CA-FINAL
FINANCIAL REPORTING

Module-1:
(As per Latest Amendments Made by ICAI & MCA)

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Dedicated to
BABA VISHAN PURI JI MAHARAJ
BABA LAKSHMAN PURI JI MAHARAJ
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</table>
CONCEPT 1: OBJECTIVE

The objective of this Standard is to prescribe the accounting treatment for inventories. This Standard provides the guidance for determining the cost of inventories and for subsequent recognition as an expense, including any write-down to net realizable value.

It provides guidance on the techniques for the measurement of cost, such as the standard cost method or retail method. It also outlines acceptable methods of determining cost, including specific identification, first-in-first-out and weighted average cost method.

CONCEPT 2: SCOPE

- This standard is applicable to all inventories except:
  - (a) Financial instruments (to be accounted under Ind AS 32, Financial Instruments: Presentation and Ind AS 109, Financial Instruments);
  - (b) Biological assets (i.e. living animals or plants) related to agricultural activity and agricultural produce at the point of harvest (to be accounted under Ind AS 41, Agriculture); and
  - (c) Work-in-progress arising under construction contracts including directly related service contracts (accounted under Ind AS 115 Revenue from Contracts)

- This Standard does not apply to the measurement of inventories held by:
  - (a) Producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products, to the extent that they are measured at net realizable value in accordance with well-established practices in those industries. When such inventories are measured at net realizable value, changes in that value are recognised in profit or loss in the period of the change.
  - (b) Commodity broker-traders who measure their inventories at fair value less costs to sell. When such inventories are measured at net realizable value/ fair value less costs to sell, changes in those values are to be recognised in profit or loss in the period of the change.

CONCEPT 3: RELEVANT DEFINITIONS

The following are the key terms used in this standard:

1) **Inventories are assets:**
   - (a) held for sale in the ordinary course of business; (Finished Goods)
(b) in the process of production for such sale; or (Work in progress)

(c) in the form of materials or supplies to be consumed in the production process or in the rendering of services. (Raw material)

2) **Inventories encompass of:**
   a) goods purchased and held for resale (e.g. merchandise purchased by a retailer and held for resale, or land and other property held for resale);
   b) finished goods produced, or work in progress being produced, by the entity; and includes
   c) materials and supplies awaiting use in the production process.

In the case of a service provider, inventories include the costs of the service, for which the entity has not yet recognised the related revenue (see Ind AS 115 Revenue from Contracts).

3) **Net realisable value** is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Net realisable value refers to the net amount that an entity expects to realize from the sale of inventory in the ordinary course of business. Fair value reflects the price at which an orderly transaction to sell the same inventory in the principal (or most advantageous) market for that inventory would take place between market participants at the measurement date. The former is an entity-specific value; the latter is not. Net realisable value for inventories may not equal fair value less costs to sell.

4) **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.)
CONCEPT 4: MEASUREMENT OF INVENTORIES

Inventories shall be measured at the lower of cost and net realisable value.

At the lower of

- Cost
- Net realisable value

1) Cost of inventories

Cost of Inventories comprises:

a) All costs of purchase;

b) Costs of conversion; and

c) Other costs incurred in bringing the inventories to their present location and condition.

- Cost of Purchase
  - Conversion Cost
  - Other cost to bring inventory to present location and condition

2) Cost of purchase

The costs of purchase of inventories include:

a) The purchase price,

b) Import duties and other taxes (other than those subsequently recoverable by the entity from the taxing authorities),

c) Transport, handling and

d) Other costs directly attributable to the acquisition of finished goods, materials and services.

Any trade discounts, rebates and other similar items are deducted in determining the costs of purchase of inventory.
### 3) **Cost of conversion**

The costs of conversion of inventories include costs directly related to the units of production, such as:

- **a)** direct material, direct labour and other direct costs; and
- **b)** a systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods.

- **Fixed production overheads** are those indirect costs of production that remain relatively constant regardless of the volume of production, such as depreciation and maintenance of factory buildings and equipment, and the cost of factory management and administration.

- **Allocation of fixed production overheads** to the costs of conversion is based on the normal capacity of the production facilities. Normal capacity is the production expected to be achieved on average over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. The actual level of production may be used if it approximates normal capacity.

- **When production levels are abnormally low**, unallocated overheads are recognised as an expense in the period in which they are incurred. In periods of abnormally high production, the amount of fixed overhead allocated to each unit of production is decreased so that
inventories are not measured above cost.

- Variable production overheads are those indirect costs of production that vary directly, or nearly directly, with the volume of production, such as indirect materials and indirect labour. Variable production overheads are allocated to each unit of production on the basis of the actual use of the production facilities.

**EXAMPLE:**
Pluto Ltd. has a plant with the normal capacity to produce 5,00,000 units of a product per annum and the expected fixed overhead is ₹15,00,000. Fixed overhead on the basis of normal capacity is ₹3 per unit (15,00,000 | 5,00,000).

**CASE 1:**
Actual production is 5,00,000 units. Fixed overhead on the basis of normal capacity and actual overhead will lead to same figure of ₹15,00,000. Therefore, it is advisable to include this on normal capacity.

**CASE 2:**
Actual production is 3,75,000 units. Fixed overhead is not going to change with the change in output and will remain constant at ₹15,00,000, therefore, overheads on actual basis is ₹4 p|u (15,00,000 | 3,75,000).

Hence by valuing inventory at ₹4 each for fixed overhead purpose, it will be overvalued and the losses of ₹3,75,000 will also be included in closing inventory leading to a higher gross profit than actually earned.

Therefore, it is advisable to include fixed overhead per unit on normal capacity to actual production (3,75,000 X 3) ₹11,25,000 and balance ₹3,75,000 shall be transferred to Profit & Loss Account.

**CASE 3:**
Actual production is 7,50,000 units. Fixed overhead is not going to change with the change in output and will remain constant at ₹15,00,000, therefore, overheads on actual basis is ₹2 (15,00,000 | 7,50,000).

Hence by valuing inventory at ₹3 each for fixed overhead purpose, we will be adding the element of cost to inventory which actually has not been incurred. At ₹3 per unit, total fixed overhead comes to ₹22,50,000 whereas, actual fixed overhead expense is only ₹15,00,000. Therefore, it is advisable to include fixed overhead on actual basis (7,50,000 X 2) ₹15,00,000.
4) Other costs

- Other costs are included in the cost of inventories only to the extent that they are incurred in bringing the inventories to their present location and condition. **Cost to be excluded** from the cost of inventories and recognised as expenses in the period in which they are incurred are:
  
  a) abnormal amounts of wasted materials, labour or other production costs;
  
  b) storage costs, unless those costs are necessary in the production process before a further production stage;
  
  c) administrative overheads that do not contribute to bringing inventories to their present location and condition; and
  
  d) selling costs.

- The extent to which borrowing cost is included in the cost of inventories is determined on the basis of the requirement of Ind AS 23 Borrowing Costs.

- An entity may acquire inventories on deferred settlement terms. When the arrangement effectively contains a financing element, that element, for example a difference between the purchase prices for normal credit terms and the amount paid, is recognised as interest expense over the period of the financing.

**EXAMPLE 1: COST OF INVENTORY**

Venus Trading Company purchases cars from several countries and sells them to Asian countries. During the current year, this company has incurred following expenses:

1. Trade discounts on purchase.
2. Handling costs relating to imports
3. Salaries of accounting department
4. Sales commission paid to sales agents.
5. After sales warranty costs
6. Import duties
7. Costs of purchases (based on supplier’s invoices)
8. Freight expense
9. Insurance of purchases
10. Brokerage commission paid to indenting agents

Evaluate which costs are allowed by Ind AS 2 for inclusion in the cost of inventory in the books of Venus.
SOLUTION

Items number 1, 2, 6, 7, 8, 9, 10 are allowed by Ind AS 2 for the calculation of cost of inventories. Salaries of accounts department, sales commission, and after sale warranty costs are not considered to be the cost of inventory therefore they are not allowed by Ind AS 2 for inclusion in cost of inventory and are expensed off in the profit and loss account.

CONCEPT 5: ALLOCATION OF COST TO JOINT PRODUCTS AND BY-PRODUCTS

- A production process may result in more than one product being produced simultaneously. This is the case, for example, when joint products are produced or when there is a main product and a by-product.
- When the costs of conversion of each product are not separately identifiable, they are allocated between the products on a rational and consistent basis. The allocation may be based, for example, on the relative sales value of each product either at the stage in the production process when the products become separately identifiable, or at the completion of production.
- Most by-products, by their nature, are immaterial. When this is the case, they are often measured at net realisable value and this value is deducted from the cost of the main product. As a result, the carrying amount of the main product is not materially different from its cost.

CONCEPT 6: COST OF INVENTORIES OF SERVICE PROVIDER

To the extent that service providers have inventories, they measure them at the costs of their production. These costs consist primarily of the labour and other costs of personnel directly engaged in providing the service, including supervisory personnel, and attributable overheads. Labour and other costs relating to sales and general administrative personnel are not included but are recognised as expenses in the period in which they are incurred. The cost of inventories of a service provider does not include profit margins or non- attributable overheads that are often factored into prices charged by service providers.

CONCEPT 7: COST OF AGRICULTURAL PRODUCE HARVESTED FROM BIOLOGICAL ASSETS

In accordance with Ind AS 41, Agriculture, inventories comprising agricultural produce that an entity has harvested from its biological assets are measured on initial recognition at their fair value less costs to sell at the point of harvest. This is the cost of the inventories at that date for application of this Standard.
CONCEPT 8: TECHNIQUES FOR THE MEASUREMENT OF COST

- Techniques for the measurement of the cost of inventories, such as the standard cost method or the retail method, may be used for convenience if the results approximate to actual cost.

- **Standard Cost Method:** Cost is based on normal levels of materials and supplies, labour efficiency and capacity utilisation. They are regularly reviewed and revised where necessary.

  **Measurement Techniques**
  - Retail method
  - Standard cost

- **Retail Method:** Cost is determined by reducing the sales value of the inventory by the appropriate percentage gross margin. The percentage used takes into consideration inventory that has been marked down to below its original selling price. This method is often used in the retail industry for measuring inventories of rapidly changing items that have similar margins.

- The percentage used takes into consideration inventory that has been marked down to below its original selling price. An average percentage for each retail department is often used.

EXAMPLE 2: MEASUREMENT TECHNIQUES OF COST

Mars Fashions is a new luxury retail company located in Lajpat Nagar, New Delhi. Kindly advise the accountant of the company on the necessary accounting treatment for the following items:

(a) One of Company’s product lines is beauty products, particularly cosmetics such as lipsticks, moisturizers and compact make-up kits. The company sells hundreds of different brands of these products. Each product is quite similar, is purchased at similar prices and has a short lifecycle before a new similar product is introduced. The point of sale and inventory system is not yet fully functioning in this department. The sales manager of the cosmetic department is unsure of the cost of each product but is confident of the selling price and has reliably informed you that the Company, on average, make a gross margin of 65% on each line.

(b) Mars Fashions also sells handbags. The Company manufactures their own handbags as they wish to be assured of the quality and craftsmanship which goes into each handbag. The handbags are manufactured in India in the head office factory which has made handbags for the last fifty years. Normally, Mars manufactures 100,000 handbags a year in their handbag division which uses 15% of the space and overheads...
of the head office factory. The division employs ten people and is seen as being an efficient division within the overall company.

In accordance with Ind AS 2, explain how the items referred to in a) and b) should be measured.

**SOLUTION**

(a) The retail method can be used for measuring inventories of the beauty products. The cost of the inventory is determined by taking the selling price of the cosmetics and reducing it by the gross margin of 65% to arrive at the cost.

- The handbags can be measured using standard cost especially if the results approximate cost. Given that The company has the information reliably on hand in relation to direct materials, direct labour, direct expenses and overheads, it would be the best method to use to arrive at the cost of inventories.

**CONCEPT 9: INVENTORY ORDINARILY NOT INTERCHANGEABLE**

The cost of inventories of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects shall be assigned by using specific identification of their individual costs. Specific identification of cost means that specific costs are attributed to identified items of inventory.

**CONCEPT 10: INVENTORY ORDINARILY INTERCHANGEABLE**

- The costs of inventories, other than that are not ordinarily interchangeable and goods or services produced and segregated for specific projects, shall be assigned by using the first-in, first-out (FIFO) or weighted average cost formula.

- An entity shall use the same cost formula for all inventories having a similar nature and use to the entity. For inventories with a different nature or use, different cost formulas may be justified.

- **FIFO** formula assumes that the items of inventory that were purchased or produced first are sold first, and consequently the items remaining in inventory at the end of the period are those most recently purchased or produced.

- Under the **weighted average** cost formula, the cost of each item is determined from the weighted average of the cost of similar items at the beginning of a period and the cost of similar items purchased or produced during the period. The average may be calculated on a periodic basis, or as each additional shipment is received, depending upon the circumstances of the entity.
Specific identification of items of inventory

Identified actual costs

Other items of inventory

Apply either:
First-in-first out
Weighted Average

EXAMPLE 3

Mercury Ltd. uses a periodic inventory system. The following information relates to 20X1-20X2.

<table>
<thead>
<tr>
<th>Date</th>
<th>Particular</th>
<th>Unit</th>
<th>Cost p.u.</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>Inventory</td>
<td>200</td>
<td>10</td>
<td>2,000</td>
</tr>
<tr>
<td>May</td>
<td>Purchases</td>
<td>50</td>
<td>11</td>
<td>550</td>
</tr>
<tr>
<td>September</td>
<td>Purchases</td>
<td>400</td>
<td>12</td>
<td>4,800</td>
</tr>
<tr>
<td>February</td>
<td>Purchases</td>
<td>350</td>
<td>14</td>
<td>4,900</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,000</td>
<td></td>
<td>12,250</td>
</tr>
</tbody>
</table>

Physical inventory at 31.03.20X2 400 units. Calculate ending inventory value and cost of sales using:
(a) FIFO
(b) Weighted Average

SOLUTION

FIFO inventory 31.03.20X2

Cost of Sales

Weighted average cost per item

Weighted average inventory at 31.03.20X2

Cost of sales 20X1-20X2
CONCEPT 11: NET REALISABLE VALUE

Measurement of net realisable value

- Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. The cost of inventories may not be recoverable if those inventories are damaged, if they have become wholly or partially obsolete, or if their selling prices have declined.

- Estimates of net realisable value are based on the most reliable evidence available at the time the estimates are made, of the amount the inventories are expected to realise. These estimates take into consideration fluctuations of price or cost directly relating to events occurring after the end of the period to the extent that such events confirm conditions existing at the end of the period.

- Estimates of net realisable value also take into consideration the purpose for which the inventory is held. For example, the net realisable value of the quantity of inventory held to satisfy firm sales or service contracts is based on the contract price. If the sales contracts are for less than the inventory quantities held, the net realisable value of the excess is based on general selling prices.

- Inventories are usually written down to net realisable value item by item. It is not appropriate to write inventories down on the basis of a classification of inventory, for example, finished goods, or all the inventories in a particular operating segment.

Writing inventories down to net realisable value

Materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in which they will be incorporated are expected to be sold at or above cost. However, when a decline in the price of materials indicates that the cost of the finished products exceeds net realisable value, the materials are written down to net realisable value. In such circumstances, the replacement cost of the materials may be the best available measure of their net realisable value.

CONCEPT 12: REVERSALS OF WRITE-DOWNS

- A new assessment is made of net realisable value in each subsequent period. When the circumstances that previously caused inventories to be written down below cost no longer exist or when there is clear evidence of an increase in net realisable value because of changed economic circumstances, the amount of the write-down is reversed (ie the reversal is limited to the amount of the original write-down) so that the new carrying amount is the lower of the cost and the revised net realisable value.

- This occurs, for example, when an item of inventory that is carried at net realisable value, because its selling price has declined, is still on hand in a subsequent period and its selling price has increased.
EXAMPLE 4
Sun Pharma Limited, a renowned company in the field of pharmaceuticals has the following four items in inventory: The Cost and Net realizable value is given as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
<th>Net Realisable Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2,000</td>
<td>1,900</td>
</tr>
<tr>
<td>B</td>
<td>5,000</td>
<td>5,100</td>
</tr>
<tr>
<td>C</td>
<td>4,400</td>
<td>4,550</td>
</tr>
<tr>
<td>D</td>
<td>3,200</td>
<td>2,990</td>
</tr>
<tr>
<td>Total</td>
<td>14,600</td>
<td>14,540</td>
</tr>
</tbody>
</table>

Determine the value of Inventories:

a. On an item by item basis
b. On a group basis

SOLUTION
Inventories shall be measured at the lower of cost and net realisable value.

<table>
<thead>
<tr>
<th>Item by item basis :</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1,900</td>
</tr>
<tr>
<td>B</td>
<td>5,000</td>
</tr>
<tr>
<td>C</td>
<td>4,400</td>
</tr>
<tr>
<td>D</td>
<td>2,990</td>
</tr>
<tr>
<td></td>
<td><strong>14,290</strong></td>
</tr>
<tr>
<td>Group basis</td>
<td>14,540</td>
</tr>
</tbody>
</table>

CONCEPT 13 : DISCLOSURE
The financial statements shall disclose:

1) Accounting policies
   the accounting policies adopted in measuring inventories, including the cost formula used.

2) Analysis of carrying amount
   the total carrying amount of inventories and the carrying amount in classifications appropriate to the entity.
Common classifications of inventories are as follows:

a) Merchandise;
b) Production supplies;
c) Materials;
d) Work in progress; and
e) Finished goods.

The inventories of a service provider may be described as work in progress.

