.20X1 at ₹250 lakhs. As at that date the value in use and Fair value is ₹200 lakhs. The cost of disposal is ₹13 lakhs.

Calculate the Impairment Loss to be recognised in the books of the Company?

Solution

Calculation of Impairment Loss:

<table>
<thead>
<tr>
<th>Calculation of Impairment Loss</th>
<th>INR in Lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recoverable Amount =</td>
<td>200</td>
</tr>
<tr>
<td>Higher of,</td>
<td></td>
</tr>
<tr>
<td>Fair Value less Cost of Disposal (200 -13)</td>
<td>187</td>
</tr>
<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>Value in Use</td>
<td>200</td>
</tr>
<tr>
<td>Impairment Loss = Carrying Amount – Recoverable Amount</td>
<td>50</td>
</tr>
<tr>
<td>= 250 - 200</td>
<td></td>
</tr>
</tbody>
</table>

- An impairment loss shall be recognised immediately in profit or loss, unless the asset is carried at revalued amount in accordance with another Standard (for example, in accordance with the revaluation model in Ind AS 16).

- Any impairment loss of a revalued asset shall be treated as a revaluation decrease in accordance with that other Standard. Impairment loss on a revalued asset is recognised in other comprehensive income to the extent that the impairment loss does not exceed the amount
in the revaluation surplus for that same asset. Such an impairment loss on a revalued asset reduces the revaluation surplus for that asset.

- When the amount estimated for an impairment loss is greater than the carrying amount of the asset to which it relates, an entity shall recognise a liability if, and only if, that is required by another Standard.

- After the recognition of an impairment loss, the depreciation (amortisation) charge for the asset is 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.

- If an impairment loss is recognised, any related deferred tax assets or liabilities are determined in accordance with Ind AS 12 by comparing the revised carrying amount of the asset with its tax base.

**Illustration 5**

*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. The effect of the impairment loss is as follows:*

<table>
<thead>
<tr>
<th>Solution:</th>
<th>Identifiable assets before impairment loss</th>
<th>Impairment loss</th>
<th>Identifiable assets after impairment loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount</td>
<td>₹ 1,000</td>
<td>(₹ 350)</td>
<td>₹ 650</td>
</tr>
<tr>
<td>Tax Base</td>
<td>₹ 800</td>
<td>-</td>
<td>₹ 800</td>
</tr>
<tr>
<td>Taxable (deductible) temporary difference</td>
<td>₹ 200</td>
<td>(₹ 350)</td>
<td>(₹ 150)</td>
</tr>
<tr>
<td>Deferred tax liability (asset) at 30%</td>
<td>₹ 60</td>
<td>(₹ 105)</td>
<td>(₹ 45)</td>
</tr>
</tbody>
</table>

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.
5.9.2 Recognition and measurement of an impairment loss for a cash-generating unit and goodwill

5.9.2.1 Identification of cash generating units

- 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.

- If there is any indication that an asset may be impaired, recoverable amount shall be estimated for the 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).

- The recoverable amount of an individual asset cannot be determined if:
  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.

- In such cases, value in use and, therefore, recoverable amount, can be determined only for the asset’s cash-generating unit.

- If recoverable amount cannot be determined for an individual asset, an entity identifies the lowest aggregation of assets that generate largely independent cash inflows.

Illustration 6

A mining entity owns a private railway to support its mining activities. The private railway could be sold only 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.

Solution

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. Therefore, the entity estimates the recoverable amount of the cash-generating unit to which the private railway belongs, i.e., the mine as a whole.

Illustration 7

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.
Solution

Since 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 is the cash inflows generated by the five routes together. The cash-generating unit for each route is the bus company as a whole.

5.9.2.2 Relevance of internal management reporting to the identification of CGUs

Cash inflows are inflows of cash and cash equivalents received from parties external to the entity. In identifying whether cash inflows from an asset (or group of assets) are largely independent of the cash inflows from other assets (or groups of assets), an entity considers various factors including how management monitors the entity’s operations or how management makes decisions about continuing or disposing of the entity’s assets and operations.

5.9.2.3 Active market exists for the output produced by an asset or group of assets

- If an active market exists for the output produced by an asset or group of assets, that asset or group of assets shall be identified as a cash-generating unit, even if some or all of the output is used internally.
- Even if part or all of the output produced by an asset or a group of assets is used by other units of the entity, this asset or group of assets forms a separate cash-generating unit if the entity could sell the output on an active market. This is because the asset or group of assets could generate cash inflows that would be largely independent of the cash inflows from other assets or groups of assets.
- If the cash inflows generated by any asset or cash-generating unit are affected by internal transfer pricing, an entity shall use management’s best estimate of future price(s) that could be achieved in arm’s length transactions in estimating:
  a) the future cash inflows used to determine the asset’s or cash-generating unit’s value in use; and
  b) the future cash outflows used to determine the value in use of any other assets or cash-generating units that are affected by the internal transfer pricing.

5.9.2.4 Cash-generating units to be identified consistently from period to period

- Cash-generating units shall be identified consistently from period to period for the same asset or types of assets, unless a change is justified.
- If an entity determines that an asset belongs to a cash-generating unit different from that in previous periods, or that the types of assets aggregated for the asset’s cash-generating unit have changed, disclosures are required about the cash-generating unit, if an impairment loss is recognised or reversed for the cash-generating unit.
5.9.2.5 Allocation of assets and liabilities to CGUs

- The **recoverable amount** of a cash-generating unit is the higher of the cash-generating unit’s fair value less costs of disposal and its value in use.

- **Carrying amount** is the amount at which an asset is recognised after deducting any accumulated depreciation (amortisation) and accumulated impairment losses thereon. The carrying amount of a cash-generating unit shall be determined on a basis consistent with the way the recoverable amount of the cash-generating unit is determined.

- The carrying amount of a cash-generating unit:
  a) includes the carrying amount of only those assets that can be attributed directly, or allocated on a reasonable and consistent basis, to the cash-generating unit and will generate the future cash inflows used in determining the cash-generating unit’s value in use; and
  b) does not include the carrying amount of any recognised liability, unless the recoverable amount of the cash-generating unit cannot be determined without consideration of this liability.

This is because fair value less costs of disposal and value in use of a cash-generating unit are determined excluding cash flows that relate to assets that are not part of the cash-generating unit and liabilities that have been recognised.

- In some cases, although some assets contribute to the estimated future cash flows of a cash-generating unit, they cannot be allocated to the cash-generating unit on a reasonable and consistent basis. This might be the case for goodwill or corporate assets such as head office assets.