3) Inventories carried at fair value less costs to sell
the carrying amount of inventories carried at fair value less costs to sell.

4) Amounts recognised in profit or loss
   a) the amount of inventories recognised as an expense during the period;
   b) the amount of any write-down of inventories recognised as an expense in the period; and
   c) the amount of any reversal of any write-down that is recognised as a reduction in the amount of inventories recognised as expense in the period.

In addition, disclosure is required of the circumstances or events that led to the reversal of a write-down of inventories.

5) Inventories pledged as security
the carrying amount of inventories pledged as security for liabilities.

An entity adopts a format for profit or loss that results in amounts being disclosed other than the cost of inventories recognised as an expense during the period. Under this format, the entity presents an analysis of expenses using a classification based on the nature of expenses. In this case, the entity discloses the costs recognised as an expense for raw materials and consumables, labour costs and other costs together with the amount of the net change in inventories for the period.
## SIGNIFICANT DIFFERENCES IN IND AS VIS-À-VIS AS2

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Particular</th>
<th>Ind AS 2</th>
<th>AS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Subsequent</td>
<td>Ind AS 2 deals with the subsequent recognition of cost/ carrying amount of inventories as an expense</td>
<td>AS 2 does not provide the same</td>
</tr>
<tr>
<td>2.</td>
<td>Inventory of Service provider</td>
<td>In AS 2 provides explanation with regard to inventories of service providers</td>
<td>AS 2 does not contain such an explanation</td>
</tr>
<tr>
<td>3.</td>
<td>Machinery Spares</td>
<td>Ind AS 2 does not contain specific explanation in respect of such spares as this aspect is covered under Ind AS 16</td>
<td>AS 2 explains that inventories do not include spare parts, servicing equipment and standby equipment which meet the definition of property, plant and equipment, Plant and Equipment. Such items are accounted for in accordance with Accounting Standard (AS) 10, Property, Plant and Equipment.</td>
</tr>
<tr>
<td>4.</td>
<td>Inventory held by Commodity Broker-traders</td>
<td>Ind AS 2 does not apply to measurement of inventories held by commodity broker-traders, who measure their inventories at fair value less costs to sell.</td>
<td>This aspect is not there in the AS 2</td>
</tr>
<tr>
<td>5.</td>
<td>Definition of Fair Value and Distinction Between NRV and Fair Value</td>
<td>Ind AS 2 defines fair value and provides an explanation in respect of distinction between ‘net realisable value’ and ‘fair value’</td>
<td>AS 2 does not contain the definition of fair value and such explanation.</td>
</tr>
</tbody>
</table>
It also deals with the reversal of the write-down of inventories to net realisable value to the extent of the amount of original write-down, and the recognition and disclosure thereof in the financial statements.

<table>
<thead>
<tr>
<th>7.</th>
<th>Exclusion from its Scope but Guidance given</th>
<th>Ind AS 2 excludes from its scope only the measurement of inventories held by producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products though it provides guidance on measurement of such inventories.</th>
<th>AS 2 excludes from its scope such types of inventories.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Cost Formulae</td>
<td>Ind AS 2 requires the use of consistent cost formulas for all inventories having a similar nature and use to the entity.</td>
<td>AS 2 specifically provides that the formula used in determining the cost of an item of inventory should reflect the fairest possible approximation to the cost incurred in bringing the items of inventory to their present location and condition.</td>
</tr>
</tbody>
</table>
UN SOLV ED QUESTION

QUESTION NO 1
State with reference to AS, how will you value the inventories in the following case. For kilogram of Finished Goods consisted of Material cost Rs. 100 per kg. Direct Labour Cost Rs. 20 per kg. and Direct Variable Production Overhead Rs.10per kg. Fixed Production charges for the year on normal capacity of 1,00,000 kg. is Rs.10 Lakhs. 2,000 kg. of Finished Goods are on stock at the year end.

QUESTION NO 2
Lambodar Ltd’s normal production volume is 50,000 units and the Fixed Overheads are estimated at Rs. 5,00,000 Give the treatment of Fixed Production. OH under IND- AS-2 if actual production during a period was - (a) 42,000 units (b) 50,000 units and (c) 60,000 units.

QUESTION NO 3
Vaiabh Industries produces four Joint Products L,M, N and P from a joint process, incurring a cost of Rs. 571,200. Allocate the Joint Costs with the following information.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity Produced (in ‘000s)</td>
<td>10000 Kgs.</td>
<td>12000 Kgs.</td>
<td>14000 Kgs.</td>
<td>16000 Kgs.</td>
</tr>
<tr>
<td>Sales Price per Kg.</td>
<td>Rs.13</td>
<td>Rs. 17</td>
<td>Rs.19</td>
<td>Rs.22</td>
</tr>
<tr>
<td>Stock Qty. at the end of year</td>
<td>1,625 Kgs.</td>
<td>400 Kgs.</td>
<td>Nil</td>
<td>1,550 Kgs.</td>
</tr>
</tbody>
</table>

Also determine the value of Closing Stock in respect of the above products.

QUESTION NO 4
In a manufacturing process of Mars Ltd, one by-product BP emerges besides two main products MP1 and MP2 apart from scrap. Details of cost of production process are here under:

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Amount</th>
<th>Output</th>
<th>Closing Stock 31-3-20X1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw material</td>
<td>14,500</td>
<td>1,50,000</td>
<td>MP I-5,000 units</td>
<td>250</td>
</tr>
<tr>
<td>Wages</td>
<td>-</td>
<td>90,000</td>
<td>MP II-4,000 units</td>
<td>100</td>
</tr>
<tr>
<td>Fixed overhead</td>
<td>-</td>
<td>65,000</td>
<td>BP- 2,000 units</td>
<td></td>
</tr>
<tr>
<td>Variable overhead</td>
<td>-</td>
<td>50,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Average market price of MP1 and MP2 is ₹ 60 per unit and ₹ 50 per unit respectively, by - product is sold @ ₹ 20 per unit. There is separate processing charges of ₹ 8,000 and packing charges of ₹ 2,000, ₹ 5,000 was realised from sale of scrap.

**Required:**

Calculate the value of closing stock of MP1 and MP2 as on 31-03-20X1.

**QUESTION NO 5**

Closing Inventory at Cost of a Company amounted to Rs. 956,700. The following items were included at cost in the total -

(a) 350 Shirts, which had cost Rs. 380 each and normally sold for Rs. 750 each. Owing to a defect in manufacture, they were all sold after the Balance Sheet date at 50% of their normal price. Selling expenses amounted to 5% of the proceeds.

(b) 700 Trousers, which had cost Rs. 520 each. These too were found to be defective. Selling expenses for the batch totaled Rs. 3800. They were sold for Rs. 950 each.

What should the inventory value be according to IND IND AS-2 after considering the above items?

**QUESTION NO 6**

A Ltd. produces chemical, X which has following production cost per unit.

- Raw Material = Rs. 5
- Direct Labor = Rs. 2
- Direct Expenses = Rs. 3
- Normal capacity = 5,000 units per annum
- Actual production = 4,000 units
- Fixed Production Overhead = Rs. 20,000 per annum.

The Company has 2,000 units of unsold stock lying with it at the end of year. You are required to value the closing Stock.

**QUESTION NO 7**

The Company incurred Rs. 20,00,000 as fixed production overhead per year. It normally produces 1,00,000 units in a year. In 2009-10 however its production has been only 40,000 units. At the year end 31.3.2010 the closing stock was 10,000 units. The cost of unit is below:

- Material = Rs. 500 per unit
- Labour = Rs. 250 per unit
Fixed Production overhead = Rs. 20,00,000 p.a.
Fixed administration = Rs. 10,00,000 p.a.

Calculate the value of closing stock

**QUESTION NO 8**
The company deals in three products X, Y and Z, which are neither similar nor interchangeable. at the time of closing of its account for the year 2001-2002. The historical cost and net realizable values of the items of closing stock are determined as below:

<table>
<thead>
<tr>
<th>Items</th>
<th>Historical cost (Rs. in Lakhs)</th>
<th>Net realizable value (Rs. in Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>Y</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Z</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>44</td>
<td>42</td>
</tr>
</tbody>
</table>

What will be the value of closing Stock?

**QUESTION NO 9**
Y Ltd. purchased 500 units of raw material @ Rs. 150 per unit gross less 10% Trade discount GST is chargeable @ 5% on the net price. The duty element on product is Rs. 12 per unit against which CREDIT can be claimed. The company spent Rs. 1,000 on transportation and Rs. 500 for loading and unloading Calculate the cost of purchase of raw material.

**QUESTION NO 10**
XYZ Ltd produced 10,00,000 units of product A during 2009-10 per unit cost is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Material</td>
<td>100</td>
</tr>
<tr>
<td>Direct Wages</td>
<td>50</td>
</tr>
<tr>
<td>Direct Expenses</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Rs. 152</strong></td>
</tr>
</tbody>
</table>

Production overhead is Rs. 20,00,000 of which 40% is fixed. The company sold 8,00,000 units and 2,00,000 units were in stock as on 31st March, 2010. Normal capacity is 5,00,000 units.

Calculate the value of closing stock

(Ans: Rs. 3.08 Crores)
**QUESTION NO 11**

Cost of Production of product X is given below:

- Raw Material per unit: Rs. 120
- Wages per unit: Rs. 80
- Overhead per unit: Rs. 50
  
As on the balance sheet date the replacement cost of raw material is Rs. 110 per unit. There were 1000 units of raw material on 31.3.2011.

Calculate the value of closing stock of raw material in following conditions.

(a) If finished product is sold at the rate of Rs. 275 per unit, what will be value of closing stock of raw material.

(b) If finished product is sold at the rate of Rs. 230 per unit, what will be value of closing stock of raw material.

**QUESTION NO 12**

A company does not value it’s W.I.P. because the quantity of work-in-progress cannot be determined accurately and in any case, there is not much variation between the opening and closing W.I.P. quantities. Comment on the above statement of the company.

Ans: Statement of company is not in accordance with IND AS-2.

**QUESTION NO 13**

JATIN Ltd. purchased raw materials for 1,25,000 less a rebate of 2%. It paid 25,000 as import duty, including ₹ 10,000 towards a special duty. According to local tax laws, it will get a credit of the amount paid towards the special duty, while determining its customs liability. It spent ₹ 8,000 on ocean freight, clearing agent’s charges of 2,000, 4,000 on warehouse rent and 1,500 on the watchman’s salary.

**QUESTION NO 14**

Per kg. of finished goods consisted of:

- Material cost: Rs 100 per kg.
- Direct labour cost: 20 per kg.
- Direct variable production overhead: 10 per kg.

Fixed production charges for the year on normal capacity of one lakh kg. is 10 lakhs. 2,000 kg. of finished goods are on stock at the year end. Calculate value of inventories.
**QUESTION NO 15**

Total Unit : 10,000 (closing stock)  
Contract sales : 6,000 units  
Normal units : 4,000 units  
Cost per unit : 150  
Contract selling price : 200  
Market Price : 90

**QUESTION NO 16 (VALUATION OF WIP)**

On 31st March, 2013 a business firm finds that cost of a partly finished unit on that date is 530. The unit can be finished in 2013-14 by an additional expenditure of 310. The finished unit can be sold for 750 subject to payment of 4% brokerage on selling price. The firm seeks your advice regarding:

(i) The amount at which the unfinished unit should be valued as at 31st March, 2013 for preparation of final accounts and

(ii) The desirability or otherwise of producing the finished unit.
SOLVED QUESTIONS FOR SELF PRACTICE

QUESTION NO 17
Grow More Private Limited, a Wholesaler in Food and Other Agro Products, has valued the year-end Inventory of Net Realizable Value on the ground that IND IND AS-2 does not apply to inventory of Agriculture Products. Comment.

SOLUTION

1. **Principle:** IND IND AS-2 does not apply to Producers Inventories of Livestock, Forest Product and Mineral Ores and Gases. These can be valued at Net Realizable value as per established practices.

2. **Analysis and Conclusion:**
   
   (a) However, the above principle does not apply in Trader’s Inventory of Food and Agro Products. In the above case, Grow More Ltd. is only a Trader (Wholesaler) and not the producer. Hence, they cannot value their inventory at Net Realizable Value.

   (b) As IND IND AS-2, the Company should value the Inventory at lower of cost or Net Realisable Value. If the Management of M/s. Grow More Ltd. does not agree, the Auditor should qualify the Report.

QUESTION NO 18
Varada Ltd. purchased goods at the cost of Rs. 40 Lakhs in October. Till the end of the Financial year, 75% of the Stocks were sold. The Company wants to disclose Closing Stock at Rs. 10 Lakhs. The expected Sale value is Rs. 11 Lakhs and a commission at 10% on sale is payable to the Agent. What is the correct value of Closing Stock.

SOLUTION

Principle: Inventories are valued at - (a) Cost or (b) Net Realisable Value, whichever is lower.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cost Inventory (Rs. 40 Lakhs x 25% Unsold)</td>
<td>10.00 Lakhs</td>
</tr>
<tr>
<td>2. NRV (Expected Sales Value Rs.11 Lakhs Less cost to make the sale 10% Rs. 1.10 Lakh)</td>
<td>9.90 Lakhs</td>
</tr>
<tr>
<td>3. Value of Inventory under IND AS-2 = Least of the above</td>
<td>9.90 Lakhs</td>
</tr>
</tbody>
</table>

QUESTION NO 19
Gajanan Ltd. manufacturing garments and fancy terry towels has valued at the year end, its Closing Stock of Inventories of Finished Goods, (for which firm contracts have been
received and goods are packed for export, but the ownership of which has not been transferred to the foreign buyers) at the Realisable Value inclusive of Profit and the export cash Incentives. Give your views on the above.

**SOLUTION**

1. **General Principle:** IND IND AS-2 requires that inventories should be valued at lower of cost and NRV. A departure from the general principle can be made if - (a) the AS is not applicable, or (b) having regard to the nature of industry say, plantations, inventories may be valued at market prices or price subsequently realized.

2. **Special Items (Para 2):** IND IND AS-2 also states that Producers’ Inventories of Livestock, Agriculture Crops, etc. are measured at NRV based on established practices if - (a) sale is assured under a Forward Contract or a Government Guarantee, or (b) where market is homogenous, and there is a negligible risk of failure to sell.

3. **Analysis:** In the given case the sale is assured under a Forward Contract but the goods are not of a nature covered by exceptions under Para 2. Hence, the Closing Stock of Finished Goods should have been valued at cost, as it is lower than the realizable value (as it includes profit). Also, Export Cash Incentives should not be included for valuation purposes.

4. **Conclusion:** Hence, the Company’s policy of valuation is not correct.

**QUESTION NO 20**

Akshay Pharma Ltd. ordered 16,000 kg. of certain material at Rs. 160 per unit. The Purchase Price includes GST Rs. 10 per kg. in respect of which full GST Credit is admissible. Freight incurred amounted to Rs. 1,40,160. Normal Transit Loss is 2%. The Company actually received 15,500 kg. and consumed 13,600 kg. of Material. Compute the Cost of Inventory under IND IND AS-2 and the amount of Abnormal Loss.

**SOLUTION**

1. **Quantity Reconciliation:**
   - Total Purchase Quantity (given) = 16,000 kg.
   - Normal Loss 2% on 16,000 = 320 kg.
   - Balance Effective Quantity = 16,000 (-) 320 = 15,680 kg.
   - Actually Received (given) = 15,500 kg.
   - Balance Abnormal Loss 15,680 (-) 15,500 = 180 kg.
   - Consumption Quantity (given) = 13,600 kg.
   - Closing Stock (bal.fig) = 15500 (-) 13,600 = 1900 kg.
2. **Computation of Effective Cost per kg.**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Cost Per unit (excluding GST for which Credit is available)</td>
<td>150</td>
</tr>
<tr>
<td>Total Purchase Cost for 16,000 kg. ordered</td>
<td>24,00,000</td>
</tr>
<tr>
<td>Add: Freight Charges</td>
<td>1,40,160</td>
</tr>
<tr>
<td>Total Cost of Inventory</td>
<td>25,40,160</td>
</tr>
<tr>
<td>Effective Quantity (i.e. Gross Ordered Quantity Less Normal Loss) = 16,000 (-) 320 =</td>
<td>15,680 Kg.</td>
</tr>
<tr>
<td>Effective Cost Per Kg.</td>
<td>25,40,160/15,680 = Rs. 162.00</td>
</tr>
</tbody>
</table>

3. **Valuation of Inventory and Abnormal Loss**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs.</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Cost of Material Consumed</td>
<td>22,03,200</td>
<td>Shown in Income Statement as Expense</td>
</tr>
<tr>
<td>= 13,600 Kg. at Rs.162</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Cost of Abnormal Loss</td>
<td>29,160</td>
<td>Shown in Income Statement as Expense/Loss</td>
</tr>
<tr>
<td>= 180 Kg. at Rs.162</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Cost of Closing Stock</td>
<td>3,07,800</td>
<td>Shown in Balance Sheet</td>
</tr>
<tr>
<td>= 1,900 Kg. at Rs.162</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Claim, if any, from Insurance Company will be set off against the cost of Abnormal Loss as shown above.

**QUESTION NO 21**

In a production process, normal waste is 5% of input, 5,000 MT of input wee put in process resulting in a wastage of 300 MT. Cost per MT of input is Rs. 1,000. The entire quantity of waste is on stock at the year-end. State with reference to how you will value the inventories in the above case.

**SOLUTION**

1. **Principle:** Abnormal Amounts of Waste Materials, Labour or other Production Costs are excluded from cost of inventories and such costs are recognized as expenses in the period in which they are incurred.

2. **Analysis and Conclusion:** In this case, Normal Waste is 5% of 5000 MT = 250 MT and Abnormal Waste is 300 MT (-) 25% MT = 50 MT.

   (a) Cost of Normal Waste 250 MT will be absorbed and included in determining the cost of inventories (Finished Goods) at the year end.
(b) Cost of Abnormal Waste = Rs. 52631 (50 MT x Rs. 1,052) will be charged in the P&L Statement.

**QUESTION NO 22 (INTEREST ON BANK OVERDRAFT)**

Can PT Ltd., a Wire Netting Company, while valuing its Finished Stock at the year end include interest on Bank Overdraft as an element of cost, for the reason that Overdraft has been taken specifically for the purpose of financing Current Assets like Inventory and for meeting day to day working expenses?

**SOLUTION**

1. **Nature of Interest:** As per IND IND AS-2, “Interest and other Borrowing Costs are usually considered as not relating to bringing the inventories to their present location & condition, and hence usually, excluded in the cost of inventories”.

2. **Qualifying Assets:** IND IND AS-23 identifies inventories which require a substantial period of time to bring them to a saleable condition as a Qualifying Assets, and permits capitalization of borrowing costs directly attributable to the asset as part of the Cost of the Asset.

3. **Conclusion:** In the given case, PI Ltd. can capitalize the interest cost on Bank Overdraft, only if its Inventories are in the nature of a Qualifying Asset as per IND IND AS-23. Otherwise, the entire amount will be treated as expense.

**QUESTION NO 23**

From the following data, find out value of Inventory as on 30th April using (a) LIFO Method, and (b) FIFO Method -

(a) Purchased on 1st April 10 units at Rs. 70 per unit
(b) Sold on 6th April 6 units at Rs. 90 per unit
(c) Purchased on 9th April 20 units at Rs. 75 per unit
(d) Sold on 18th April 14 units at Rs. 100 per unit

**SOLUTION**

1. **Closing Stock (in Units):** 10 (-) 6 + 20 (-)14 = 10 units.

2. **Valuation:**

<table>
<thead>
<tr>
<th>Value of Inventory under LIFO Basis</th>
<th>Value of Inventory under FIFO Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 units from 1st April - 4 x Rs.70 = Rs.280</td>
<td>10 Units from 9th April - 10 x Rs.75 = Rs.750</td>
</tr>
<tr>
<td>6 units from 9th April - 6 x Rs.75 = Rs.450</td>
<td>Total Cost = Rs. 750</td>
</tr>
<tr>
<td>Total Cost = Rs. 730</td>
<td>Total Cost = Rs. 750</td>
</tr>
</tbody>
</table>
**QUESTION NO 24**

In order to value the inventory of Finished Goods HR Ltd. has adopted the Standard Cost of Raw Materials, Labour and Overheads. The Income Tax Officer wants to know the method, as per IND IND AS-2 for the valuation of Raw Material. Comment.

**SOLUTION**

1. The use of Standard Cost of Production has been suggested by IND IND AS-2 as a matter of convenience only. IND IND AS-2 suggests that Standard Cost system may be used for convenience if the results approximate the actual cost.

2. For Inventory Valuation, IND IND AS-2 recognises the use of absorption costing based on normal capacity. If the Company can adopt absorption costing for value of inventory, then the Standard Cost system need not be adopted.

**QUESTION NO 25**

HP is a leading distributor of Petrol. A detail Inventory of Petrol in hand is taken when the books are closed at the end of each month. At the end of the month, the following information is available.

Sales - Rs. 47,25,000, General Overheads Cost - Rs. 1,25,000, Inventory at beginning - 1,00,000 Litres at Rs. 15 per Litre.

**Purchases:** (a) June 1 Two Lakh Litres at 14.25 (b) June 30 One Lakh Litres at 15.15 (c) Closing Inventory 1.30 Lakh Litres Compute the following by the FIFO as per IND IND AS-2.

(a) Value of Inventory on June 30.

(b) Amount of Cost of goods sold for June.

(c) Profit/Loss for the month of June.

**SOLUTION**

1. **Value of Inventory as on June 30:**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.30 Lakh Litres from June 1 Purchase Lot</td>
<td>4,27,500</td>
</tr>
<tr>
<td>(0.30 Lakh Litres x Rs.14.25 Per Litre)</td>
<td></td>
</tr>
<tr>
<td>1 Lakh Litres from June 30 Purchase Lot</td>
<td>15,15,000</td>
</tr>
<tr>
<td>(1 Lakh Litres x Rs.15.15 Litre)</td>
<td></td>
</tr>
<tr>
<td>Value of Inventory s on June 30</td>
<td>19,42,500</td>
</tr>
</tbody>
</table>
2. **Cost of Goods Sold:**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Stock (1 Lakh Litres x Rs.15)</td>
<td>15,00,000</td>
</tr>
<tr>
<td>Add: Purchases (2 Lakh Litres x Rs.14.5) + (1 Lakh Litres x Rs.15.15)</td>
<td>43,65,000</td>
</tr>
<tr>
<td>Less: Closing Stock</td>
<td>19,42,000</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>39,22,500</td>
</tr>
</tbody>
</table>

3. **Profit/Loss for June:**

Sales (Rs. 47,25,000) - Cost of Goods Sold (Rs.39,22,500) - General Overheads Cost (Rs. 1,25,000) = Profit Rs. 6,77,500

---

**QUESTION NO 26 (RETAIL VALUE WITH WEIGHTED AVERAGE)**

Shri Ganesh operates a retail business. For a financial year, the following data is given -

<table>
<thead>
<tr>
<th>Particulars</th>
<th>At Retail Price</th>
<th>At cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of Opening Inventory</td>
<td>Rs. 80,000</td>
<td>Rs. 60,000</td>
</tr>
<tr>
<td>Value of Purchases</td>
<td>Rs. 1,40,000</td>
<td>Rs. 1,20,000</td>
</tr>
</tbody>
</table>

Calculate the cost of Closing Stocks, if the Sales made during the period is Rs.2,00,000 (APPLY WEIGHTED AVERAGE METHOD)

**SOLUTION**

Value of Closing Inventory at Retail Prices  
= Opening Stock + Purchases (-) Sales  
= Rs. 80,000 + Rs. 1,40,000 (-) Rs. 2,00,000  
= Rs. 20,000

Average Percentage of Cost to Retail Prices  
= \( \frac{\text{Total Average Cost}}{\text{Total Average Retail Value}} \)  
= \( \frac{60,000 + 1,20,000}{80,000 + 1,40,000} \)  
= 81.82%

Value of Closing Inventory at Cost Prices  
= Retail values Less Margin of 18.18%  
= Rs.20,000 (-) 18.18% thereon  
= Rs.16,364.

---

**QUESTION NO 27 (APPLICATION OF NRV)**

Inventories of a Car Manufacturing Company include the value of items, required for the
manufacture of a model, which was removed from the production line five years back, at Cost Price. As an Auditor, give your comments.

**SOLUTION**

1. IND IND AS-2 provides that the cost of inventories may not be recoverable if those inventories which are damaged, have become partially/fully obsolete, or if their selling prices have declined.

2. The Auditor should examine whether appropriate allowance has been made for the defective/obsolete/damaged inventories in determining the NRV. Having regard to this, NRV of inventory items, whichever was removed from the production line 5 years back, is likely to be much lower than the cost, as shown in the books of account. Thus, it becomes necessary to write down the inventories to NRV.

3. Since the Company has valued these inventories at cost, it has resulted in over statement of inventory and profits. Hence, the Auditor should qualify his report.

**QUESTION NO 28 (VALUATION OF INVENTORY)**

Best Ltd. deals in 5 products - P Q, R, S & T which are neither similar nor interchangeable. While closing its accounts for the year ending 31st March, the Historical Cost and NRV of the items of Closing Stock are determined as follows:-

<table>
<thead>
<tr>
<th>Items</th>
<th>P</th>
<th>Q</th>
<th>R</th>
<th>S</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Cost (Rs.)</td>
<td>5,70,000</td>
<td>9,80,000</td>
<td>4,25,000</td>
<td>4,25,000</td>
<td>1,60,000</td>
</tr>
<tr>
<td>Net Realizable Value (Rs.)</td>
<td>4,75,000</td>
<td>10,32,000</td>
<td>2,89,000</td>
<td>4,25,000</td>
<td>2,15,000</td>
</tr>
</tbody>
</table>

What is the Value of Closing Stock for the year ending 31st March as per IND IND AS-27.

**Note:** Refer Principle relating to item-by-item write-down given above.

**SOLUTION**

In the given case, since Inventories are not interchangeable, they are to be valued independently.

<table>
<thead>
<tr>
<th>Item</th>
<th>Historical Cost (Rs.)</th>
<th>NRV (Rs.)</th>
<th>Valuation (Rs.) = Least of (2) or (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>5,70,000</td>
<td>4,75,000</td>
<td>4,75,000</td>
</tr>
<tr>
<td>Q</td>
<td>9,80,000</td>
<td>10,32,000</td>
<td>9,80,000</td>
</tr>
<tr>
<td>R</td>
<td>3,16,000</td>
<td>2,89,000</td>
<td>2,89,000</td>
</tr>
<tr>
<td>S</td>
<td>4,25,000</td>
<td>4,25,000</td>
<td>4,25,000</td>
</tr>
<tr>
<td>T</td>
<td>1,60,000</td>
<td>2,15,000</td>
<td>1,60,000</td>
</tr>
</tbody>
</table>

Inventory Value = 23,29,000
**QUESTION NO 29 (VALUATION OF RAW MATERIAL)**

A Raw Material costing Rs. 150 has Net Realisable Value (which can be the Replacement Cost) Rs.130. The Finished Goods for which this Raw Material is used, has other cost to incur Rs.60. At what Price should the Raw Material be valued, if Finished Goods has a Net Realizable Value - (1) Rs. 210 or above (2) less than Rs. 190

**SOLUTION**

Note: In all cases given above Cost of Finished Goods (RM at actuals 150+ Conversion 60) = Rs. 210.

1. **SP Rs. 210 or above:** If Sale Price is Rs. 210 or above the cost of FG can be recovered/realized fully. Hence, there is no need to write down RM Inventory to Rs. 130. So, Raw Material will be valued at Rs. 150.

2. **SP less than Rs.190:** In this case, since cost of finished goods is not realizable fully, the Raw Material Inventory should be written down to Replacement Cost, i.e. Rs.130

**QUESTION NO 30 (VALUATION OF WIP)**

On 31st March, a Business Firm finds that cost of a partly finished unit on that date is Rs.530. The unit can be finished in its next financial year, by an additional expenditure of Rs. 310. The Finished Unit can be sold for Rs.750 subject to payment of 4% brokerage on Selling Price. The firm seeks your advice regarding -

(a) The amount at which the unfinished Unit should be valued as at 31st March for preparation of Final Accounts, and  
(b) The desirability or otherwise of producing the Finished unit.

**SOLUTION**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Estimated Net Realisable Value of Final Product</td>
<td></td>
</tr>
<tr>
<td>= Sale value 750 less 4% Brokerage 30 less Further</td>
<td></td>
</tr>
<tr>
<td>Processing Costs 310 = 750 - 30 - 310</td>
<td>410</td>
</tr>
<tr>
<td>2. Actual Cost incurred till date on the partly finished unit (including RM cost therein)</td>
<td>530</td>
</tr>
<tr>
<td>3. Since the entire actual cost of Rs.530 is not recovered by use in finished production, the partly finished unit should be valued at its value in use, i.e. NRV Rs.410. So Inventory should be written down by</td>
<td>530 - 410 = 120</td>
</tr>
<tr>
<td>4. Considering actual costs till date Rs.530 + additional expected cost Rs. 310 it is not worthwhile to process this item further.</td>
<td></td>
</tr>
</tbody>
</table>
QUESTION NO 31 (VALUATION OF RAW MATERIAL)

Hari Ltd. purchased Raw Material at Rs. 400 per kg. The Company does not sell Raw Material but uses it in the production of Finished Goods. The Finished Goods in which Raw Material is used are expected to be sold at below cost. At the end of the accounting year, the Company is having 10,000 kg. of Raw Material in Stock as the Company never sells the Raw Material, does not know the Selling Price of Raw Material and hence cannot calculate the Realizable Value of the Raw Material for valuation of Inventories at the end of the year. However, Replacement cost of Raw Material is Rs.300 per kg. How will you value the Inventory of Raw Material?

SOLUTION

Hint: Refer principle relating to RM valued at NRV given above.

Inventory should be valued at Replacement Cost of 10,000 Kgs. x Rs.300 per Kg.

= Rs. 30,00,000

QUESTION NO 32

A company is engaged in the manufacturing of organic chemicals. Production of one intermediate product (say X) is in excess of its immediate requirement for captive consumption. Further factors are:

(i) X is not marketable and therefore, the market price is not known.
(ii) The estimated expenditure the further processing of X is Rs. 6000 per ton.
(iii) The company has been valuing the stock of X by theoretically converting it into equivalent units of finished products and then valuing the same on the principle of cost or net realizable value, whichever is lower.

Comments:

(a) Whether the present practice of valuating the X at the lower of cost and net realizable value of the end-product by theoretically converting it into equivalent finished product is in order.
(b) Whether the company can value at cost the stock X since X will have to undergo further processing to become marketable and net realizable value of X in its present form cannot be ascertained.
(c) If the answer of above (a) & (b) is negative, suggest the correct method for valuation of X.

ANSWER:

(a) NO
(b) NO - If net realizable after processing of X is ascertainable.
(c) At cost
QUESTION NO 33

Capital Cables Ltd. has normal wastage of 4% in the production process. During the year 2013-14 the Company used 12,000 MT of Raw Material costing Rs.150 per MT. At the end of the year 630 MT of Wastage was in Stock. The Accountant wants to know how this wastage is to be treated in the books. Explain in the context of IND AS-2 the treatment of Normal Loss and Abnormal Loss and also find out the amount of Abnormal Loss if any.

SOLUTION

1. **Principle:** Abnormal Amounts of Waste Material, Labour or other Production costs are excluded from cost of inventories and such costs are recognized as Expenses in the period in which they are incurred.

2. **Analysis and Conclusion:** Normal Waste is 4% of 12,000 MT = 480 MT & Abnormal Waste is 630 MT (-) 480 MT = 150MT.
   
   (a) Cost of Normal Waste 480 MT will be absorbed in the cost of Production and included in determining the Cost of Inventories (Finished Goods) at the year end.

   (b) Cost of Abnormal Waste will be charged in the Profit and Loss Statement.

3. **Computation**

   (a) Effective Material Cost of Output = \( \frac{12,000 \text{ MT} \times \text{Rs. 150}}{12,000 \text{ MT} - 4\% \text{ Normal Waste}} = \frac{18,00,000}{11,520} = \text{Rs.156.25 Per MT} \)

   (b) Cost of Abnormal Waste = 150 MT \( \times \) Rs.156.25 = Rs.23,437.50

QUESTION NO 34

Calculate the value of Raw Materials and Closing Stock based on the following information:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Raw Material X</th>
<th>Particulars</th>
<th>Finished Goods Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closing Balance</td>
<td></td>
<td>Closing Balance</td>
<td>1200 Units</td>
</tr>
<tr>
<td>Cost Price including GST</td>
<td>500 Units</td>
<td>Material Consumed</td>
<td>Rs.220 per unit</td>
</tr>
<tr>
<td>GST (GST Credit is receivable on GST paid)</td>
<td>Rs.200 per unit</td>
<td>Direct Labour</td>
<td>Rs. 60 per unit</td>
</tr>
<tr>
<td>Freight Inward</td>
<td>Rs.10 per unit</td>
<td>Direct Overhead</td>
<td>Rs. 40 per unit</td>
</tr>
<tr>
<td>Unloading Charges</td>
<td>Rs.20 per unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replacement Cost</td>
<td>Rs.10 per unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replacement Cost</td>
<td>Rs.150 per unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Total Fixed Overhead for the year was Rs. 2,00,000, on normal capacity of 20,000 units.

Calculate the value of the Closing Stock when -

(i) Net Realizable Value of the Finished Goods Y is Rs.400
(ii) Net Realizable Value of the Finished Goods Y is Rs.300

**SOLUTION**

1. **Principle:**

   (a) Raw Materials and Supplies held for use in production are valued at cost. However, they can be valued below cost (i.e. NRV) in the following peculiar situations.
   
   • **Sale below cost**: When the Finished Products in which the Raw Material is incorporated, are expected to be sold below cost.
   
   • **Price Decline**: When there is a decline in the price of materials, and it is estimated that the cost of Finished Goods will be exceed NRV.

   (b) Finished Goods will be valued at Cost (or) Net Realisable Value, whichever is lower.