- It may be necessary to consider some recognised liabilities to determine the recoverable amount of a cash-generating unit. This may occur if the disposal of a cash-generating unit would require the buyer to assume the liability. In this case, the fair value less costs of disposal (or the estimated cash flow from ultimate disposal) of the cash-generating unit is the estimated selling price for the assets of the cash-generating unit and the liability together, less the costs of disposal. To perform a meaningful comparison between the carrying amount of the cash-generating unit and its recoverable amount, the carrying amount of the liability is deducted in determining both the cash-generating unit’s value in use and its carrying amount.

**Illustration 8**

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.

Solution

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.

- For practical reasons, the recoverable amount of a cash-generating unit is sometimes determined after consideration of assets that are not part of the cash-generating unit (for example, receivables or other financial assets) or liabilities that have been recognised (for example, payables, pensions and other provisions). In such cases, the carrying amount of the cash-generating unit is increased by the carrying amount of those assets and decreased by the carrying amount of those liabilities.

5.9.2.6 Allocating goodwill to cash-generating units

- For the purpose of impairment testing, goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer’s cash-generating units, or groups of cash-generating units, that is expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units or groups of units.

- Goodwill sometimes cannot be allocated on a non-arbitrary basis to individual cash-generating units, but only to groups of cash-generating units. Each unit or group of units to which the goodwill is so allocated:
  a) represent the lowest level within the entity at which the goodwill is monitored for internal management purposes; and
  b) not be larger than an operating segment as defined by paragraph 5 of Ind AS 108 Operating Segments before aggregation.

- Goodwill recognised in a business combination is an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually
identified and separately recognised. 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.

- If the initial allocation of goodwill acquired in a business combination cannot be completed before the end of the annual period in which the business combination is effected, that initial allocation shall be completed before the end of the first annual period beginning after the acquisition date.

- In accordance with Ind AS 103 Business Combinations, if the initial accounting for a business combination can be determined only provisionally by the end of the period in which the combination is effected, the acquirer:
  a) accounts for the combination using those provisional values; and
  b) recognises any adjustments to those provisional values as a result of completing the initial accounting within the measurement period, which will not exceed twelve months from the acquisition date.

In such circumstances, it might also not be possible to complete the initial allocation of the goodwill recognised in the combination before the end of the annual period in which the combination is affected. When this is the case, the entity discloses the information required by this standard.

- If goodwill has been allocated to a cash-generating unit and the entity disposes of an operation within that unit, the goodwill associated with the operation disposed of shall be:
  a) included in the carrying amount of the operation when determining the gain or loss on disposal; and
  b) measured on the basis of the relative values of the operation disposed of and the portion of the cash-generating unit retained, unless the entity can demonstrate that some other method better reflects the goodwill associated with the operation disposed of.

Illustration 9

An entity sells for ₹100 an operation that was part of a cash-generating unit to which goodwill has been allocated. The goodwill allocated to the unit cannot be identified or associated with an asset group at a level lower than that unit, except arbitrarily. The recoverable amount of the portion of the cash-generating unit retained is ₹300.

Solution

Since the goodwill allocated to the cash-generating unit cannot be non-arbitrarily identified or associated with an asset group at a level lower than that unit, the goodwill associated with the operation disposed of is measured on the basis of the relative values of the operation disposed of and the portion of the unit retained. Therefore, 25 per cent of the goodwill allocated to the cash-generating unit is included in the carrying amount of the operation that is sold.
If an entity reorganises its reporting structure in a way that changes the composition of one or more cash-generating units to which goodwill has been allocated, the goodwill shall be reallocated to the units affected. This reallocation is performed by using a relative value approach similar to that used when an entity disposes of an operation within a cash-generating unit, unless the entity can demonstrate that some other method better reflects the goodwill associated with the reorganised units.

**Illustration 10**

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.

**Solution**

Since the 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.

#### 5.9.2.7 Allocating corporate assets to cash-generating units

- **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. Corporate assets include group or divisional assets such as the building of a headquarters or a division of the entity, EDP equipment or a research centre. The structure of an entity determines whether an asset meets this Standard’s definition of corporate assets for a particular cash-generating unit.

- The distinctive characteristics of corporate assets are that:
  a) they do not generate cash inflows independently of other assets or groups of assets; and
  b) their carrying amount cannot be fully attributed to the cash-generating unit under review.

- Because corporate assets do not generate separate cash inflows, they are tested for impairment in the context of the CGU or group of CGUs to which the asset belongs. In testing a cash-generating unit for impairment, an entity shall identify all the corporate assets that relate to the cash-generating unit under review. If a portion of the carrying amount of a corporate asset:
  a) can be allocated on a reasonable and consistent basis to that unit, the entity compares the carrying amount of the unit, including the portion of the carrying amount of the corporate asset allocated to the unit, with its recoverable amount. Any impairment loss is recognised in accordance with the requirement of this standard.
  b) cannot be allocated on a reasonable and consistent basis to that unit, the entity:
    (i) compares the carrying amount of the unit, excluding the corporate asset, with its recoverable amount and recognise any impairment loss in accordance with the requirement of this standard;
(ii) identify the smallest group of cash-generating units that includes the cash-generating unit under review and to which a portion of the carrying amount of the corporate asset can be allocated on a reasonable and consistent basis; and

(iii) compare the carrying amount of that group of cash-generating units, including the portion of the carrying amount of the corporate asset allocated to that group of units, with the recoverable amount of the group of units. Any impairment loss shall be recognised in accordance with the requirement of this standard.

Illustration 11

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 an 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.

Solution

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

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying value of CGUs</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Allocation of office building</td>
<td>4</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>

(office building is allocated in the ratio of

Carrying value of CGU's

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation of corporate asset</td>
<td>24</td>
<td>36</td>
<td>60</td>
</tr>
<tr>
<td>Recoverable Amount</td>
<td>18</td>
<td>38</td>
<td>56</td>
</tr>
<tr>
<td>Impairment Loss</td>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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).

5.9.2.8 Recognition and measurement of an impairment loss for a cash-generating unit

- An impairment loss is recognised for a cash-generating unit (the smallest group of cash-generating units to which goodwill or a corporate asset has been allocated) if, and only if, the
recoverable amount of the unit (group of units) is less than the carrying amount of the unit (group of units). The impairment loss is allocated to reduce the carrying amount of the assets of the unit (group of units) in the following order:

a) first, to reduce the carrying amount of any goodwill allocated to the cash-generating unit (group of units); and

b) then, to the other assets of the unit (group of units) pro rata on the basis of the carrying amount of each asset in the unit (group of units).