2. **Valuation of Finished Goods Stock**: In the given case the Valuation of FG Stock will be as under:-

   (a) **Cost per unit of Finished Goods**:

   \[
   \text{Cost per unit} = \frac{\text{Material} + \text{Direct Labour} + \text{Direct Overhead} + \text{Fixed Production OH}}{20,000} \\
   = 220 + 60 + 40 + \frac{2,00,000}{20,000} \\
   = \text{Rs.330 per unit}
   \]

   (b) Valuation of FG will be -

<table>
<thead>
<tr>
<th>Particulars</th>
<th>If NRV is Rs.400 p.u.</th>
<th>If NRV is Rs.300 p.u.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value p.u. (Lower of cost Rs.330 &amp; NRV)</td>
<td>330</td>
<td>300</td>
</tr>
<tr>
<td>Total Value of Finished Goods Stock</td>
<td>Rs. 330 x 1200 units</td>
<td>Rs. 300 x 1200 units</td>
</tr>
<tr>
<td></td>
<td>= Rs. 3,96,000</td>
<td>= Rs. 3,60,000</td>
</tr>
</tbody>
</table>

3. **Valuation of Raw Material Stock**:

   In the given case, the Valuation of RM Stock will be as under:-
### (a) Cost p.u. of Raw Material:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Cost p.u.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Price net of Excise Duty (since GST Duty eligible for GST Credit) 200-10</td>
<td>190</td>
</tr>
<tr>
<td>Add: Freight Charges</td>
<td>20</td>
</tr>
<tr>
<td>Add: Unloading cost p.u.</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Cost p.u.</strong></td>
<td><strong>220</strong></td>
</tr>
</tbody>
</table>

### (b) Total Value of Raw Material Closing Stock:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Finished Goods of valued at Cost</th>
<th>Finished Goods of valued at NRV</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Raw Material cost p.u.</td>
<td>Rs. 220</td>
<td>Rs. 220</td>
</tr>
<tr>
<td>* Replacement cost p.u.</td>
<td>Rs. 150</td>
<td>Rs. 150</td>
</tr>
<tr>
<td>* Relevant Value p.u.</td>
<td>Rs. 229 (since FG is valued at Cost)</td>
<td>Rs. 150 (since FG is valued NRV)</td>
</tr>
<tr>
<td>* Total value for 500 units</td>
<td>500 x Rs.220 = Rs.1,10,000</td>
<td>500 x Rs.150 = Rs. 75,000</td>
</tr>
</tbody>
</table>

**Note:** Replacement Cost of the Raw Material is assumed as its Net Realisable value.

**QUESTION NO 35**

Mr. Mehul gives the following information relating to items forming part of inventory as on 31.03.2015. His Factory produces Product X using Raw Material A.

1. 600 units of Raw Material A (Purchased at Rs.120). Replacement Cost of Raw Material A as on 31.03.2015 is Rs. 90 per unit.
2. 500 units of Partly Finished Goods in the process of producing X and Cost incurred till date Rs.260 per unit. These units can be finished next year by incurring Additional Cost of Rs. 60 per unit.
3. 1,500 units of Finished Product X and Total Cost incurred Rs. 320 per unit.

Expected Selling price of Product X is Rs. 300 per unit.

Determine how each item of inventory will be valued on 31.03.2015. Calculate the Value of Total Inventory as on 31.03.2015.
### Solution

<table>
<thead>
<tr>
<th>Item</th>
<th>Valuation Principle</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Material</td>
<td>Since the Finished Product using this Raw Material is expectable be sold below cost, Raw Material may be valued of NRV, i.e. Replacement cost of Rs.90.</td>
<td>600 x Rs. 90 = Rs. 54000</td>
</tr>
</tbody>
</table>
| WIP            |  • Cost Rs. 260  
                   • Estimated NRV  
                    = Sale Price Rs.300 - Cost to Complete Rs. 60  
                    = Rs.240  
                   • Hence, valued at least of the above, i.e. Rs.240 p.u. | 500 x Rs. 240 = Rs. 1,20,000 |
| Finished Goods | Cost Rs.320 or Net Realisable Value Rs.300, whichever is lower. Hence valued at Rs.300 p.u.             | 1500 x Rs. 300 = Rs. 4,50,000 |
| Total          |                                                                                                         | Rs. 6,24,000         |

### Question No 36

From the following information, value the Inventories as on 31st March, 2015.

Raw Material has been purchased at Rs.125 per Kg. Prices of Raw Material are on the decline. The Finished Goods being manufactured with the Raw Material is also being sold at below Cost. The Stock of Raw Material is of 15,000kg. and the Replacement Cost of Raw Material is Rs.100 Per Kg.

Cost of Finished Goods per Kg. is as under:-

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs. per Kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material cost</td>
<td>125</td>
</tr>
<tr>
<td>Direct Labour Cost</td>
<td>20</td>
</tr>
<tr>
<td>Direct Variable Production Overhead</td>
<td>10</td>
</tr>
</tbody>
</table>

Fixed Production Overhead for the year for a normal capacity of 1,00,000 kgs. of production is rs.10 Lakhs. At the year end, there were 2,000 Kgs. of Finished Goods in stock. Net Realisable value of Finished goods is rs.140 Per Kg.
SOLUTION

1. Conversion Cost Per Kg. of Finished Product
   
   \[ \text{Conversion Cost Per Kg.} = \text{Direct Labour} + \text{Direct Variable Production OH} + \text{Fixed Production OH} \]
   
   \[ = \text{Rs. 20} + \text{Rs. 10} + \frac{\text{Rs. 10 Lakhs}}{1 \text{ Lakh Kgs.}} = \text{Rs. 40 Per Kg.} \]

2. Inventory Valuation is as under:

   (A) For Finished Goods

   (a) Cost per Kg. for Finished Product
   
   \[ = \text{Material} + \text{Conversion} \]
   
   \[ = 125 + 40 = \text{Rs. 165 Per Kg.} \]

   (b) Net Realizable value of Finished Product if sold after Conversion
   
   \[ \text{Given} = \text{Rs. 140 per kg.} \]

   (c) Hence, Valuation Rate for finished goods
   
   \[ = (a) \text{ or } (b), \text{ whichever is lower.} \]
   
   \[ = \text{Rs. 140 Per Kg.} \]

   (d) Value of Inventory 2,000 kg. of Finished Product
   
   \[ 2,000 \text{ Kg. x Rs. 140} = \text{Rs. 2,80,000} \]

   (B) For Raw Materials

   (a) Cost of Raw Material
   
   \[ \text{Given} = \text{Rs. 125 Per kg.} \]

   (b) Replacement Cost of Material, i.e. Sale without Conversion
   
   \[ \text{Given} = \text{Rs.100 Per Kg.} \]

   (c) Valuation Rate for Raw Material (i.e. least of Cost or NRV, least of (a) and (b)
   
   \[ = \text{Rs. 100 per Kg.} \]

   (d) Value of Inventory 15,000 kg. of Raw Material
   
   \[ 15,000 \text{ kgs x Rs. 100} = \text{Rs. 15,00,000} \]

Note: When the Finished Products in which the Raw Material is incorporated, are expected to be sold below Cost (NRV Rs.140 Vs. Cost Rs.165), it is preferable to sell the product without Conversion. In such case, the Raw Materials will be valued below cost, i.e. at NRV, being the Replacement cost.

**QUESTION NO 37**

Inventories of a Car manufacturing company include the value of items, required for the manufacture of model which was removed from the production line five years back, at cost price. As an Auditor Comment.
ANSWER:

(1) **Provision of IND AS-2**

The cost of inventories may not be recoverable if those inventories are damaged, have become wholly or partially obsolete, or if their selling prices have declined. Accordingly, the auditor should examine whether appropriate allowance has been made for the defective, damaged, obsolete and slow-moving inventories in determining the net realizable value.

(2) **Analysis and Conclusion**

In this case, items required be the manufacture of a model which has been withdrawn from the production line five veal's ago are included in the stock at cost price resulting in overstatement of inventory and profit. As it appears from the facts given that the net realizable value of these items is likely to much lower than the cost at which these are being shown in the books of account. Accordingly, it becomes necessary to write down the inventory to 'net realizable value' if the items of inventories become wholly or partially obsolete. Under the circumstance, the auditor should qualify the report appropriately.

**QUESTION NO 38**

The management tells you that the WIP is not valued since it is difficult to ascertain the same, in view of the multiple processes involved and in any case, the value of opening and closing WIP would be more or less the same. Advise.

**ANSWER:**

(i) **Provision of IND AS-2**

Inventory includes raw material, work-in-progress and finished goods and should be valued at cost or NRV whichever is lower.

(ii) **Analysis and Conclusion**

In this case work-in-progress is also a component of inventory and should be valued at cost or NRV whichever is lower.

**QUESTION NO 39**

CC Ltd, a Pharmaceutical Company, while valuing its finished stock at the year end wants to include interest on Bank Overdraft as an element of cost, for the Reason that overdraft has been taken specifically for the purpose of financing curl-cut assets like inventory and for meeting day to day working expenses.
(i) Provision of IND AS-2

Cost of inventories comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. However, it makes clear that interest and other borrowing costs are usually not included in the cost of inventories because generally such costs are not related in bringing the inventories to their present location and condition.

(ii) Conclusion

Therefore, the proposal of CC Ltd. to include interest on bank overdraft as an element of cost is not acceptable because it does not form part of cost of production.

QUESTION NO 40

A company is engaged in the manufacture of electronic products and systems. As per Chief Accountant a prototype system was installed at one of the customer’s locations in June 2010 for getting acceptance on the performance of the system. The Chief Accountant has stated that as the ownership of the system installed for field trials was vested with the company, for accounting & control purposes, the prototype system installed at customer’s location in 2010 was capitalised in the accounts for the year 2010-11 at its bought-out cost. State whether the accounting treatment adopted by the company is correct or not?

ANSWER:

(i) Provision of IND AS-2

Inventories mean assets held for sale in the ordinary course of business, or in the process of production for such sale, or for consumption in the production of goods or services for sale, including maintenance supplies and consumable other than machinery spares.

(ii) Provision of IND AS 16

Fixed asset is an asset held with the intention of being used for the purpose of producing or providing goods or services and is not held for sale in the normal course of business.

(iii) Analysis and Conclusion

Accordingly, the system installed by the company at customer’s site for his acceptance, based on the field trials of the system, is an item of inventory, it is not a fixed assets. Installation of such prototype system at customer’s sites for their acceptance is akin to sale of goods on approval basis. Therefore, the capitalization of such prototype system at its bought out cost is not correct.
**QUESTION NO 41**

(Study Material) Ambica Stores is a departmental store, which sell goods on retail basis. It makes a gross profit of 20% on net sales. The following figures for the year-end are available:

- Opening Stock: Rs. 50,000
- Purchases: Rs. 3,60,000
- Purchases Returns: Rs. 10,000
- Freight Inwards: Rs. 10,000
- Gross Sales: Rs. 4,50,000
- Sales Returns: Rs. 11,250
- Carriage Outwards: Rs. 5,000

Compute the estimated cost of the inventory on the closing date.

**ANSWER:**

<table>
<thead>
<tr>
<th>Particular</th>
<th>Calculation of Cost for Closing Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Stock</td>
<td>Rs. 50,000</td>
</tr>
<tr>
<td>Purchase less return (3,60,000 - 10,000)</td>
<td>Rs. 3,50,000</td>
</tr>
<tr>
<td>Freight Inwards</td>
<td>Rs. 10,000</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Less: COGS (4,50,000 - 11,250) - profit @ 20%</td>
<td>Rs. 3,51,000</td>
</tr>
<tr>
<td>Closing Stock</td>
<td>Rs. 59,000</td>
</tr>
</tbody>
</table>

**QUESTION NO 42 (STUDY MATERIAL)**

<table>
<thead>
<tr>
<th>Particular</th>
<th>Kg.</th>
<th>Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Stock: Finished Goods</td>
<td>1,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Raw Materials</td>
<td>1,100</td>
<td>11,000</td>
</tr>
<tr>
<td>Purchase</td>
<td>10,000</td>
<td>1,00,000</td>
</tr>
<tr>
<td>Labour</td>
<td></td>
<td>76,500</td>
</tr>
<tr>
<td>Overhead (Fixed)</td>
<td></td>
<td>75,000</td>
</tr>
<tr>
<td>Sales</td>
<td>10,000</td>
<td>2,80,000</td>
</tr>
<tr>
<td>Closing Stock: Raw Materials</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>Finished Goods</td>
<td>1,200</td>
<td></td>
</tr>
</tbody>
</table>
The expected production for the year was 15,000 kg. of the finished product. Due to fall in market demand the sales price for the finished goods was 20 per kg. and the replacement cost for the raw metatarsal was 9.50 per kg. on the closing day. You are required to calculate the closing stock as on that date.

**ANSWER:**

(i) **Calculation of Cost per Unit**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Material consumed (1100 + 10000 - 900) @10 per unit</td>
<td>1,02,000</td>
</tr>
<tr>
<td>Director Labour</td>
<td>76,500</td>
</tr>
<tr>
<td>Fixed Overhead</td>
<td>51,000</td>
</tr>
<tr>
<td>Cost of production</td>
<td>2,29,500</td>
</tr>
<tr>
<td>Cost of closing stock per unit (2,29,500 - 10,200)</td>
<td>22.50</td>
</tr>
</tbody>
</table>

(ii) **Conclusion**

Since NRV is lower than cost hence Finished goods is valued at 20 i.e. NRV and raw material is valued at replacement cost i.e. 9.5.

Finished Goods (1,200 × 20) 24,000
Raw Materials (900 × 9.50) 8,550

32,550

**QUESTION NO 43**

The closing inventory at cost of a company amounted to 2,84,700. The following items were included at cost in the total:

(a) 400 coats, which had cost 80 each and normally sold for 150 each. Owing to a defect in manufacture, they were all sold after the balance sheet date at 50% of their normal price. Selling expenses amounted to 5% of the proceeds.

(b) 800 skirts, which had cost 20 each. These too were found to be defective. Remedial work in April cost 5 per skirt, and selling expenses for the batch totalled 800. They were sold for 28 each.

What should the inventory value be according to IND AS-2 after considering the above items?
ANSWER:

Valuation of Closing Stock

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs</th>
<th>Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closing Stock at Cost</td>
<td>2,84,700</td>
<td></td>
</tr>
<tr>
<td>Less: Cost of 400 coats (400x80)</td>
<td></td>
<td>32,000</td>
</tr>
<tr>
<td>Less: Net Realisable Value (400x75) - 5%</td>
<td>(28,500)</td>
<td>(3,500)</td>
</tr>
<tr>
<td>Value of closing Stock</td>
<td></td>
<td>2,81,200</td>
</tr>
</tbody>
</table>

Note: There is no loss on skirts due to which we have not considered any decline.

QUESTION NO 44

Best Ltd. deals in Five Products - P, Q, R, S, and T which are neither similar nor interchangeable. At the time of closing of its Accounts for the year ending 31st March 2011, the Historical Cost and Net Realizable Value of the items of the Closing Stock are determined as follows:

<table>
<thead>
<tr>
<th>Items</th>
<th>Historical Cost (R)</th>
<th>Net Realizable Value (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>5,70,000</td>
<td>4,75,000</td>
</tr>
<tr>
<td>Q</td>
<td>9,80,000</td>
<td>10,32,000</td>
</tr>
<tr>
<td>R</td>
<td>3,16,000</td>
<td>2,89,000</td>
</tr>
<tr>
<td>S</td>
<td>4,25,000</td>
<td>4,25,000</td>
</tr>
<tr>
<td>T</td>
<td>1,60,000</td>
<td>2,15,000</td>
</tr>
</tbody>
</table>

What will be the Value of Closing Stock for the year ending 31st March 2011 as per IND AS-2 “Valuation of Inventories“?

ANSWER:

Statement of Valuation of Inventory

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item P</td>
<td>4,75,000</td>
</tr>
<tr>
<td>Item Q</td>
<td>9,80,000</td>
</tr>
<tr>
<td>Item R</td>
<td>2,89,000</td>
</tr>
<tr>
<td>Item S</td>
<td>4,25,000</td>
</tr>
<tr>
<td>Item T</td>
<td>1,60,000</td>
</tr>
<tr>
<td>Total</td>
<td>23,29,000</td>
</tr>
</tbody>
</table>
QUESTION NO 45

XY Ltd. was making provisions for non-moving stocks based on no issues for the last 2 months upto 31.3.11. Based on technical evaluation the company wants to make provisions Turing year 31.3.12.

Total value of stock - 100 lakhs.

Provisions required based on 12 months issue 3.5 lakhs

Provisions required based on technical evaluation 2.5 lakhs.

Does this amount to change in accounting policy? Can the company change the method of provision?

ANSWER:

(i) **Provision of AS**

The decision of making provisions for non-moving stocks on the basis of technical evaluation does not amount to change in accounting policy. Accounting policy of a company may require that provision for non-moving stocks should be made. The method of estimating the amount of provision may be changed in case a more prudent estimate can be made.

(ii) **Analysis and Conclusion**

In the given case, considering the total value of stock, the change in the amount of required provision of non-moving stock from 3.5 lakhs to 2.5 lakhs is also not material.

The disclosure can be made for such change in the following lines by way of notes to the accounts in the annual accounts of ABC Ltd. for the year 2011-12.

"The company has provided for non-moving stocks on the basis of technical evaluation unlike preceding years. Had the same method been followed as in the previous year, the profit for the year and the corresponding effect on the year end net assets would have been higher by Rs 1 Lakh.

QUESTION NO 46

"In determining the cost of inventories, it is appropriate to exclude certain costs and recognize them as expenses in the period in which they are incurred." Provide example of such costs as per IND AS-2: Valuation of Inventories.

ANSWER:

As per of IND AS 2, "Valuation of Inventories" in determining the cost of inventories, it is appropriate to exclude following costs and recognize them as expenses in the period in which they are incurred:

(a) Abnormal amounts of wasted materials, labour, or other production cost:
(b) Storage cost, unless the production process requires such storage,
(c) Administrative overheads that do not contribute to bringing the inventories to their present location and condition.
(d) Selling and distribution cost.

**STUDY MATERIAL PRACTICAL QUESTIONS**

**QUESTION NO 1**

UA Ltd. purchased raw material @ ₹ 400 per kg. Company does not sell raw material but uses in production of finished goods. The finished goods in which raw material is used are expected to be sold at below cost. At the end of the accounting year, company is having 10,000 kg of raw material in inventory. As the company never sells the raw material, it does not know the selling price of raw material and hence cannot calculate the realizable value of the raw material for valuation of inventories at the end of the year. However, replacement cost of raw material is ₹ 300 per kg. How will you value the inventory of raw material?

**ANSWER:**

As per Ind AS 2 “Inventories”, materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in which they will be incorporated are expected to be sold at or above cost. However, when there has been a decline in the price of materials and it is estimated that the cost of the finished products will exceed net realizable value, the materials are written down to net realizable value. In such circumstances, the replacement cost of the materials may be the best available measure of their net realizable value. Therefore, in this case, UA Ltd. will value the inventory of raw material at ₹ 30,00,000 (10,000 kg. @ ₹ 300 per kg.).

**QUESTION NO 2**

Sun Ltd. has fabricated special equipment (solar power panel) during 20X1-20X2 as per drawing and design supplied by the customer. However, due to a liquidity crunch, the customer has requested the company for postponement in delivery schedule and requested the company to withhold the delivery of finished goods products and discontinue the production of balance items.

As a result of the above, the details of customer balance and the goods held by the company as work-in-progress and finished goods as on 31-03-20X3 are as follows:

- Solar power panel (WIP) ₹ 85 lakhs
- Solar power panel (finished products) ₹ 55 lakhs
Sundry Debtor (solar power panel) ₹ 65 lakhs

The petition for winding up against the customer has been filed during 20X2-20X3 by Sun Ltd. Comment with explanation on provision to be made of ₹ 205 lakh included in Sundry Debtors, Finished goods and work-in-progress in the financial statement of 20X2-20X3.

ANSWER:

From the fact given in the question it is obvious that Sun Ltd. is a manufacturer of solar power panel. As per Ind AS 2 'Inventories', inventories are assets (a) held for sale in the ordinary course of business; (b) in the process of production for such sale; or (c) in the form of materials or supplies to be consumed in the production process or in the rendering of services. Therefore, solar power panel held in its stock will be considered as its inventory. Further, as per the standard, inventory at the end of the year are to be valued at lower of cost or NRV.

As the customer has postponed the delivery schedule due to liquidity crunch the entire cost incurred for solar power panel which were to be supplied has been shown in Inventory. The solar power panel are in the possession of the Company which can be sold in the market. Hence company should value such inventory as per principle laid down in Ind AS 2 i.e. lower of Cost or NRV. Though, the goods were produced as per specifications of buyer the Company should determine the NRV of these goods in the market and value the goods accordingly. Change in value of such solar power panel should be provided for in the books. In the absence of the NRV of WIP and Finished product given in the question, assuming that cost is lower, the company shall value its inventory as per Ind AS 2 for ₹ 140 lakhs [i.e solar power panel (WIP) ₹ 85 lakhs + solar power panel (finished products) ₹ 55 lakhs].

Alternatively, if it is assumed that there is no buyer for such fabricated solar power panel, then the NRV will be Nil. In such a case, full value of finished goods and WIP will be provided for in the books.

As regards Sundry Debtors balance, since the Company has filed a petition for winding up against the customer in 20X2-20X3, it is probable that amount is not recoverable from the party. Hence, the provision for doubtful debts for ₹ 65 lakhs shall be made in the books against the debtor’s amount.
QUESTION 1 MAY 2018 EXAM

XYZ Limited has a plant with the normal capacity to produce 10,00,000 units of a product per annum and the expected fixed overhead is ₹ 30,00,000. Fixed overhead, therefore based on normal capacity is ₹ 3 per unit.

Determine Fixed overhead as per Ind AS 2' Inventories’ if

(i) Actual production is 15,00,000 units.

(ii) Actual production is 7,50,000 units

ANSWER

(i) Actual production is 7,50,000 units: Fixed overhead is not going to change with the change in output and will remain constant at ₹ 30,00,000, therefore, overheads on actual basis is ₹ 4 per unit (30,00,000/7,50,000).

Hence, by valuing inventory ₹ 4 each for fixed overhead purpose, it will be overvalued and the losses of ₹ 7,50,000 will also be included in closing inventory leading to a higher gross profit than actually earned.

Therefore, it is advisable to include fixed overhead per unit on normal capacity to actual production (7,50,000 x 3) ₹ 22,50,000 and balance ₹ 7,50,000 shall be transferred to Profit & Loss Account.

(ii) Actual production is 15,00,000 units: Fixed overhead is not going to change with the change in output and will remain constant at ₹ 30,00,000, therefore, overheads on actual basis is ₹ 2 (30,00,000/15,00,000).

Hence by valuing inventory at ₹ 3 each for fixed overhead purpose, we will be adding the element of cost to inventory which actually has not been incurred. At ₹ 3 per unit, total fixed overhead comes to ₹ 45,00,000 whereas, actual fixed overhead expense is only ₹ 30,00,000. Therefore, it is advisable to include fixed overhead on actual basis (15,00,000 x 2) ₹ 30,00,000.
The objective of this Standard is to prescribe the accounting treatment for property, plant and equipment. The principal issues in accounting for property, plant and equipment are the recognition of the assets, the determination of their carrying amounts and the depreciation charges and impairment losses to be recognised in relation to them.

Under Ind AS 16, property, plant and equipment is initially measured at its cost, subsequently measured using either a cost or a revaluation model and depreciated so that its depreciable amount is allocated on a systematic basis over its useful life.

This Standard shall be applied in accounting for property, plant and equipment except when another Standard requires or permits a different accounting treatment.

This Standard does not apply to:

- (a) PPE classified as held for sale (as per Ind AS 105)
- (b) Biological assets related to agricultural activity other than bearer plants (Ind AS 41)
- (c) Recognition and measurement of exploration and evaluation assets (Ind AS 106)
- (d) Mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources

However, this Standard applies to property, plant and equipment used to develop or maintain the assets described in (b)-(d).

It may be noted that other Indian Accounting Standards may require recognition of an item of property, plant and equipment based on an approach different from that in this Standard. For example, Ind AS 17, Leases, requires an entity to evaluate its recognition of an item of leased property, plant and equipment on the basis of the transfer of risks and rewards. However, in such cases other aspects of the accounting treatment for these assets, including depreciation, are prescribed by this Standard.

An entity accounting for investment property in accordance with Ind AS 40, Investment Property shall use the cost model in this Standard.
CONCEPT 3: RELEVANT DEFINITIONS

The following are the key terms used in this standard:

- **Property, plant and equipment** are tangible items that:
  
  a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
  
  b) are expected to be used during more than one period.

- **A bearer plant** is a living plant that:
  
  a) is used in the production or supply of agricultural produce;
  
  b) is expected to bear produce for more than one period; and
  
  c) has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales.

- **Carrying amount** is the amount at which an asset is recognised after deducting any accumulated depreciation and accumulated impairment losses.

- **Cost** is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction or, where applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other Indian Accounting Standards, e.g. Ind AS 102, Share-based Payment.

- **Depreciable amount** is the cost of an asset, or other amount substituted for cost, less its residual value.

- **Depreciation** is the systematic allocation of the depreciable amount of an asset over its useful life.

- **Entity-specific value** is the present value of the cash flows an entity expects to arise from the continuing use of an asset and from its disposal at the end of its useful life or expects to incur when settling a liability.
• **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. (See Ind AS 113, Fair Value Measurement.)

• **An impairment loss** is the amount by which the carrying amount of an asset exceeds its recoverable amount.

• **Recoverable amount** is the higher of an asset’s fair value less costs to sell and its value in use.

• The **residual value** of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

• **Useful life** is:
  a) the period over which an asset is expected to be available for use by an entity; or
  b) the number of production or similar units expected to be obtained from the asset by an entity.

### CONCEPT 4: RECOGNITION

**General recognition criteria**

The cost of an item of property, plant and equipment shall be recognised as an asset if, and only if:

a) it is probable that future economic benefits associated with the item will flow to the entity; and

b) the cost of the item can be measured reliably.

- Probable that future economic benefit will flow to entity
- Cost can be measured reliably
- Recognition of cost as an asset (PPE)
CONCEPT 5: SPARE PARTS, STAND-BY EQUIPMENT AND SERVICING EQUIPMENT

Items such as spare parts, stand-by equipment and servicing equipment are recognised in accordance with this Ind AS when they meet the definition of property plant and equipment otherwise, such items are classified as inventory.

CONCEPT 6: AGGREGATION OF INDIVIDUALLY INSIGNIFICANT ITEMS

This Standard does not prescribe the unit of measure for recognition, ie what constitutes an item of property, plant and equipment. Thus, judgement is required in applying the recognition criteria to an entity's specific circumstances. It may be appropriate to aggregate individually insignificant items, such as moulds, tools and dies, and to apply the criteria to the aggregate value.

CONCEPT 7: INITIAL COST

Items of property, plant and equipment may be acquired for safety or environmental reasons. The acquisition of such property, plant and equipment, although not directly increasing the future economic benefits of any particular existing item of property, plant and equipment, may be necessary for an entity to obtain the future economic benefits from its other assets.

Such items of property, plant and equipment qualify for recognition as assets because they enable an entity to derive future economic benefits from related assets in excess of what could be derived had those items not been acquired.

For example: A chemical manufacturer may install new chemical handling processes to comply with environmental requirements for the production and storage of dangerous chemicals; related plant enhancements are recognised as an asset because without them the entity is unable to manufacture and sell chemicals. However, the resulting carrying amount of such an asset and related assets is reviewed for impairment in accordance with Ind AS 36 Impairment of Assets.
**CONCEPT 8: SUBSEQUENT COSTS**

- Repair & Maintenance (Day to Day Servicing)
- Replacement at Regular Intervals
- Major Inspection/Overhauls

**CONCEPT 9: REPAIR AND MAINTENANCE**

An entity does not recognise in the carrying amount of an item of property, plant and equipment the costs of the day-to-day servicing of the item. Rather, these costs are recognised in profit or loss as incurred. Costs of day-to-day servicing are primarily the costs of labour and consumables, and may include the cost of small parts.

**CONCEPT 10: REPLACEMENT PARTS**

Parts of some items of property, plant and equipment may require replacement at regular intervals. For example, a furnace may require relining after a specified number of hours of use, or aircraft interiors such as seats and galleys may require replacement several times during the life of the airframe.

Items of property, plant and equipment may also be acquired to make a less frequently recurring replacement, such as replacing the interior walls of a building, or to make a non-recurring replacement.

Under the recognition principle, an entity recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if the recognition criteria are met. The carrying amount of those parts that are replaced is derecognised in accordance with the derecognition provisions of this Standard.

**CONCEPT 10: MAJOR INSPECTIONS OR OVERHAULS**

A condition of continuing to operate an item of property, plant and equipment may be performing regular major inspections for faults regardless of whether parts of the item are replaced.

When each major inspection is performed, its cost is recognised in the carrying amount of the item of property, plant and equipment as a replacement if the recognition criteria are satisfied.
Any remaining carrying amount of the cost of the previous inspection is derecognised. This occurs regardless of whether the cost of the previous inspection was identified in the transaction in which the item was acquired or constructed. If necessary, the estimated cost of a future similar inspection may be used as an indication of what the cost of the existing inspection component was when the item was acquired or constructed.

**CONCEPT 11: MEASUREMENT AT RECOGNITION**

**Measurement at cost**
An item of property, plant and equipment that qualifies for recognition as an asset should be initially measured at its cost.

**Element of cost**

**CASE I: COST OF AN ACQUIRED ASSET**

**Component of cost**
The cost of an item of property, plant and equipment comprises:

a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates;

b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management; and

c) the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period.

- Purchase price including import duties and non-refundable purchase taxes
- Directly attributable Cost
- Initial estimate of the costs of dismantling and removing the item and restoring
**CASE II: COST OF SELF-CONSTRUCTED ASSET**

The cost of a self-constructed asset is determined using the same principles as for an acquired asset. If an entity makes similar assets for sale in the normal course of business, the cost of the asset is usually the same as the cost of constructing an asset for sale.

**Examples of directly attributable costs are:**

<table>
<thead>
<tr>
<th>Cost Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee benefits cost arising directly from construction or acquisition PPE</td>
</tr>
<tr>
<td>Cost of Site Preparation</td>
</tr>
<tr>
<td>Initial delivery and handling costs</td>
</tr>
<tr>
<td>Installation and assembly costs</td>
</tr>
<tr>
<td>Professional Fees</td>
</tr>
<tr>
<td>Costs of testing—whether the asset is working properly after deducting proceeds from sale of any product produced during the testing period.</td>
</tr>
</tbody>
</table>

- **Example of costs that are not costs of an item of property, plant and equipment are:**

  - Costs of conducting business in a new location or with a new class of customer (including costs of staff training)
  - Costs incurred in introducing a new product or service
  - Cost of opening a new facility
  - Administrative and other general overhead costs

Therefore, any internal profits are eliminated in arriving at such costs. Similarly, the cost of abnormal amounts of wasted material, labour, or other resources incurred in self-constructing an asset is not included in the cost of the asset.

Ind AS 23, Borrowing Costs, establishes criteria for the recognition of interest as a component of the carrying amount of a self-constructed item of property, plant and equipment.
Bearer plants are accounted for in the same way as self-constructed items of property, plant and equipment before they are in the location and condition necessary to be capable of operating in the manner intended by management. Consequently, references to 'construction' in this Standard should be read as covering activities that are necessary to cultivate the bearer plants before they are in the location and condition necessary to be capable of operating in the manner intended by management.

**Cost of dismantling, removal and site restoration**

Cost incurred by an entity in respect of obligation for dismantling, removing and restoring the site on which an item of property, plant and equipment is located are recognised and measured in accordance with Ind AS 37, Provisions, Contingent Liabilities and Contingent Assets.

If the obligations are incurred when the asset is acquired, or during a period when the item is used other than to produce inventories, they are included in the cost of the item property, plant and equipment.

An entity applies Ind AS 2, Inventories, to the costs of obligations for dismantling, removing and restoring the site on which an item is located that are incurred during a particular period as a consequence of having used the item to produce inventories during that period.

**Incidental operations**

Some operations occur in connection with the construction or development of an item of property, plant and equipment, but are not necessary to bring the item to the location and condition necessary for it to be capable of operating in the manner intended by management.

These incidental operations may occur before or during the construction or development activities. For example, income may be earned through using a building site as a car park until construction starts.

Because incidental operations are not necessary to bring an item to the location and condition necessary for it to be capable of operating in the manner intended by management, the income and related expenses of incidental operations are recognised in profit or loss and included in their respective classifications of income and expense.

**Cessation of capitalisation**

Recognition of costs in the carrying amount of an item of property, plant and equipment ceases when the item is in the location and condition necessary for it to be capable of operating in the manner intended by management. Therefore, costs incurred in using or redeploying an item are not included in the carrying amount of that item.

For example, the following costs are not included in the carrying amount of an item of property, plant and equipment:
a) costs incurred while an item capable of operating in the manner intended by management has yet to be brought into use or is operated at less than full capacity;

b) initial operating losses, such as those incurred while demand for the item’s output builds up; and

c) costs of relocating or reorganising part or all of an entity’s operations.

**EXAMPLE**

Moon Ltd incurs the following costs in relation to the construction of a new factory and the introduction of its products to the local market.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>INR,000 (cost incurred)</th>
<th>INR,000 (As per Ind AS16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site preparation costs</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Direct Material</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Direct Labour cost, including ₹10,000 incurred during an industrial strike</td>
<td>1,160</td>
<td>1,150</td>
</tr>
<tr>
<td>Testing of various processes in factory</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Consultancy fees for installation of equipment</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Relocation of staff to new factory</td>
<td>450</td>
<td>-</td>
</tr>
<tr>
<td>General overheads</td>
<td>550</td>
<td>-</td>
</tr>
<tr>
<td>Estimated Costs to dismantle (at present value)</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total Cost to be Capitalised as per Ind AS 16</strong></td>
<td></td>
<td><strong>4,000</strong></td>
</tr>
</tbody>
</table>

**CASE III: PAYMENT DEFERRED BEYOND NORMAL CREDIT TERMS**

The cost of an item of property, plant and equipment is the cash price equivalent at the recognition date. If payment is deferred beyond normal credit terms, the difference between the cash price equivalent and the total payment is recognised as interest over the period of credit unless such interest is capitalised in accordance with Ind AS 23.

**CASE IV: EXCHANGE OF ASSETS**

- One or more items of property, plant and equipment may be acquired in exchange for a non-monetary asset or assets, or a combination of monetary and nonmonetary assets. The cost of such an item of property, plant and equipment is measured at fair value (even if an entity cannot immediately derecognise the asset given up) unless:
a) the exchange transaction lacks commercial substance; or  
b) the fair value of neither the asset received nor the asset given up is reliably measurable.

- If the acquired item is not measured at fair value, its cost is measured at the carrying amount of the asset given up.

- An entity determines whether an exchange transaction has commercial substance by considering the extent to which its future cash flows are expected to change as a result of the transaction. An exchange transaction has commercial substance if:
  
a) the configuration (risk, timing and amount) of the cash flows of the asset received differs from the configuration of the cash flows of the asset transferred; or  

b) the entity-specific value of the portion of the entity’s operations affected by the transaction changes as a result of the exchange; and  

c) the difference in (a) or (b) is significant relative to the fair value of the assets exchanged.

- For the purpose of determining whether an exchange transaction has commercial substance, the entity-specific value of the portion of the entity’s operations affected by the transaction shall reflect post-tax cash flows.

- The fair value of an asset is reliably measurable if:
  
a) the variability in the range of reasonable fair value measurements is not significant for that asset or  

b) the probabilities of the various estimates within the range can be reasonably assessed and used when measuring fair value.