- In allocating an impairment loss to individual assets within a CGU, the carrying amount of an individual shall not be reduced below the highest of:
  - Fair value less costs to sell
  - Value in use
  - zero

- The amount of the impairment loss that would otherwise have been allocated to the asset shall be allocated pro rata to the other assets of the unit (group of units).

- If the recoverable amount of an individual asset cannot be determined:
  a) an impairment loss is recognised for the asset if its carrying amount is greater than the higher of its fair value less costs of disposal and the results of the allocation procedures described; and
  b) 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.

**Illustration 12**

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.

Solution

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.

After the allocation procedures have been applied, a liability is recognised for any remaining amount of an impairment loss for a cash-generating unit if, and only if, that is required by another Indian Accounting Standard.

5.9.3 Two-step approach for goodwill allocated to a group of CGUs

When goodwill is allocated to a group of CGUs for the purpose of impairment testing but cannot be allocated on a non-arbitrary basis to individual CGUs, the individual CGUs must be tested for impairment before the group of CGUs containing the associated goodwill.

5.10 REVERSING AN IMPAIRMENT LOSS

5.10.1 Reversals of impairment losses – general

- An entity is required to assess at the end of each reporting period whether there is any indication that an impairment loss recognised in prior periods for an asset other than goodwill may no longer exist or may have decreased. If any such indication exists, the entity shall estimate the recoverable amount of that asset.
- An impairment loss recognised for goodwill shall not be reversed in a subsequent period.
An impairment loss recognised in prior periods for an asset other than goodwill shall be reversed if, and only if, there has been a change in the estimates used to determine the asset’s recoverable amount since the last impairment loss was recognised. If this is the case, the carrying amount of the asset is, except as described in paragraph 117, increased to its recoverable amount.

A reversal of an impairment loss reflects an increase in the estimated service potential of an asset, either from use or from sale, since the date when an entity last recognised an impairment loss for that asset. Examples of changes in estimates include:

a) a change in the basis for recoverable amount (i.e., whether recoverable amount is based on fair value less costs of disposal or value in use);

b) if recoverable amount was based on value in use, a change in the amount or timing of estimated future cash flows or in the discount rate; or

c) if recoverable amount was based on fair value less costs of disposal, a change in estimate of the components of fair value less costs of disposal.

An asset’s value in use may become greater than the asset’s carrying amount simply because the present value of future cash inflows increases as they become closer. However, the service potential of the asset has not increased. Therefore, 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.

5.10.2 Indications of reversals of impairment loss

In assessing whether there is any indication that an impairment loss recognised in prior periods for an asset other than goodwill may no longer exist or may have decreased, an entity shall consider, as a minimum, the following indications:

5.10.2.1 External sources of information

a) there are observable indication that the asset’s value has increased significantly during the period;

b) 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

c) market interest rates or other market rates of return on investments have decreased during the period, and those decreases are likely to affect the discount rate used in calculating the asset’s value in use and increase the asset’s recoverable amount materially.

5.10.2.2 Internal sources of information

a) significant changes with a favourable 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, the asset is used or is expected to be used. These changes include costs incurred during the
period to improve or enhance the asset’s performance or restructure the operation to which the asset belongs; and

b) evidence is available from internal reporting that indicates that the economic performance of the asset is, or will be, better than expected.

- If there is an indication that an impairment loss recognised for an asset other than goodwill may no longer exist or may have decreased, this may indicate that the remaining useful life, the depreciation (amortisation) method or the residual value may need to be reviewed and adjusted in accordance with the Indian Accounting Standard applicable to the asset, even if no impairment loss is reversed for the asset.

**5.10.3 Reversing an impairment loss for an individual asset**

- The increased carrying amount of an asset other than goodwill attributable to a reversal of an impairment loss shall 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. Any increase in excess of this amount would be a revaluation and would be accounted for under the appropriate Standard (e.g. Ind AS 16 Property, Plant and Equipment).

- A reversal of an impairment loss for an asset other than goodwill is recognised immediately in profit or loss, unless the asset is carried at revalued amount in accordance with another Indian Accounting Standard. Any reversal of an impairment loss of a revalued asset shall be treated as a revaluation increase in accordance with that other Indian Accounting Standard.

- A reversal of an impairment loss on a revalued asset is recognised in other comprehensive income and increases the revaluation surplus for that asset. However, to the extent that an impairment loss on the same revalued asset was previously recognised in profit or loss, a reversal of that impairment loss is also recognised in profit or loss.

- After a reversal of an impairment loss is recognised, the depreciation (amortisation) charge for the asset is 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.

**5.10.4 Reversing an impairment loss for a cash-generating unit**

- A reversal of an impairment loss for a cash-generating unit shall be allocated to the assets of the unit, except for goodwill, pro rata with the carrying amounts of those assets. These increases in carrying amounts is treated as reversals of impairment losses for individual assets and recognised as discussed above.

- In allocating a reversal of an impairment loss for a cash-generating unit, the carrying amount of an asset shall 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 amortisation or depreciation) had no impairment loss been recognised for the asset in prior periods.
The amount of the reversal of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit, except for goodwill.

### 5.10.5 Reversing an impairment loss for goodwill not permitted

- An impairment loss recognised for goodwill shall not be reversed in a subsequent period.
- Ind AS 38 *Intangible Assets* prohibits the recognition of internally generated goodwill. Any increase in the recoverable amount of goodwill in the periods following the recognition of an impairment loss for that goodwill is likely to be an increase in internally generated goodwill, rather than a reversal of the impairment loss recognised for the acquired goodwill.

### Illustration 13: Reversal of Impairment Loss

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

As a result Saturn’s Ltd revenue is estimated to get reduce by 30%. The adverse change in market place and regulatory conditions is an indicator of impairment. As a result, Venus Ltd has to estimate the recoverable amount of goodwill and net assets of Saturn Ltd 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 net selling price is expected to be ₹2,90,000.

### Solution

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**

<table>
<thead>
<tr>
<th></th>
<th>Goodwill</th>
<th>Other assets</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Cost</td>
<td>80,000</td>
<td>3,20,000</td>
<td>4,00,000</td>
</tr>
<tr>
<td>Accumulated Depreciation (3,20,000/20) x 2</td>
<td>-</td>
<td>(32,000)</td>
<td>(32,000)</td>
</tr>
<tr>
<td>Carrying Amount</td>
<td>80,000</td>
<td>2,88,000</td>
<td>3,68,000</td>
</tr>
<tr>
<td>Impairment Loss</td>
<td>(80,000)</td>
<td>(76,000)</td>
<td>(1,56,000)</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>INR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Cost</td>
<td></td>
<td>3,20,000</td>
</tr>
<tr>
<td>Accumulated Depreciation for 4 years (3,20,000/20) x 4</td>
<td>(64,000)</td>
<td></td>
</tr>
<tr>
<td>Carrying amount had no impairment loss is recognised on 31st March 20X5</td>
<td>2,56,000</td>
<td></td>
</tr>
</tbody>
</table>
Carrying amount of other assets after recognition of impairment loss

<table>
<thead>
<tr>
<th>Description</th>
<th>INR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount on 31\textsuperscript{st} March 20X3</td>
<td>2,12,000</td>
</tr>
<tr>
<td>Accumulated Depreciation for 2 years (2,12,000/18) x 2 [rounded off to nearest thousand for ease of calculation]</td>
<td>(24,000)</td>
</tr>
<tr>
<td>Carrying amount on 31\textsuperscript{st} March 20X5</td>
<td>1,88,000</td>
</tr>
</tbody>
</table>

- The impairment loss recognised previously can be reversed only to the extent of lower of re-estimated recoverable amount is ₹ 2,56,000 (higher of fair value less costs of disposal ₹ 2,90,000 and value in use ₹ 3,04,000)
- 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 31\textsuperscript{st} March 20X5.
- The carrying amount of other assets at 31\textsuperscript{st} March 20X5 after reversal of impairment loss will be ₹ 2,56,000.
- From 1\textsuperscript{st} April 20X5 the depreciation charge will be ₹ 16,000 i.e. (₹ 2,56,000/16)

5.11 DISCLOSURE

5.11.1 Disclosure – general

- 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 in other comprehensive income during the period; and
  d) the amount of reversals of impairment losses on revalued assets recognised in other comprehensive income during the period.
- The information required as above may be presented with other information disclosed for the class of assets. For example, this information may be included in a reconciliation of the carrying amount of property, plant and equipment, at the beginning and end of the period, as required by Ind AS 16.
5.11.2 Entities reporting segment information

- An entity that reports segment information in accordance with Ind AS 108 shall disclose the following for each reportable segment:
  
a) the amount of impairment losses recognised in profit or loss and in other comprehensive income during the period; and

b) the amount of reversals of impairment losses recognised in profit or loss and in other comprehensive income during the period.

5.11.3 Impairment losses recognised or reversed in the period

- An entity is required to disclose the following for each material impairment loss recognised or reversed during the period for an individual asset, including goodwill, or a cash-generating unit:

a) the events and circumstances that led to the recognition or reversal of the impairment loss;

b) the amount of the impairment loss recognised or reversed;

c) for an individual asset:
   
   (i) the nature of the asset; and

   (ii) if the entity reports segment information in accordance with Ind AS 108, the reportable segment to which the asset belongs;

d) for a cash-generating unit:

   (i) a description of the cash-generating unit (such as whether it is a product line, a plant, a business operation, a geographical area, or a reportable segment as defined in Ind AS 108);

   (ii) the amount of the impairment loss recognised or reversed by class of assets and, if the entity reports segment information in accordance with Ind AS 108, by reportable segment; and

   (iii) if the aggregation of assets for identifying the cash-generating unit has changed since the previous estimate of the cash-generating unit’s recoverable amount (if any), a description of the current and former way of aggregating assets and the reasons for changing the way the cash-generating unit is identified;

e) the recoverable amount of the asset or CGU, and whether the recoverable amount of the asset (cash-generating unit) is its fair value less costs of disposal or its value in use;

f) if recoverable amount is fair value less costs of disposal, the entity shall disclose the following information:
(i) the level of the fair value hierarchy (refer Ind AS 113) within which the fair value measurement of the asset (cash-generating unit) is categorised in its entirety (without taking into account whether the ‘costs of disposal’ are observable);

(ii) for fair value measurements categorised within Level 2 and Level 3 of the fair value hierarchy, a description of the valuation technique(s) used to measure fair value less costs of disposal. If there has been a change in valuation technique, the entity shall disclose that change and the reason(s) for making it; and

(iii) for fair value measurements categorised within Level 2 and Level 3 of the fair value hierarchy, each key assumption on which management has based its determination of fair value less costs of disposal. Key assumptions are those to which the asset’s (cash-generating unit’s) recoverable amount is most sensitive. The entity shall also disclose the discount rate(s) used in the current measurement and previous measurement if fair value less costs of disposal is measured using a present value technique.

g) if recoverable amount is value in use, the discount rate(s) used in the current estimate and previous estimate (if any) of value in use.

5.11.4 Other impairment losses/reversals material in aggregate to the financial statements

An entity shall disclose the following information for the aggregate impairment losses and the aggregate reversals of impairment losses recognised during the period for which no information is disclosed in above paragraph:

a) the main classes of assets affected by impairment losses and the main classes of assets affected by reversals of impairment losses; and

b) the main events and circumstances that led to the recognition of these impairment losses and reversals of impairment losses.

5.11.5 Unallocated goodwill

If any portion of the goodwill acquired in a business combination during the period has not been allocated to a cash-generating unit (group of units) at the end of the reporting period, the amount of the unallocated goodwill shall be disclosed together with the reasons why that amount remains unallocated.

5.11.6 Information to be disclosed for CGUs to which significant goodwill or indefinite – life intangible assets have been allocated

An entity is required to disclose the following information for each cash-generating unit (group of units) for which the carrying amount of goodwill or intangible assets with indefinite useful lives
allocated to that unit (group of units) is significant in comparison with the entity’s total carrying amount of goodwill or intangible assets with indefinite useful lives:

a) the carrying amount of goodwill allocated to the unit (group of units);

b) the carrying amount of intangible assets with indefinite useful lives allocated to the unit (group of units);

c) the basis on which the unit’s (group of units’) recoverable amount has been determined (ie value in use or fair value less costs of disposal);

d) if the unit’s (group of units’) recoverable amount is based on value in use:

(i) each key assumption on which management has based its cash flow projections for the period covered by the most recent budgets/forecasts. Key assumptions are those to which the unit’s (group of units’) recoverable amount is most sensitive.

(ii) a description of management’s approach to determining the value(s) assigned to each key assumption, whether those value(s) reflect past experience or, if appropriate, are consistent with external sources of information, and, if not, how and why they differ from past experience or external sources of information.

(iii) the period over which management has projected cash flows based on financial budgets/forecasts approved by management and, when a period greater than five years is used for a cash-generating unit (group of units), an explanation of why that longer period is justified.

(iv) the growth rate used to extrapolate cash flow projections beyond the period covered by the most recent budgets/forecasts, and the justification for using any growth rate that exceeds the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market to which the unit (group of units) is dedicated.