- If an entity is able to measure reliably the fair value of either the asset received or the asset given up, then the fair value of the asset given up is used to measure the cost of the asset received unless the fair value of the asset received is more clearly evident.

<table>
<thead>
<tr>
<th>If PPE is acquired in exchange for other non-monetary asset or for a combination of monetary and non-monetary asset</th>
<th>Measure cost at fair value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unless the exchange transaction has no commercial substance or</td>
<td>Fair value of neither the asset received for given up can be measured reliably</td>
</tr>
</tbody>
</table>
**CASE V: ASSETS HELD UNDER FINANCE LEASE**

The cost of an item of property, plant and equipment held by a lessee under a finance lease is determined in accordance with Ind AS 17, Leases.

**CONCEPT 12: MEASUREMENT AFTER RECOGNITION**

Alternative bases available for measurement after recognition

A entity may choose either the cost model or the revaluation model as its accounting policy and should apply that policy to an entire class of property, plant and equipment.

**Cost model**

After recognition as an asset, an item of property, plant and equipment should be carried at its cost less any accumulated depreciation and any accumulated impairment losses.

```
+-----------------+-----------------+-----------------+
| Cost            | Accumulated     | Carrying Amount |
|                 | Depreciation    |                 |
+-----------------+-----------------+-----------------+
|                 | Accumulated     |                 |
|                 | Impairment Loss |                 |
```

**Revaluation model**

After recognition as an asset, an item of property, plant and equipment whose fair value can be measured reliably is carried at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations are required to be carried out with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period.
Frequency of revaluations

- The frequency of revaluations depends upon the changes in fair values of the items of property, plant and equipment being revalued. When the fair value of a revalued asset differs materially from its carrying amount, a further revaluation is required. Some items of property, plant and equipment experience significant and volatile changes in fair value, thus necessitating annual revaluation.

- Such frequent revaluations are unnecessary for items of property, plant and equipment with only insignificant changes in fair value. Instead, it may be necessary to revalue the item only every three or five years.

Accumulated depreciation at the date of revaluation

- When an item of property, plant and equipment is revalued, the carrying amount of that asset is adjusted to the revalued amount. At the date of revaluation, the asset is treated in one of the following ways:

  a) The gross carrying amount is adjusted in a manner that is consistent with the revaluation of the carrying amount of the asset. For example, the gross carrying amount may be restated by reference to observable market data or it may be restated proportionately to the change in the carrying amount. The accumulated depreciation at the date of the revaluation is adjusted to equal the difference between the gross carrying amount and the carrying amount of the asset after taking into account accumulated impairment losses; or

  b) The accumulated depreciation is eliminated against the gross carrying amount of the asset.
Revaluation to be made for entire class of assets

If an item of property, plant and equipment is revalued, the entire class of property, plant and equipment to which that asset belongs shall be revalued.

A class of property, plant and equipment is a grouping of assets of a similar nature and use in an entity’s operations. The following are examples of separate classes:

<table>
<thead>
<tr>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
</tr>
<tr>
<td>Land and Buildings</td>
</tr>
<tr>
<td>Machinery</td>
</tr>
<tr>
<td>Ships</td>
</tr>
<tr>
<td>Aircraft</td>
</tr>
<tr>
<td>Motor Vehicles</td>
</tr>
<tr>
<td>Furniture and Fixtures</td>
</tr>
<tr>
<td>Office Equipment</td>
</tr>
<tr>
<td>Bearer Plants</td>
</tr>
</tbody>
</table>

The items within a class of property, plant and equipment are revalued simultaneously to avoid selective revaluation of assets and the reporting of amounts in the financial statements that are a mixture costs and values as at different dates.

However, a class of assets may be revalued on a rolling basis provided revaluation of the class of assets is completed within a short period and provided the revaluations are kept up to date.

Treatment of Surplus or Deficit arising on Revaluation

- If an asset’s carrying amount is increased as a result of a revaluation, the increase should be recognised in other comprehensive income and accumulated in equity under the heading of revaluation surplus. However, the increase should be recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.

- If an asset’s carrying amount is decreased as a result of a revaluation, the decrease should be recognised in profit or loss. However, the decrease should be recognised in other comprehensive income to the extent of any credit balance existing in the revaluation surplus in respect of that asset. The decrease recognised in other comprehensive income reduces the amount accumulated in equity under the heading of revaluation surplus.
Treatment of revaluation gain and loss is summarized in the below diagram:

The revaluation surplus included in equity in respect of an item of property, plant and equipment may be transferred directly to retained earnings when the asset is derecognised. This may involve transferring the whole of the surplus when the asset is retired or disposed of.

However, some of the surplus may be transferred as the asset is used by an entity. In such a case, the amount of the surplus transferred would be the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset’s original cost. Transfers from revaluation surplus to retained earnings are not made through profit or loss.

The effects of taxes on income, if any, resulting from the revaluation of property, plant and equipment are recognised and disclosed in accordance with Ind AS 12, Income Taxes.

**CONCEPT 13: DEPRECIATION**

- The depreciable amount of an asset should be allocated on a systematic basis over its useful life. The depreciation charge for each period should be recognised in profit or loss unless it is included in the carrying amount of another asset.
- Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item should be depreciated separately.
• An entity allocates the amount initially recognised in respect of an item of property, plant and equipment to its significant parts and depreciates separately each such part.

• A significant part of an item of property, plant and equipment may have a useful life and a depreciation method that are the same as the useful life and the depreciation method of another significant part of that same item. Such parts may be grouped in determining the depreciation charge.

• To the extent that an entity depreciates separately some parts of an item of property, plant and equipment, it also depreciates separately the remainder of the item. The remainder consists of the parts of the item that are individually not significant. If an entity has varying expectations for these parts, approximation techniques may be necessary to depreciate the remainder in a manner that faithfully represents the consumption pattern and/or useful life of its parts.

• Land and buildings are separable assets and are accounted for separately, even when they are acquired together. With some exceptions, such as quarries and sites used for landfill, land has an unlimited useful life and therefore is not depreciated. Buildings have a limited useful life and therefore are depreciable assets. An increase in the value of the land on which a building stands does not affect the determination of the depreciable amount of the building.

• If the cost of land includes the costs of site dismantlement, removal and restoration, that portion of the land asset is depreciated over the period of benefits obtained by incurring those costs. In some cases, the land itself may have a limited useful life, in which case it is depreciated in a manner that reflects the benefits to be derived from it.

Residual Value
The residual value and the useful life of an asset should be reviewed at least at each financial year-end and, if expectations differ from previous estimates, the change(s) should be accounted for as a change in an accounting estimate in accordance with Ind AS 8, Accounting Policies, Changes in Accounting Estimates and Errors.

**EXAMPLE : REVISION OF USEFUL LIFE**

An asset which cost ₹ 10,000 was estimated to have a useful life of 10 years and residual value ₹ 2000. After two years, useful life was revised to 4 remaining years.

Calculate the depreciation charge.
SOLUTION:

<table>
<thead>
<tr>
<th></th>
<th>Year-1</th>
<th>Year-2</th>
<th>Year-3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>Less: Accumulated Depreciation</strong></td>
<td>(800)</td>
<td>(1,600)</td>
<td>(3,200)</td>
</tr>
<tr>
<td><strong>Carrying Amount</strong></td>
<td>9,200</td>
<td>8,400</td>
<td>6,800</td>
</tr>
<tr>
<td><strong>Charges for year</strong></td>
<td>$10,000 - 2,000 (= 800)</td>
<td>$10,000 - 2,000 (= 800)</td>
<td>$8,400 - 2,000 (= 1,600)</td>
</tr>
</tbody>
</table>

- The residual value of an asset may increase to an amount equal to or greater than the asset’s carrying amount. If it does, the asset’s depreciation charge is zero unless and until its residual value subsequently decreases to an amount below the asset’s carrying amount.

- Depreciation is recognised even if the fair value of the asset exceeds its carrying amount, as long as the asset’s residual value does not exceed its carrying amount. Repair and maintenance of an asset do not negate the need to depreciate it.

**Commencement of depreciation**
Depreciation of an asset begins when it is available for use, i.e. when it is in the location and condition necessary for it to be capable of operating in the manner intended by management.

**Cessation of depreciation**
- Depreciation of an asset ceases at the earlier of:
  - the date that the asset is classified as held for sale (or included in a disposal group that is classified as held for sale) in accordance with Ind AS 105.
  - the date that the asset is derecognised.
- Therefore, depreciation does not cease when the asset becomes idle or is retired from active use unless the asset is fully depreciated. However, under usage methods of depreciation the depreciation charge can be zero while there is no production.

**Factors affecting the useful life of an asset**
The future economic benefits embodied in an asset are consumed by an entity principally through its use. However, other factors, such as technical or commercial obsolescence and wear and tear while an asset remains idle, often result in the diminution of the economic benefits that might have been obtained from the asset. Consequently, all the following factors are considered in determining the useful life of an asset:
a) expected usage of the asset. Usage is assessed by reference to the asset’s expected capacity or physical output;

b) expected physical wear and tear, which depends on operational factors such as the number of shifts for which the asset is to be used and the repair and maintenance programme, and the care and maintenance of the asset while idle;

c) technical or commercial obsolescence arising from changes or improvements in production, or from a change in the market demand for the product or service output of the asset. Expected future reductions in the selling price of an item that was produced using an asset could indicate the expectation of technical or commercial obsolescence of the asset, which, in turn, might reflect a reduction of the future economic benefits embodied in the asset; and

d) legal or similar limits on the use of the asset, such as the expiry dates of related leases.

**Impact of an entity’s asset management policy**

The useful life of an asset is defined in terms of the asset’s expected utility to the entity. The asset management policy of the entity may involve the disposal of assets after a specified time or after consumption of a specified proportion of the future economic benefits embodied in the asset.

Therefore, the useful life of an asset may be shorter than its economic life. The estimation of the useful life of the asset is a matter of judgement based on the experience of the entity with similar assets.

**Depreciation method**

The depreciation method used shall reflect the pattern in which the asset’s future economic benefits are expected to be consumed by the entity.

The depreciation method applied to an asset is reviewed at least at each financial year-end and, if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the method should be changed to reflect the changed pattern. Such a change is accounted for as a change in an accounting estimate in accordance with Ind AS8.

**EXAMPLE: CHANGE IN DEPRECIATION METHOD**

An entity acquired an asset 3 years ago at a cost of ₹ 5 million. The depreciation method adopted for the asset was 10 percent reducing balance method.

At the end of Year 3, the entity estimates that the remaining useful life of the asset is 8 years and determines to adopt straight-line method from that date so as to reflect the revised estimated pattern of recovery of economic benefits.
Show the necessary treatment in accordance of Ind AS 16.

**SOLUTION:**

Change in Depreciation Method shall be accounted for as a change in an accounting estimate in accordance of Ind AS 8 and hence will have a prospective effect.

Depreciation Charges for year 1 to 11 will be as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>₹ 500,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>₹ 450,000</td>
</tr>
<tr>
<td>Year 3</td>
<td>₹ 405,000</td>
</tr>
<tr>
<td>Year 4 to 11</td>
<td>₹ 456,000 p.a.</td>
</tr>
</tbody>
</table>

A variety of depreciation methods can be used to allocate the depreciable amount of an asset on a systematic basis over its useful life. These methods include:

a) Straight-line depreciation method results in a constant charge over the useful life if the asset's residual value does not change.

b) Diminishing balance method results in a decreasing charge over the useful life.

c) Units of production method results in a charge based on the expected use or output.

The entity selects the method that most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. That method is applied consistently from period to period unless there is a change in the expected pattern of consumption of those future economic benefits.

A depreciation method that is based on revenue that is generated by an activity that includes the use of an asset is not appropriate. The revenue generated by an activity that includes the use of an asset generally reflects factors other than the consumption of the economic benefits of the asset (e.g. other inputs and processes, selling activities and changes in sales volumes and prices).
IMPAIRMENT

Identification of an impairment loss

To determine whether an item of property, plant and equipment is impaired, an entity applies Ind AS 36, Impairment of Assets. Ind AS 36 explains how an entity reviews the carrying amount of its assets, how it determines the recoverable amount of an asset, and when it recognises, or reverses the recognition of, an impairment loss.

Compensation for impairment

• Compensation from third parties for items of property, plant and equipment that were impaired, lost or given up shall be included in profit or loss when the compensation becomes receivable.
• Impairments or losses of items of property, plant and equipment, related claims for or payments of compensation from third parties and any subsequent purchase or construction of replacement assets are separate economic events and are accounted for separately as follows:
  a) impairments of items of property, plant and equipment are recognised in accordance with Ind AS 36;
  b) derecognition of items of property, plant and equipment retired or disposed of is determined in accordance with this Standard;
  c) compensation from third parties for items of property, plant and equipment that were impaired, lost or given up is included in determining profit or loss when it becomes receivable; and
  d) the cost of items of property, plant and equipment restored, purchased or constructed as replacements is determined in accordance with this Standard.

CONCEPT 14: DERECOGNITION

Derecognition - general

• The carrying amount of an item of property, plant and equipment should be derecognised:
  a) on disposal; or
  b) when no future economic benefits are expected from its use or disposal.
• The gain or loss arising from the derecognition of an item of property, plant and equipment is included in profit or loss when the item is derecognised (unless Ind AS 17 requires otherwise on a sale and leaseback). Gains shall not be classified as revenue.
• The gain or loss arising from the derecognition of an item of property, plant and equipment shall be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.
• In determining the date of disposal of an item, an entity applies the criteria in Ind AS 18 for recognising revenue from the sale of goods. Ind AS 17 applies to disposal by a sale and leaseback.

• The amount of consideration to be included in the gain or loss arising from the derecognition of an item of property, plant and equipment is determined in accordance with the requirements for determining the transaction price in Ind AS 18.

• Subsequent changes to the estimated amount of the consideration included in the gain or loss shall be accounted for in accordance with the requirements for changes in the transaction price in Ind AS 18.

CONCEPT 15: DISCLOSURE

Disclosure-general

• The financial statements should disclose, for each class of property, plant and equipment:
  a) the measurement bases used for determining the gross carrying amount;
  b) the depreciation methods used;
  c) the useful lives or the depreciation rates used; and
  d) the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period.

• Entity is also required to provide a reconciliation of the carrying amount at the beginning and end of the period showing:
  a) additions;
  b) assets classified as held for sale or included in a disposal group classified as held for sale in accordance with Ind AS 105 and other disposals;
  c) acquisitions through business combinations;
  d) increases or decreases resulting from revaluations and from impairment losses recognised or reversed in other comprehensive income;
  e) impairment losses recognised in profit or loss in accordance with Ind AS 36;
  f) impairment losses reversed in profit or loss in accordance with Ind AS 36;
  g) depreciation;
  h) the net exchange differences arising on the translation of the financial statements from the functional currency into a different presentation currency, including the translation of a foreign operation into the presentation currency of the reporting entity; and
  i) other changes.
• The financial statements are also disclose:
  a) the existence and amounts of restrictions on title, and property, plant and equipment pledged as security for liabilities;
  b) the amount of expenditures recognised in the carrying amount of an item of property, plant and equipment in the course of its construction;
  c) the amount of contractual commitments for the acquisition of property, plant and equipment; and
  d) if it is not disclosed separately in the statement of profit and loss, the amount of compensation from third parties for items of property, plant and equipment that were impaired, lost or given up that is included in profit or loss.

Items stated at revalued amounts
• If items of property, plant and equipment are stated at revalued amounts, the following should be disclose:
  a) the effective date of the revaluation;
  b) whether an independent valuer was involved;
  c) for each revalued class of property, plant and equipment, the carrying amount that would have been recognised had the assets been carried under the cost model; and
  d) the revaluation surplus, indicating the change for the period and any restrictions on the distribution of the balance to shareholders.

Additional recommended disclosure
• Entities are encouraged but does not required, to disclose the following amounts:
  a) the carrying amount of temporarily idle property, plant and equipment;
  b) the gross carrying amount of any fully depreciated property, plant and equipment that is still in use;
  c) the carrying amount of property, plant and equipment retired from active use and not classified as held for sale in accordance with Ind AS 105; and
  d) when the cost model is used, the fair value of property, plant and equipment when this is materially different from the carrying amount.
## SIGNIFICANT DIFFERENCES IN IND AS 16 VIS-À-VIS AS 10

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Particular</th>
<th>Ind AS 16</th>
<th>AS 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fixed Assets retired from Active Use and Held for Sale</td>
<td>Ind AS 16 does not deal with the assets 'held for sale' because the treatment of such assets is covered in Ind AS 105, Non-current Assets Held for Sale and Discontinued Operations.</td>
<td>AS 10 deals with accounting for items of fixed assets retired from active use and held for sale.</td>
</tr>
<tr>
<td>2.</td>
<td>Stripping Costs in the Production Phase of a Surface Mine</td>
<td>Ind AS 16 provides guidance on measuring 'Stripping Costs in the Production Phase of a Surface Mine'.</td>
<td>AS 10 does not contain this guidance.</td>
</tr>
</tbody>
</table>

## PRACTICAL QUESTIONS FOR PRACTICE ON VARIOUS CONCEPTS

**QUESTION 1 (REPLACEMENT)**

MS Ltd. has acquired a heavy machinery at a cost of ₹ 1,00,00,000 (with no breakdown of the component parts). The estimated useful life is 10 years. At the end of the sixth year, one of the major components, the turbine requires replacement, as further maintenance is uneconomical. The remainder of the machine is perfect and is expected to last for the next four years. The cost of a new turbine is ₹ 45,00,000.

Can the cost of the new turbine be recognised as an asset, and, if so, what treatment should be used?