(v) the discount rate(s) applied to the cash flow projections.

e) if the unit’s (group of units’) recoverable amount is based on fair value less costs of disposal, the valuation technique(s) used to measure fair value less costs of disposal. An entity is not required to provide the disclosures required by Ind AS 113. If fair value less costs of disposal is not measured using a quoted price for an identical unit (group of units), an entity shall disclose the following information:

(i) each key assumption on which management has based its determination of fair value less costs of disposal. Key assumptions are those to which the unit’s (group of units’) recoverable amount is most sensitive;

(ii) a description of management’s approach to determining the value (or values) assigned to each key assumption, whether those values reflect past experience or, if appropriate, are consistent with external sources of information, and, if not, how and why they differ from past experience or external sources of information;
(iii) the level of the fair value hierarchy (see Ind AS 113 within which the fair value measurement is categorised in its entirety (without giving regard to the observability of 'costs of disposal'); and

(iv) if there has been a change in valuation technique, the change and the reason(s) for making it. If fair value less costs of disposal is measured using discounted cash flow projections, an entity shall disclose the following information:

(v) the period over which management has projected cash flows;

(vi) the growth rate used to extrapolate cash flow projections; and

(vii) the discount rate(s) applied to the cash flow projections.

f) if a reasonably possible change in a key assumption on which management has based its determination of the unit’s (group of units’) recoverable amount would cause the unit’s (group of units’) carrying amount to exceed its recoverable amount:

(i) the amount by which the unit’s (group of units’) recoverable amount exceeds its carrying amount;

(ii) the value assigned to the key assumption; and

(iii) the amount by which the value assigned to the key assumption must change, after incorporating any consequential effects of that change on the other variables used to measure recoverable amount, in order for the unit’s (group of units’) recoverable amount to be equal to its carrying amount.

5.11.7 Information to be disclosed for CGUs to which insignificant goodwill or indefinite-life intangible assets have been allocated

- If some or all of the carrying amount of goodwill or intangible assets with indefinite useful lives is allocated across multiple cash-generating units (groups of units), and the amount so allocated to each unit (group of units) is not significant in comparison with the entity’s total carrying amount of goodwill or intangible assets with indefinite useful lives, that fact shall be disclosed, together with the aggregate carrying amount of goodwill or intangible assets with indefinite useful lives allocated to those units (groups of units).

- In addition, if the recoverable amounts of any of those units (groups of units) are based on the same key assumption(s) and the aggregate carrying amount of goodwill or intangible assets with indefinite useful lives allocated to them is significant in comparison with the entity’s total carrying amount of goodwill or intangible assets with indefinite useful lives, an entity shall disclose that fact, together with:
  a) the aggregate carrying amount of goodwill allocated to those units (groups of units);
  b) the aggregate carrying amount of intangible assets with indefinite useful lives allocated to those units (groups of units);
c) a description of the key assumption(s);

d) a description of management’s approach to determining the value(s) assigned to the key assumption(s), whether those value(s) reflect past experience or, if appropriate, are consistent with external sources of information, and, if not, how and why they differ from past experience or external sources of information; and

e) if a reasonably possible change in the key assumption(s) would cause the aggregate of the units’ (groups of units’) carrying amounts to exceed the aggregate of their recoverable amounts:

- (i) the amount by which the aggregate of the units’ (groups of units’) recoverable amounts exceeds the aggregate of their carrying amounts;

- (ii) the value(s) assigned to the key assumption(s); and

- (iii) the amount by which the value(s) assigned to the key assumption(s) must change, after incorporating any consequential effects of the change on the other variables used to measure recoverable amount, in order for the aggregate of the units’ (groups of units’) recoverable amounts to be equal to the aggregate of their carrying amounts.

The most recent detailed calculation made in a preceding period of the recoverable amount of a cash-generating unit (group of units) may, in accordance with paragraph 24 or 99, be carried forward and used in the impairment test for that unit (group of units) in the current period provided specified criteria are met. When this is the case, the information for that unit (group of units) that is incorporated into the disclosures required by paragraphs 134 and 135 relate to the carried forward calculation of recoverable amount.

Illustration 14

From the following details of an asset, find out:

(a) Impairment loss and its treatment.

(b) Current year depreciation at the year end.

Particulars of assets:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of asset</td>
<td>₹ 56 lakhs</td>
</tr>
<tr>
<td>Useful life</td>
<td>10 years</td>
</tr>
<tr>
<td>Salvage value</td>
<td>Nil</td>
</tr>
</tbody>
</table>
Carrying value at the beginning of the year | ₹ 27.30 lakhs
---|---
Remaining useful life | 3 years
Recoverable amount at the beginning of the year | ₹ 12 lakhs
Upward revaluation done in last year | ₹ 14 lakhs

Solution

Impairment loss

Impairment loss = Carrying amount of the asset – Recoverable amount

= ₹ 27.30 lakhs – ₹ 12 lakhs

= ₹ 15.30 lakhs

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:

(a) 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.

(b) 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 lakhs. The balance amount of ₹ 1.30 lakhs will be recognised as an expense in the profit and loss account.

Current year depreciation

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

Illustration 15

Venus Ltd. has an asset, which is carried in the Balance Sheet on March 31, 20X1 at ₹ 500 lakhs. As at that date the value in use is ₹ 400 lakhs and the fair value less costs to sells is ₹ 375 lakhs.
From the above data:
(a) Calculate impairment loss.
(b) Prepare journal entries for adjustment of impairment loss.
(c) Show, how impairment loss will be shown in the Balance Sheet.

Solution

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 lakhs
Step 2: Value in use: ₹ 400 lakhs
Step 3: Recoverable amount, i.e., higher of ‘fair value less costs to sell’ & ‘value in use’.
    Thus, recoverable amount is ₹ 400 lakhs
Step 4: Carrying amount of the asset ₹ 500 lakhs
Step 5: Impairment loss, i.e., excess of amount computed in step 4 over amount computed in Step 3.
    ₹ 100 lakhs (being the difference between ₹ 500 lakhs and ₹ 400 lakhs).

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 lakhs will be charged to Profit & Loss Account.

### Journal Entries

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Dr. Amt.</th>
<th>Cr. Amt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.3.20X1</td>
<td>Impairment Loss A/c</td>
<td>Dr.</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>To Assets A/c</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(Being impairment loss on an asset recognised)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.3.20X1</td>
<td>Statement of Profit &amp; Loss</td>
<td>Dr.</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>To Impairment Loss A/c</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(Being impairment loss transferred to statement of profit and loss)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Illustration 16

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 for an individual magazine title?

Solution

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.

Illustration 17

A mining entity owns a private railway to support its mining activities. The private railway could be sold only 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. Should the entity determine the recoverable amount for the private railway or for the mining business as a whole?

Solution

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. Therefore, the entity estimates the recoverable amount of the cash-generating unit to which the private railway belongs, i.e., the mine as a whole.

Illustration 18

A bus company provides services under contract with a municipality that requires minimum service on each of seven 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. Should the company determine the recoverable amount for an individual asset or for a cash generating unit?

Solution

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 is the cash inflows generated by the seven routes together. The cash-generating unit for each route is the bus company as a whole.

**Illustration 19**

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, what are 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?

**Solution**

(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.

**Illustration 20**

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, what are the cash-generating units for Plant 1, Plant 2 and Plant 3?

Solution

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.

Illustration 21

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.

Is the mine required to be impaired?

Solution

The cash-generating unit’s fair value less costs to sell 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. Thus, there is no impairment loss.
Illustration 22

An entity sells for ₹100 crores an operation that was part of a cash-generating unit to which goodwill has been allocated. The goodwill allocated to the unit cannot be identified or associated with an asset group at a level lower than that unit, except arbitrarily. The recoverable amount of the portion of the cash-generating unit retained is ₹300 crores. How the goodwill should be allocated to the operation sold?

Solution

Since goodwill allocated to the cash-generating unit cannot be non-arbitrarily identified or associated with an asset group at a level lower than that unit, the goodwill associated with the operation disposed of is measured on the basis of the relative values of the operation disposed of and the portion of the unit retained. Therefore, 25% of the goodwill allocated to the cash-generating unit is included in the carrying amount of the operation that is sold.

Illustration 23

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. How the goodwill should be reallocated to B, C and D?

Solution

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.

Illustration 24

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 was 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.

Solution

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Goodwill (₹ in crores)</th>
<th>Identifiable assets (₹ in crores)</th>
<th>Total (₹ in crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical cost</td>
<td>200</td>
<td>1,000</td>
<td>1,200</td>
</tr>
<tr>
<td>Depreciation (20X1-20X2)</td>
<td></td>
<td>(100)</td>
<td>(100)</td>
</tr>
<tr>
<td>Carrying amount</td>
<td>200</td>
<td>900</td>
<td>1,100</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Goodwill</th>
<th>Identifiable assets</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impairment loss</td>
<td>(200)</td>
<td>(300)</td>
<td>(500)</td>
</tr>
<tr>
<td>Carrying amount after impairment loss</td>
<td>-</td>
<td>600</td>
<td>600</td>
</tr>
</tbody>
</table>

**Illustration 25**

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:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Carrying value (before goodwill allocation)</th>
<th>Recoverable amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>₹ ’000</td>
<td>₹ ’000</td>
</tr>
<tr>
<td>A</td>
<td>600</td>
<td>740</td>
</tr>
<tr>
<td>B</td>
<td>550</td>
<td>650</td>
</tr>
<tr>
<td>C</td>
<td>450</td>
<td>400</td>
</tr>
</tbody>
</table>
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.

Solution

1. Computation of goodwill on acquisition

<table>
<thead>
<tr>
<th>Particular</th>
<th>Amount (₹ '000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of investment (8,00,000 x 2/5 x ₹ 4)</td>
<td>1,280</td>
</tr>
<tr>
<td>Fair value of non-controlling interest (2,00,000 x ₹ 1.4)</td>
<td>280</td>
</tr>
<tr>
<td>Fair value of identifiable net assets at date of acquisition</td>
<td>(1,300)</td>
</tr>
<tr>
<td>So goodwill equals</td>
<td>260</td>
</tr>
</tbody>
</table>

 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

<table>
<thead>
<tr>
<th>Unit</th>
<th>Carrying value</th>
<th>Recoverable Amount</th>
<th>Impairment Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Allocation</td>
<td>Allocation of goodwill (2:2:1)</td>
<td>After Allocation</td>
</tr>
<tr>
<td>A</td>
<td>600</td>
<td>104</td>
<td>704</td>
</tr>
<tr>
<td>B</td>
<td>550</td>
<td>104</td>
<td>654</td>
</tr>
<tr>
<td>C</td>
<td>400*</td>
<td>52</td>
<td>452</td>
</tr>
</tbody>
</table>

* After writing down assets in the individual CGU to recoverable amount.
3. Calculation of closing goodwill

<table>
<thead>
<tr>
<th>Particular</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill arising on acquisition (W1)</td>
<td>260</td>
</tr>
<tr>
<td>Impairment loss (W2)</td>
<td>(56)</td>
</tr>
<tr>
<td>So closing goodwill equals</td>
<td>204</td>
</tr>
</tbody>
</table>

4. Calculation of overall impairment loss

<table>
<thead>
<tr>
<th>Particular</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>on goodwill (W3)</td>
<td>56</td>
</tr>
<tr>
<td>on assets in unit C (450 – 400)</td>
<td>50</td>
</tr>
<tr>
<td>So total loss equals</td>
<td>106</td>
</tr>
</tbody>
</table>

₹ 21.2 (20%) of the above is allocated to the NCI with the balance allocated to the shareholders of Sun Ltd.

5.12 SIGNIFICANT DIFFERENCES IN IND AS 36 VIS-À-VIS AS 28

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particular</th>
<th>Ind AS 36</th>
<th>AS 28</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Financial Assets</td>
<td>Ind AS 36 applies to financial assets classified as subsidiaries, as defined in Ind AS 110, associates as defined in Ind AS 28, joint ventures as defined in Ind AS 111.</td>
<td>AS 28 does not apply to the above assets</td>
</tr>
<tr>
<td>2.</td>
<td>Biological Assets:</td>
<td>Ind AS 36 specifically excludes biological assets related to agricultural activity</td>
<td>AS 28 does not specifically exclude biological assets</td>
</tr>
<tr>
<td>3.</td>
<td>Impairment Testing for an Intangible</td>
<td>Ind AS 36 requires annual impairment testing for an</td>
<td>AS 28 does not require the annual impairment testing for</td>
</tr>
<tr>
<td></td>
<td>Asset with an Indefinite Useful Life</td>
<td>intangible asset with an indefinite useful life or not yet available for use and goodwill acquired in a business combination.</td>
<td>the goodwill unless there is an indication of impairment.</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>4.</td>
<td><strong>Additional Guidance</strong></td>
<td>Ind AS 36 gives additional guidance on, <em>inter alia</em>, the following aspects: (a) estimating the value in use of an asset; (b) for managements to assess the reasonableness of the assumptions on which cash flows are based; and (c) using present value techniques in measuring an asset’s value in use.</td>
<td>AS 28 does not provide such guidance</td>
</tr>
<tr>
<td>5.</td>
<td><strong>Reversal of Goodwill</strong></td>
<td>Ind AS 36 prohibits the recognition of reversals of impairment loss for goodwill.</td>
<td>AS 28 requires that the impairment loss recognised for goodwill should be reversed in a subsequent period when it was caused by a specific external event of an exceptional nature that is not expected to recur and subsequent external events that have occurred that reverse the effect of that event</td>
</tr>
<tr>
<td>6.</td>
<td><strong>Bottom up and Top Down Test</strong></td>
<td>In Ind AS 36, goodwill is allocated to cash-generating units (CGUs) or groups of AS 28, goodwill is allocated to CGUs only when the allocation can be done on a reasonable</td>
<td></td>
</tr>
</tbody>
</table>
CGUs that are expected to benefit from the synergies of the business combination from which it arose. There is no bottom-up or top-down approach for allocation of goodwill. If that requirement is not met for a specific CGU under review, the smallest CGU to which the carrying amount of goodwill can be allocated on a reasonable and consistent basis must be identified and the impairment test carried out at this level. Thus, when all or a portion of goodwill cannot be allocated reasonably and consistently to the CGU being tested for impairment, two levels of impairment tests are carried out, viz., bottom-up test and top-down test.
TEST YOUR KNOWLEDGE