**QUESTION 2 (ACQUISITION OF ASSETS)**

On April 1, 20X1, XYZ Ltd, acquired a machine under the following terms:

<table>
<thead>
<tr>
<th></th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>List price of machine</td>
<td>80,00,000</td>
</tr>
<tr>
<td>Import duty</td>
<td>5,00,000</td>
</tr>
<tr>
<td>Delivery fees</td>
<td>1,00,000</td>
</tr>
<tr>
<td>Electrical installation costs</td>
<td>10,00,000</td>
</tr>
</tbody>
</table>
In addition to the above information XYZ Ltd. was granted a trade discount of 10% on the initial list price of the asset and a settlement discount of 5%, if payment for the machine was received within one month of purchase. XYZ Ltd. paid for the plant on April 20, 20X1. At what cost the asset will be recognised?

**QUESTION 3**

The term of an operating lease allows a tenant, XYZ Ltd. to tailor the property to meet its specific needs by building an additional internal wall, but on condition that the tenant returns the property at the end of the lease in its original state. This will entail dismantling the internal wall. XYZ Ltd. incurs a cost of ₹25,00,000 on building the wall and present value of estimated cost to dismantle the wall is ₹10,00,000. At what value should the leasehold improvements be capitalised in the books of XYZ Ltd.

**SOLUTION**

The leasehold improvement is not only the cost of building the wall, but also the cost of restoring the property at the end of the lease. As such both costs i.e., ₹35,00,000 are capitalised when the internal wall is built and will be recognised in profit and loss over the useful life of the asset (generally the lease term) as a part of depreciation charge.

**QUESTION 4 (ACQUISITION OF ASSETS)**

X Limited started construction on a building for its own use on April 1, 20X0. The following costs are incurred:

<table>
<thead>
<tr>
<th>Item</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price of land</td>
<td>30,00,000</td>
</tr>
<tr>
<td>Stamp duty &amp; legal fee</td>
<td>2,00,000</td>
</tr>
<tr>
<td>Architect fee</td>
<td>2,00,000</td>
</tr>
<tr>
<td>Site preparation</td>
<td>50,000</td>
</tr>
<tr>
<td>Materials</td>
<td>10,00,000</td>
</tr>
<tr>
<td>Direct labour cost</td>
<td>4,00,000</td>
</tr>
<tr>
<td>General overheads</td>
<td>1,00,000</td>
</tr>
</tbody>
</table>

Other relevant information: Material costing ₹1,00,000 had been spoiled and therefore wasted and a further ₹1,50,000 was spent on account of faulty design work. As a result of
these problems, work on the building was stopped for two weeks during November 20X0 and it is estimated that ₹ 22,000 of the labour cost relate to that period. The building was completed on January 1, 20X1 and brought in use April 1, 20X1. X Limited had taken a loan of ₹ 40,00,000 on April 1, 20X0 for construction of the building (which meets the definition of qualifying asset as per Ind AS 23). The loan carried an interest rate of 8% per annum and is repayable on April 1, 20X2.

Calculate the cost of the building that will be included in tangible non-current asset as an addition?

**QUESTION 5 (CHANGE IN ESTIMATED LIFE)**

XYZ Ltd. purchased an asset on January 1, 20X0, for ₹ 1,00,000 and the asset had an estimated useful life of ten years and a residual value of ₹ nil. The company has charged depreciation using the straight-line method at ₹ 10,000 per annum. On January 1, 20X4, the management of XYZ Ltd. Reviews the estimated life and decides that the asset will probably be useful for a further four years and, therefore, the total life is revised to eight years. How should the asset be accounted for remaining years?

**QUESTION 6 (ACQUISITION OF ASSETS)**

On 1 April 20X1, Sun Ltd purchased some land for ₹ 10 million (including legal costs of ₹ 1 million) in order to construct a new factory. Construction work commenced on 1 May 20X1. Sun Ltd incurred the following costs in relation with its construction:

- Preparation and levelling of the land - ₹ 3,00,000.
- Purchase of materials for the construction - ₹ 6·08 million in total.
- Employment costs of the construction workers - ₹ 2,00,000 per month.
- Overhead costs incurred directly on the construction of the factory - ₹1,00,000 per month.
- Ongoing overhead costs allocated to the construction project using the company's normal overhead allocation model- ₹ 50,000 per month.
- Income received during the temporary use of the factory premises as a car park during the construction period - ₹ 50,000.
- Costs of relocating employees to work at the new factory- ₹ 300,000.
- Costs of the opening ceremony on 31 January 20X1- ₹ 150,000.

The factory was completed on 30 November 20X1 and production began on 1 February 20X2. The overall useful life of the factory building was estimated at 40 years from the date of completion. However, it is estimated that the roof will need to be replaced 20 years after the date of completion and that the cost of replacing the roof at current prices would be 30% of the total cost of the building.
At the end of the 40-year period, Sun Ltd has a legally enforceable obligation to demolish the factory and restore the site to its original condition. The directors estimate that the cost of demolition in 40 years' time (based on prices prevailing at that time) will be ₹20 million. An annual risk adjusted discount rate which is appropriate to this project is 8%. The present value of ₹1 payable in 40 years' time at an annual discount rate of 8% is 4.6 cents.

The construction of the factory was partly financed by a loan of ₹17.5 million taken out on 1 April 20X1. The loan was at an annual rate of interest of 6%. During the period 1 April 20X1 to 31 August 20X1 (when the loan proceeds had been fully utilised to finance the construction), Sun Ltd received investment income of ₹100,000 on the temporary investment of the proceeds.

Required:
Computate the carrying amount of the factory in the Balance Sheet of Sun Ltd at 31 March 20X2. You should explain your treatment of all the amounts referred to in this part in your answer.

QUESTION NO 7 (REPAIRS & REPLACEMENT)

XYZ Ltd. has acquired a heavy road transporter at a cost of ₹1,00,000 (with no breakdown of the component parts). The estimated useful life is 10 years. At the end of the sixth year, the power train (one of its component) requires replacement, as further maintenance is uneconomical due to the off-road time required. The remainder of the vehicle is perfectly roadworthy and is expected to last for the next four years. The cost of a new power train is ₹45,000.

Can the cost of the new power train be recognized as an asset, and, if so, what treatment should be used?

QUESTION NO 8 (ACQUISITION OF ASSETS)

ABC Ltd. is installing a new plant at its production facility. It has incurred these costs:

<table>
<thead>
<tr>
<th>1</th>
<th>Cost of the plant (cost per supplier's invoice plus taxes)</th>
<th>₹ 25,00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Initial delivery and handling costs</td>
<td>₹ 2,00,000</td>
</tr>
<tr>
<td>3</td>
<td>Cost of site preparation</td>
<td>₹ 6,00,000</td>
</tr>
<tr>
<td>4</td>
<td>Consultants used for advice on the acquisition of the plant</td>
<td>₹ 7,00,000</td>
</tr>
<tr>
<td>5</td>
<td>Interest charges paid to supplier of plant for deferred credit</td>
<td>₹ 2,00,000</td>
</tr>
<tr>
<td>6</td>
<td>Estimated dismantling costs to be incurred after 7 years</td>
<td>₹ 3,00,000</td>
</tr>
<tr>
<td>7</td>
<td>Operating losses before commercial production</td>
<td>₹ 4,00,000</td>
</tr>
</tbody>
</table>

Please advise ABC Ltd. on the costs that can be capitalized in accordance with Ind AS 16.
**QUESTION NO 9 (REVALUATION OF ASSETS)**

A Ltd. has an item of plant with an initial cost of ₹ 1,00,000. At the date of revaluation, accumulated depreciation amounted to ₹ 55,000. The fair value of the asset, by reference to transactions in similar assets, is assessed to be ₹ 65,000.

Pass Journal Entries with regard to Revaluation?

**QUESTION NO 10 (CHANGE IN ESTIMATED LIFE)**

B Ltd. owns an asset with an original cost of ₹ 2,00,000. On acquisition, management determined that the useful life was 10 years and the residual value would be ₹ 20,000. The asset is now 8 years old, and during this time there have been no revisions to the assessed residual value.

At the end of year 8, management has reviewed the useful life and residual value and has determined that the useful life can be extended to 12 years in view of the maintenance program adopted by the company. As a result, the residual value will reduce to ₹ 10,000.

How would the above changes in estimates be made by B Ltd.?

**QUESTION NO 11**

X Ltd. has a machine which got damaged due to fire as on January 31, 20X1. The carrying amount of machine was ₹ 1,00,000 on that date. X Ltd. sold the damaged asset as scrap for ₹ 10,000. X Ltd. has insured the same asset against damage. As on March 31, 20X1, the compensation proceeds was still in process but the insurance company has confirmed the claim. Compensation of ₹ 50,000 is receivable from the insurance company. How X Ltd. will account for the above transaction?

**QUESTION NO 12 (CHANGE IN DECOMMISSIONING COST)**

An entity has a nuclear power plant and a related decommissioning liability. The nuclear power plant started operating on April 1, 2017. The plant has a useful life of 40 years. Its initial cost was ₹ 1,20,000 which included an amount for decommissioning costs of ₹ 10,000, which represented ₹ 70,400 in estimated cash flows payable in 40 years discounted at a risk-adjusted rate of 5 per cent. The entity's financial year ends on March 31. On March, value of the decommissioning liability has decreased by ₹ 8,000. The discount rate has not yet changed.

How the entity will account for the above changes in decommissioning liability if it adopts cost model?
**QUESTION NO 13 (CHANGE IN DECOMMISSIONING COST)**

An entity has a nuclear power plant and a related decommissioning liability. The nuclear power plant started operating on April 1, 20X1. The plant has a useful life of 40 years. Its initial cost was ₹ 1,20,000.; This included an amount for decommissioning costs of ₹ 10,000, which represented ₹ 70,400 in estimated cash flows payable in 40 years discounted at a risk-adjusted rate of 5 per cent. The entity's financial year ends on March 31. Assume that a market-based discounted cash flow valuation of ₹ 1,15,000 is obtained at March 31, 20X4. It includes an allowance of ₹ 11,600 for decommissioning costs, which represents no change to the original estimate, after the unwinding of three years’ discount. On March 31, 20X5, the entity estimates that, as a result of technological advances, the present value of the decommissioning liability has decreased by ₹ 5,000. The entity decides that a full valuation of the asset is needed at March 31, 20X5, in order to ensure that the carrying amount does not differ materially from fair value. The asset is now valued at ₹ 1,07,000, which is net of an allowance for the reduced decommissioning obligation.

How the entity will account for the above changes in decommissioning liability if it adopts revaluation model?

**QUESTION 14- REPLACEMENT COST**

Sun Ltd has acquired a heavy road trailer at a cost of ₹ 100,000 (with no breakdown of component parts). The estimated useful life is 10 years. At the end of the sixth year, the engine requires replacement, as further maintenance is uneconomical due to the off-road time required. The remainder of the vehicle is perfectly road worthy and is expected to last for the next four years. The cost of the new engine is ₹ 45,000. The discount rate assumed is 5%.

Whether the cost of new engine can be recognised as the asset, and if so, what treatment should be followed?

**SOLUTION**

For recognition of an item as property, plant and equipment, the recognition condition needs to be satisfied:

(a) future economic benefits associated with the asset should flow to the entity and
(b) cost can be measured reliably.

The new engine will produce economic benefits to the Company and cost of the engine can be measured reliably. Hence, the item should be recognised as the asset.

The cost of ₹ 45,000 of new engine will be added to the carrying amount.

The original invoice of the trailer did not specify the cost of the engine. Therefore, the cost of replacement ₹ 45,000 will used as indicative price and discount to year 1,
i.e., \( (45,000 \times \frac{1}{1.05^6}) = 33,580 \)

Revised Cost = \((100,000 - 33,580 + 45,000) = 111,420 \)

**QUESTION NO 15 (INSPECTION COST)**

A shipping company is required by law to bring all ships into dry dock every five years for a major inspection overhaul. Overhaul expenditure might at first sight seem to be a repair to the ships but it is actually a cost incurred in getting the ship back into a seaworthy condition. As such the costs must be capitalized.

A ship which cost ₹ 20 million with a 20 year life must have major overhaul every five years. The estimated cost of the overhaul at the five-year point is ₹ 5 million.

**QUESTION 16 – DEFERRED PAYMENT CREDIT**

On 1st April 20X1, an item of property is offered for sale at ₹ 10 million, with payment terms being three equal installments of ₹ 33,33,333 over a two years period (payments are made on 1st April 20X1, 31st March 20X2 and 31st March 20X3).

The property developer is offering a discount of 5 percent (i.e. ₹ 0.5 million) if payment is made in full at the time of completion of sale. Implicit interest rate of 5.36 percent p.a. Show how the property will be recorded in accordance of Ind AS 16.

**QUESTION 17 – EXCHANGE OF ASSETS**

Pluto Ltd owns land and building which are carried in its balance sheet at an aggregate carrying amount of ₹ 10 million. The fair value of such asset is ₹ 15 million. It exchanges the land and building for a private jet, which has a fair value of ₹ 18 million, and pays additional ₹ 3 million in cash.

Show the necessary treatment as per Ind AS 16.

**QUESTION 18 ACCUMULATED DEPRECIATION AT THE DATE OF REVALUATION**

Jupiter Ltd. has an item of plant with an initial cost of ₹ 100,000. At the date of revaluation accumulated depreciation amounted to ₹ 55,000. The fair value of asset, by reference to transactions in similar assets, is assessed to be ₹ 65,000.

Find out the entries to be passed?
QUESTION 19: REVALUATION MODEL FOR ENTIRE CLASS

Venus Ltd. is a large manufacturing group. It owns a considerable number of industrial buildings, such as factories and warehouses, and office buildings in several capital cities. The industrial buildings are located in industrial zones whereas the office buildings are in central business districts of the cities. Venus's Ltd. management want to apply the Ind AS 16 revaluation model to the subsequent measurement of the office buildings but continue to apply the historical cost model to the industrial buildings. Is this acceptable under Ind AS 16, Property, Plant and Equipment?

QUESTION 20 UTILISATION OF REVALUATION SURPLUS

An item of PPE was purchased for ₹ 9,00,000 on 1 April 20X1. It is estimated to have a useful life of 10 years and is depreciated on a straight line basis. On 1 April 20X3, the asset is revalued to ₹ 9,60,000. The useful life remains unchanged at ten years.

Show the necessary treatment as per Ind AS 16.
PAST EXAMINATION QUESTIONS

QUESTION 1 NOVEMBER 2018 EXAM

On 1st April, 2017 Good Time Limited purchase some land for ₹ 1.5 crore (including legal cost of ₹ 10 lakhs) for the purpose of constructing a new factory. Construction work commenced on 1st May, 2017 Good Time Limited incurred the following costs in relation to its construction.

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation and levelling of the land</td>
</tr>
<tr>
<td>Purchase of materials of the construction</td>
</tr>
<tr>
<td>Employment costs of the construction workers (per month)</td>
</tr>
<tr>
<td>Overhead costs incurred directly on the construction of the factory (per month)</td>
</tr>
<tr>
<td>Ongoing overhead costs allocated to the construction project (using he company’s normal overhead allocation model) per month</td>
</tr>
<tr>
<td>Costs of relocating employees to work at new factory</td>
</tr>
<tr>
<td>Costs of the opening ceremony on 1st January, 2018</td>
</tr>
<tr>
<td>Income received during the temporary use of the factory premises as a store during the construction period.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

The construction of the factory was completed on 31st December, 2017 and production began on 1st February, 2018. The overall useful life of the factory building was estimated at 40 years from the date of completion. However, it is estimated that the roof will need to be replaced 20 years after the date of completion and that the cost of replacing the roof at current prices would be 25% of the total cost of the building.

At the end of the 40 years period, Good Time Limited has a legally enforceable obligation to demolish the factory and restore the site to its original condition. The company estimates that the cost of demolition in 40 years time (based on price prevailing at that time) will be ₹ 3 crore. The annual risk adjusted discount rate which is appropriate to this project is 8% The present value of ₹ 1 payable in 40 years time at an annual discount rate of 8% is 0.046.

The construction of the factory was partly financed by a loan of ₹ 1.4 crore taken out on 1st April, 2017. The loan was at an annual rate of interest of 9% During the period 1st April, 2017 to 30th September, 2017 (when the loan proceeds had been fully utilized to finance the construction), Good Time Limited received investment income of ₹ 1,25,000 on the temporary investment of the proceeds.

You are required to compute the cost of the factory and the carrying amount of the

**ANSWER**

**Computation of the cost of the factory**

<table>
<thead>
<tr>
<th>Description</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of land</td>
<td>1,50,00,000</td>
</tr>
<tr>
<td>Preparation and levelling</td>
<td>4,40,000</td>
</tr>
<tr>
<td>Materials</td>
<td>92,00,000</td>
</tr>
<tr>
<td>Employment costs of construction workers (1,45,000 x 8 months)</td>
<td>11,60,000</td>
</tr>
<tr>
<td>Direct overhead costs (1,25,000 x 8 months)</td>
<td>10,00,000</td>
</tr>
<tr>
<td>Allocated overhead costs</td>
<td>Nil</td>
</tr>
<tr>
<td>Income from use of a factory as a store</td>
<td>Nil</td>
</tr>
<tr>
<td>Relocation costs</td>
<td>Nil</td>
</tr>
<tr>
<td>Costs of the opening ceremony</td>
<td>Nil</td>
</tr>
<tr>
<td>Finance costs</td>
<td>9,45,000</td>
</tr>
<tr>
<td>Investment income on temporary investment of the loan proceeds</td>
<td>-1,25,000</td>
</tr>
<tr>
<td>Demolition cost recognised as provision (3,00,00,000 x 0.046)</td>
<td>13,80,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,90,00,000</td>
</tr>
</tbody>
</table>

**Computation of carrying amount of the factory as at 31st March, 2018**

<table>
<thead>
<tr>
<th>Description</th>
<th>Land (Non-depreciable asset)</th>
<th>Factory (Depreciable asset)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of the asset (Total cost 2,90,00,000)</td>
<td>1,50,00,000</td>
<td>1,40,00,000</td>
</tr>
<tr>
<td>Less: Depreciation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On Land</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>On Factory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation on roof component (1,40,00,000 x 25% x 1/20 x 3/12)</td>
<td>43,750</td>
<td></td>
</tr>
<tr>
<td>Depreciation on remaining factory (1,40,00,000 x 75% x 1/40 x 3/12)</td>
<td></td>
<td>65,625</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-1,09,375</td>
</tr>
</tbody>
</table>
Carrying amount of depreciable asset ie factory

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Cost</th>
<th>1,50,000,000</th>
<th>1,38,90,625</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost</td>
<td></td>
<td>2,88,90,625</td>
<td></td>
</tr>
</tbody>
</table>

**Note**

1. Interest cost has been capitalised based on nine month period. This is because, purchase of land would trigger off capitalisation.