Practical Questions

1. 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.

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

<table>
<thead>
<tr>
<th>Cash-generating units</th>
<th>Carrying amount</th>
<th>(₹ in crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>500</td>
<td>10</td>
</tr>
<tr>
<td>B</td>
<td>750</td>
<td>20</td>
</tr>
<tr>
<td>C</td>
<td>1,100</td>
<td>20</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Corporate asset</th>
<th>Carrying amount</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>600</td>
<td>The carrying amount of X can be allocated on a reasonable basis (i.e., pro rata basis) to the individual cash-generating units.</td>
</tr>
<tr>
<td>Y</td>
<td>200</td>
<td>The carrying amount of Y cannot be allocated on a reasonable basis to the individual cash-generating units.</td>
</tr>
</tbody>
</table>
Recoverable amount as on March 31, 20X1 is as follows:

<table>
<thead>
<tr>
<th>Cash-generating units</th>
<th>Recoverable amount (₹ in crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>600</td>
</tr>
<tr>
<td>B</td>
<td>900</td>
</tr>
<tr>
<td>C</td>
<td>1,400</td>
</tr>
<tr>
<td>ABC Ltd.</td>
<td>3,200</td>
</tr>
</tbody>
</table>

Calculate the impairment loss, if any. Ignore decimals.

3. 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 to sell 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. Whether any impairment loss should be recognised for the machine in the following cases?

(a) Budgets/forecasts approved by management reflect no commitment of management to replace the machine.

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

(i) may differ from its fair value less costs to sell; and
(ii) 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.

(b) 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.

4. 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.

5. A Ltd. purchased a machinery of ₹ 100 crores 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:

<table>
<thead>
<tr>
<th>Financial year</th>
<th>Estimated future cash flows (₹ in crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X2-20X3</td>
<td>15</td>
</tr>
<tr>
<td>20X3-20X4</td>
<td>30</td>
</tr>
<tr>
<td>20X4-20X5</td>
<td>40</td>
</tr>
<tr>
<td>20X5-20X6</td>
<td>10</td>
</tr>
</tbody>
</table>

Discount rate applicable : 10%
Fair value less costs to sell as on March 31, 20X2 : ₹ 70 crores

Calculate the impairment loss, if any.

6. Assuming in the above question, as on March 31, 20X3, there is no change in the estimated future cash flows and discount rate. Fair value less costs to sell as on March 31, 20X3 is ₹ 40 crores. How should it be dealt with under Ind AS 36?

<table>
<thead>
<tr>
<th>Financial year</th>
<th>Estimated cash flows (₹ in crores)</th>
<th>Present value factor @ 10%</th>
<th>Present value</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X3-20X4</td>
<td>30</td>
<td>0.9091</td>
<td>27.27</td>
</tr>
<tr>
<td>20X4-20X5</td>
<td>40</td>
<td>0.8264</td>
<td>33.06</td>
</tr>
<tr>
<td>20X5-20X6</td>
<td>10</td>
<td>0.7513</td>
<td>7.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>67.84</td>
</tr>
</tbody>
</table>

7. A Ltd. purchased an asset of ₹ 100 lakhs on April 1, 20X0. It has useful life of 4 years with no residual value. Recoverable amount of the asset is as follows:
Calculate the amount of impairment loss or its reversal, if any, on March 31, 20X1, March 31, 20X2 and March 31, 20X3.

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash flows</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X1-20X2</td>
<td>US $ 80</td>
</tr>
<tr>
<td>20X2-20X3</td>
<td>US $ 100</td>
</tr>
<tr>
<td>20X3-20X4</td>
<td>US $ 20</td>
</tr>
</tbody>
</table>

Following information has been provided:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>India</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicable discount rate</td>
<td>15%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Exchange rates are as follows:

<table>
<thead>
<tr>
<th>As on</th>
<th>Exchange rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 31, 20X1</td>
<td>₹ 45/US $</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>As on</th>
<th>Expected Exchange rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 31, 20X2</td>
<td>₹ 48/US $</td>
</tr>
<tr>
<td>March 31, 20X3</td>
<td>₹ 51/US $</td>
</tr>
<tr>
<td>March 31, 20X4</td>
<td>₹ 55/US $</td>
</tr>
</tbody>
</table>

Calculate value in use as on March 31, 20X1.
9. Cash flow is ₹ 100, ₹ 200 or ₹ 300 with probabilities of 10%, 60% and 30%, respectively. Calculate expected cash flows.

10. 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.

11. 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).

Answers to Practical Questions

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

2. 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.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount</td>
<td>500</td>
<td>750</td>
<td>1,100</td>
<td>2,350</td>
</tr>
<tr>
<td>Useful life</td>
<td>10 years</td>
<td>20 years</td>
<td>20 years</td>
<td>—</td>
</tr>
<tr>
<td>Weight based on useful life</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Carrying amount (after assigning weight)</td>
<td>500</td>
<td>1,500</td>
<td>2,200</td>
<td>4,200</td>
</tr>
<tr>
<td>Pro-rata allocation of X</td>
<td>12%</td>
<td>36%</td>
<td>52%</td>
<td>100%</td>
</tr>
<tr>
<td>(500/4,200)</td>
<td>(1,500/4,200)</td>
<td>(2,200/4,200)</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Allocation of carrying amount of X</td>
<td>72</td>
<td>216</td>
<td>312</td>
<td>600</td>
</tr>
<tr>
<td>Carrying amount (after allocation of X)</td>
<td>572</td>
<td>966</td>
<td>1,412</td>
<td>2,950</td>
</tr>
</tbody>
</table>
Calculation of impairment loss

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

(a) Impairment loss of each cash-generating units

<table>
<thead>
<tr>
<th>Particulars</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount (after allocation of X)</td>
<td>572</td>
<td>966</td>
<td>1,412</td>
</tr>
<tr>
<td>Recoverable amount</td>
<td>600</td>
<td>900</td>
<td>1,400</td>
</tr>
<tr>
<td>Impairment loss</td>
<td>-</td>
<td>66</td>
<td>12</td>
</tr>
</tbody>
</table>

(b) Allocation of the impairment loss

<table>
<thead>
<tr>
<th>Allocation to</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Other assets in cash-generating units</td>
<td>51</td>
<td>9</td>
</tr>
<tr>
<td>Impairment loss</td>
<td>66</td>
<td>12</td>
</tr>
</tbody>
</table>

(66 x 216/966) for 15 = 15
(66 x 750/966) for 51 = 51
(12 x 312/1,412) for 3 = 3
(12 x 1,100/1,412) for 9 = 9

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

<table>
<thead>
<tr>
<th>Particulars</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>X</th>
<th>Y</th>
<th>ABC Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount</td>
<td>500</td>
<td>750</td>
<td>1,100</td>
<td>600</td>
<td>200</td>
<td>3,150</td>
</tr>
<tr>
<td>Impairment loss (Step I)</td>
<td>-</td>
<td>(51)</td>
<td>(9)</td>
<td>(18)</td>
<td>-</td>
<td>(78)</td>
</tr>
<tr>
<td>Carrying amount (after Step I)</td>
<td>500</td>
<td>699</td>
<td>1,091</td>
<td>582</td>
<td>200</td>
<td>3,072</td>
</tr>
<tr>
<td>Recoverable amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,200</td>
</tr>
<tr>
<td>Impairment loss for the ‘larger’ cash-generating unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nil</td>
</tr>
</tbody>
</table>

3. The machine’s value in use can be estimated to be close to its fair value less costs to sell. 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 to sell is less than its carrying amount, an impairment loss is recognised for the machine.

4. 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**

<table>
<thead>
<tr>
<th>On March 31, 20X2</th>
<th>Goodwill of subsidiary (₹ )</th>
<th>Net identifiable assets (₹ )</th>
<th>Total (₹ )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount</td>
<td>400</td>
<td>1,350</td>
<td>1,750</td>
</tr>
<tr>
<td>Unrecognised non-controlling interests</td>
<td>100</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td><strong>Adjusted carrying amount</strong></td>
<td><strong>500</strong></td>
<td><strong>1,350</strong></td>
<td><strong>1,850</strong></td>
</tr>
<tr>
<td>Recoverable amount</td>
<td></td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Impairment loss</strong></td>
<td></td>
<td></td>
<td><strong>850</strong></td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>On March 31, 20X2</th>
<th>Goodwill of subsidiary (₹)</th>
<th>Net identifiable assets (₹)</th>
<th>Total (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount</td>
<td>400</td>
<td>1,350</td>
<td>1,750</td>
</tr>
<tr>
<td>Impairment loss</td>
<td>(400)</td>
<td>(350)</td>
<td>(750)</td>
</tr>
<tr>
<td>Carrying amount after impairment loss</td>
<td>-</td>
<td>1,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Financial year</th>
<th>Estimated cash flows (₹ in crores)</th>
<th>Present value factor @ 10%</th>
<th>Present value</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X2-20X3</td>
<td>15</td>
<td>0.9091</td>
<td>13.64</td>
</tr>
<tr>
<td>20X3-20X4</td>
<td>30</td>
<td>0.8264</td>
<td>24.79</td>
</tr>
<tr>
<td>20X4-20X5</td>
<td>40</td>
<td>0.7513</td>
<td>30.05</td>
</tr>
<tr>
<td>20X5-20X6</td>
<td>10</td>
<td>0.6830</td>
<td>6.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>75.31</td>
</tr>
</tbody>
</table>
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 crores (after providing for one year depreciation @ ₹ 20 crore). Therefore, the impairment loss of ₹ 4.69 crore should be provided in the books.

6. 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 is ₹ 56.48 crores (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.

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

7. **As on March 31, 20X1**

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

Therefore, an impairment loss of ₹ 15 lakhs 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 lakhs.

**As on March 31, 20X2**

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

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 lakhs |
| Depreciation (₹ 40 lakhs/2 years) | ₹ 20 lakhs |
Carrying amount of the asset (closing balance) | ₹ 20 lakhs
---|---
Recoverable amount (given) | ₹ 28 lakhs

Since, the recoverable amount of the asset exceeds the carrying amount of the asset by ₹ 8 lakhs, 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 lakhs. Therefore, the reversal of an impairment loss of ₹ 5 lakhs should be done as on March 31, 20X3.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash flows (US $)</th>
<th>Present value factor @ 10%</th>
<th>Discounted cash flows (US $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X1-20X2</td>
<td>80</td>
<td>0.9091</td>
<td>72.73</td>
</tr>
<tr>
<td>20X2-20X3</td>
<td>100</td>
<td>0.8264</td>
<td>82.64</td>
</tr>
<tr>
<td>20X3-20X4</td>
<td>20</td>
<td>0.7513</td>
<td>15.03</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Cash flow</th>
<th>Probability</th>
<th>Expected cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>10%</td>
<td>10</td>
</tr>
<tr>
<td>200</td>
<td>60%</td>
<td>120</td>
</tr>
<tr>
<td>300</td>
<td>30%</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>220</td>
</tr>
</tbody>
</table>

The expected cash flow is ₹ 220.
10.

<table>
<thead>
<tr>
<th>Years</th>
<th>Cash flow</th>
<th>P.V.F.</th>
<th>Present value</th>
<th>Probability</th>
<th>Expected cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,000</td>
<td>0.95238</td>
<td>952.38</td>
<td>10%</td>
<td>95.24</td>
</tr>
<tr>
<td>2</td>
<td>1,000</td>
<td>0.90273</td>
<td>902.73</td>
<td>60%</td>
<td>541.64</td>
</tr>
<tr>
<td>3</td>
<td>1,000</td>
<td>0.85161</td>
<td>851.61</td>
<td>30%</td>
<td>255.48</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>892.36</td>
</tr>
</tbody>
</table>

The expected present value is ₹ 892.36.

11. (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)].