2. All of the net finance cost ₹ 8,20,000 (₹ 9,45,000 - ₹ 1,25,000) has been allocated to the depreciable asset i.e Factory. Alternatively, it can be allocated proportionately between land and factory.

**QUESTION 2 NOVEMBER 2019 EXAM**

M Ltd. is setting up a new factory outside the Delhi city limits. In order to facilitate the construction of the factory and its operations, M Ltd. is required to incur expenditure on the construction/development of electric-substation. Though M Ltd. incurs (or contributes to) the expenditure on the construction/development, it will not have ownership rights on these items and they are also available for use to other entities and public at large. Whether M Ltd. can capitalise expenditure incurred on these items as property, plant and equipment (PPE)? If yes, then how should these items be depreciated and presented in the financial statements of M Ltd. as per Ind AS?

**ANSWER**

As per Ind AS 16, the cost of an item of property, plant and equipment shall be recognised as an asset if, and only if:

1. it is probable that future economic benefits associated with the item will flow to the entity; and
2. the cost of the item can be measured reliably.

Ind AS 16, further, states that the cost of an item of property, plant and equipment comprise any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

In the given case, electric-substation is required to facilitate the construction of the refinery and for its operations. Expenditure on these items is required to be incurred in order to get future economic benefits from the project as a whole which can be considered as the unit of measure for the purpose of capitalisation of the said expenditure even though the company cannot restrict the access of others for using the assets individually. It is apparent that the aforesaid expenditure is directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.
In view of this, even though M Ltd. may not be able to recognise expenditure incurred on electric-substation as an individual item of property, plant and equipment in many cases (where it cannot restrict others from using the asset), expenditure incurred may be capitalised as a part of overall cost of the project.

From this, it can be concluded that, in the extant case the expenditure incurred on electric-substation should be considered as the cost of constructing the factory and accordingly, expenditure incurred on electric-substation should be allocated and capitalised as part of the items of property, plant and equipment of the factory.

**Depreciation**

As per Ind AS 16, each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately.

Further, Ind AS 16 provides that, if these assets have a useful life which is different from the useful life of the item of property, plant and equipment to which they relate, it should be depreciated separately. However, if these assets have a useful life and the depreciation method that are the same as the useful life and the depreciation method of the item of property, plant and equipment to which they relate, these assets may be grouped in determining the depreciation charge. Nevertheless, if it has been included in the cost of property, plant and equipment as a directly attributable cost, it will be depreciated over the useful lives of the said property, plant and equipment.

The useful lives of electric-substation should not exceed that of the asset to which it relates.
Entities are borrowing the funds to acquire, build and install the fixed assets and other assets, these assets take time to make them useable or saleable, therefore the entity incur the interest (cost on borrowings) to acquire and build these assets. The objective of this Ind AS is to prescribe the treatment of borrowing cost (interest+ other cost) in accounting, whether the cost of borrowing should be included in the cost of assets or not.

This Standard does not apply:

- Cost of owner's equity, including preference share capital not classified as a liability:
- A qualifying asset measured at fair value, for example, biological asset: or
- Inventories that are manufactured or other otherwise produced in large quantities on a repetitive basis.

Borrowing costs are defined as interest and other costs incurred relating to borrowing of funds. It includes the following costs or charges:

- Interest expenses calculated using the effective interest rate method.
- Finance charges when the asset acquired under finance leases.
- Exchange difference arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to make it equal to the net carrying amount of the financial liability. This is somewhat akin to internal rate of return.

When applying the effective interest method, an generally amortize any fees, points paid or receive transaction costs and other premium or discounts included in the calculation of the effective interest rate over the expected life of the instrument. However, shorter period is used if this is the period which the fees, points paid or received, transaction costs premiums or discounts relate.
Example 1:
X Ltd borrowed for 5 years by issuing 10% debentures of ₹ 100 each having total face value of ₹ 1,000 crore issued at discount and collected ₹ 990.58 crores. The issued expenses were ₹ 10 lakhs, which were paid at the time of issue. What will be effective interest rate on these borrowing?

The debentures are issued at a discount further issue expenses of ₹ 10 lakhs has also been incur the effective interest rate will be higher than the coupon rate of 10% by applying the formula- \( PV = \frac{FV}{(i+r)^n} \). The effective rate comes 10.25%

The correctness of this effective interest rate is tested below as the future cash outflow discounted @10.25% is equal to cash inflow by issuing the debentures.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash inflow (Net carrying amount)</th>
<th>Future Cash outflow interest + Principal</th>
<th>Discount rate @10.25%</th>
<th>Discounted cash outflow (Amount in crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>(990.58-0.10) =990.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>100</td>
<td>0.9070</td>
<td>90.70</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>100</td>
<td>0.8230</td>
<td>82.30</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>100</td>
<td>0.7462</td>
<td>74.62</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>100</td>
<td>0.6768</td>
<td>67.68</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1100</td>
<td>0.6138</td>
<td>675.18</td>
<td></td>
</tr>
</tbody>
</table>

Net Cash inflow received on account of borrowings from debenture is equal to present value of cash outflow on account of interest ₹ 100 crores every year and in 5th year ₹ 1100 crores including principal repayment.

CONCEPT 5: DIRECT BORROWING COST

As per this Ind AS, borrowing cost, which is directly attributable to the acquisition, construction or production of qualifying asset should be capitalized as part of cost of the asset. Other borrowing costs are recognized as expenses.

CONCEPT 6: QUALIFYING ASSET

An asset which takes substantial period of time to get ready for its intended use or sale, is called qualifying asset.
Examples of qualifying assets:

- Any tangible fixed assets, which are in construction process or acquired tangible fixed assets, which are not ready for use or resale such as plants and machinery.
- Any intangible assets, which are in development phase or acquired but not ready for use or resale, such as patent.
- Investment property.
- Inventories that require a substantial period (i.e. generally more than one accounting period) to bring them to a saleable condition.

Following are the examples which are not qualifying assets:

- Financial asset;
- Inventories that are manufactured, or otherwise produced, over a short period of time;
- Assets which are ready for their intended use or sale when acquired.

CONCEPT 7: CONDITIONS FOR CAPITALIZATION OF BORROWING COST

Following conditions should be satisfied for capitalization of borrowing costs:

- Those borrowing costs, which are directly attributable to the acquisition, construction or production of qualifying asset, are eligible for capitalization. Directly attributable costs are those costs that would have been avoided if the expenditure on the qualifying asset had not been made.
- Qualifying assets will give future economic benefit to the enterprise and the cost can be measured reliably.

CONCEPT 8: AMOUNT OF BORROWING COSTS ELIGIBLE FOR CAPITALIZATION

- Specific borrowing-

  \[
  \text{Amount of borrowing cost to the capitalized (Amount borrowed is specifically for the purchase of qualifying assets)} = \text{Actual borrowing cost incurred during the period less any income on the temporary investment of borrowed amount.}
  \]

Example 2:

X Ltd borrowed for 5 years by issuing 10% debentures of ₹ 100 each having total face of ₹ 1,000 crores, issued at discount and collected ₹ 990.58 crores. The issued expenses were
₹ 10 lakhs, which were paid at the time of issue. Effective rate of interest is 10.25%. It is specific borrowing for investment in a power plant. Since presently there is requirement for only 50% of the moraty raised and the balance will be required after 6 months of Year 1, the Company invested such fund temporarily for 6 months @ 4% p.a. The plant is under construction during the Year.

How much of the borrowing cost to be capitalized in year 1

Borrowing cost to be capitalized in Year 1

Interest expense as per effective interest rate method

\[
\text{(₹ 990.48 crores @ 10.25\%)} \quad \text{₹ 101.52 crores}
\]

Less : Investment income 4% of \((9904.48 \times 50\% \times 1/2)\)

\[
\text{9.90 crores}
\]

Borrowing cost to be capitalized

\[
\text{91.62 crores}
\]

CONCEPT 9: GENERAL BORROWINGS

When the amount borrowed is generally used for the purpose of obtaining qualifying asset:

- Amount of borrowing cost to be capitalized should be determined by applying a capitalization rate to the expenditure on that asset. The capitalization rate should be weighted average of borrowing cost.

- Amount of borrowing cost capitalized during a period should not exceed the amount of borrowing cost incurred during that period.

- The average carrying amount of the asset during a period including borrowing cost previously capitalized, is normally a reasonable approximation of the expenditure to which capitalization rate is applied in that period.

Linking borrowing costs relating to general borrowings to qualifying assets:

- Find out qualifying asset in which general borrowings are applied and total investment therein
- Deduct specific borrowings used to finance such investments. Balance is the utilization of general borrowings
- Find out general borrowings
- Find out capitalization = Total borrowing costs to general borrowings
- Apportion borrowing costs relating to general borrowings = Total Investment Requirements Capitalization Rate
- Charges the apportioned borrowings cost in the ratio of investment requirements in various qualifying assets
- Charges specific borrowing cost net of investment income
- Apportioned general borrowings cost + specific borrowing costs net of investment income
CONCEPT 10: COMMENCEMENT OF CAPITALIZATION OF BORROWING COST

Following three conditions must be fulfilled before the commencement of capitalization of borrowing cost:

- Activities, which are essential to prepare the asset for its intended use, should be in progress.
- Borrowing cost is incurred.
- Expenditure for acquisition, construction or production of a qualifying asset is being incurred.

CONCEPT 11: EXPENDITURE ON QUALIFYING ASSET

- Expenditure includes payment of cash, transfer of other asset or assumption of interest bearing liabilities.
- Progress payment received and grant received towards the cost incurred should be deducted from the expenditure.

CONCEPT 12: SUSPENSION OF CAPITALIZATION OF BORROWING COST

Capitalization of borrowing costs should be suspended during extended periods in which active development is interrupted.

Capitalization of borrowing costs is not suspended when a temporary delay is a necessary part of the process of getting an asset ready for its intended use or sale.

CONCEPT 13: CESSIONATION OF CAPITALIZATION

- Capitalization of borrowing cost should cease when substantially all the activities necessary to prepare the qualifying assets for its intended use or sale are completed.
  - It means all relevant activities, which are essential for intended use or sale of qualifying assets, should be completed.
- Construction of the qualifying asset is carried in parts/phase and each part/phase can be used independently, required activities are completed for such phase and it is ready for intended use or sale, capitalization of borrowing cost for such phase/part will cease.
CONCEPT 14: DISCLOSURE

An entity shall disclose:

- The amount of borrowing cost capitalized during the period.
- The capitalization rate used to determine the amount of borrowing costs eligible for capitalization.

CONCEPT 15: EXCHANGE DIFFERENCES PARA 6E

Ind AS-23, “Borrowing Costs”, provides that borrowing costs may include “exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.” The manner of arriving at the adjustments stated therein shall be as follows:

- The adjustment should be of an amount which is equivalent to the extent to which the exchange loss does not exceed the difference between the cost of borrowing in functional currency when compared to the cost of borrowing in a foreign currency.
- Where there is an unrealized exchange loss which is treated as an adjustment to interest and subsequently there is a realized or unrealized gain in respect of the settlement or translation of the same borrowing, the gain to the extent of the loss previously recognized as an adjustment should also be recognized as an adjustment to interest.
PRACTICAL PROBLEMS

QUESTION NO 1 (PROGRESS PAYMENT)

Given below are some relevant data as regards a construction contract.

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs. In lacs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure incurred till 31.3.2000</td>
<td>450</td>
</tr>
<tr>
<td>Interest cost capitalized for the year 1999-2000 @ 12% p.a.</td>
<td>24</td>
</tr>
<tr>
<td>Amount specifically borrowed till 31.3.2000</td>
<td>200</td>
</tr>
<tr>
<td>Assets transferred to construction during 2000-01</td>
<td>100</td>
</tr>
<tr>
<td>Cash payments during 2000-01</td>
<td>78</td>
</tr>
<tr>
<td>Progress payment received</td>
<td>300</td>
</tr>
<tr>
<td>New borrowings during 2000-01 @ 12%</td>
<td>200</td>
</tr>
</tbody>
</table>

The company intends to capitalize total borrowing cost of Rs.48 lacs. Is it possible to do that as per IND AS 23?

QUESTION NO 2 (CESSATION IN PARTS)

Given below are expenses incurred in three phases of a project relating to construction of a captive power plant:

<table>
<thead>
<tr>
<th></th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash payments</td>
<td>500000</td>
<td>700000</td>
<td>500000</td>
<td>2700000</td>
</tr>
<tr>
<td>Transfer of assets</td>
<td>500000</td>
<td>200000</td>
<td>300000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1000000</td>
<td>900000</td>
<td>800000</td>
<td>2700000</td>
</tr>
</tbody>
</table>

Money borrowed at the rate of 12% per annum is Rs.2200000.

The phase 1 is complete. How should the company capitalize borrowing costs?

QUESTION NO 3

Borrowing cost on the loans taken specifically to construct captive power plant is being capitalized even after the commencement of commercial production. The management argues that the borrowing cost is attributable solely and exclusively captive power plant and therefore should be capitalized. Give comment
QUESTION NO 4 (DEFINITION OF Q.ASSETS)

Parveen Jindal Limited obtained term loan during the year ended 31st March, 2002 Ltd. uses extent of Rs.650lacs for modernization and development of its factory. Building worth Rs.120lacs were completed and plant and machinery worth Rs.350 lacs were installed by 31st March, 2002. A sum of Rs.70 lacs has been advanced for Assets the installation of which is expected in the following year. Rs.110 lacs have been utilized for working capital requirements. Interest paid on the loan of Rs.650 lacs during the year 2001-2002 amounted to Rs.58.50 lacs. How should the interest amount be treated in the Accounts of the company?

QUESTION NO 5 (CAPITALISATION RATE)

C Limited has made the following capital expenditure in an expansion programme commencing from 1.6.2001:

<table>
<thead>
<tr>
<th>Project</th>
<th>Remarks</th>
<th>Amount</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Specific borrowings used</td>
<td>34,00,00,000</td>
<td>Completed on 31.12.01</td>
</tr>
<tr>
<td></td>
<td>Rs.24,00,00,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Specific borrowing used</td>
<td>20,00,00,000</td>
<td>Completed on 30.11.01</td>
</tr>
<tr>
<td></td>
<td>Rs.6,00,00,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>4,00,00,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>4,00,00,000</td>
<td>Completed on 28.2.02</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>8,00,00,000</td>
<td>Under construction</td>
</tr>
</tbody>
</table>

Details of borrowings:

- Rs.20,00,00,000 11% Debentures issued on 1.7.99 redeemable in four equal installments commencing from 1.7.2001.
- Rs.15,00,00,000 14% secured working capital loan taken on 1.4.01 and Rs.5,00,00,000 was paid on 31.12.2001
- Rs.30,00,00,000 14% specific borrowings for projects A and B taken on 1.5.2001
- $6,000,000 8% foreign currency loan taken on 1.6.2001 Exchange rate as of that date was US$1= Rs.43.00. The exchange rate as of March 31, 2001 was US$1=Rs.46.5. Average exchange rate= Rs.45/-

Calculate the amount of borrowing costs to the capitalized during the year 2001-2002

QUESTION NO 6 (DEFINITION OF Q.ASSETS)

R Ltd. has borrowed Rs.25 crores from financial institution during the financial year 2001-02. These borrowings are used to invest in shares of A Ltd, a subsidiary company, which
is implementing a new project estimated to cost 50 crores. As on 31\textsuperscript{st} march, 2002 since the said project was not yet complete, the directors of R ltd, resolved to capitalize the interest on the borrowings amounting to Rs.3 crores and add it to the cost of investments. As a statutory auditor, please comment.

**QUESTION NO 7 (DATE WISE CAPITALISATION)**

XYZ Ltd. Has undertaken a profit for expansion of company of capacity as per the following details:

<table>
<thead>
<tr>
<th>Plan (RS.)</th>
<th>Actual (RS.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2002</td>
<td>2,00,000</td>
</tr>
<tr>
<td>May 2002</td>
<td>2,00,000</td>
</tr>
<tr>
<td>June 2002</td>
<td>10,00,000</td>
</tr>
<tr>
<td>July 2002</td>
<td>1,00,000</td>
</tr>
<tr>
<td>August 2002</td>
<td>2,00,000</td>
</tr>
<tr>
<td>September 2002</td>
<td>5,00,000</td>
</tr>
</tbody>
</table>

The company pays to its bankers at the rate of 12\% p.a., interest being debited on a monthly basis. During the half year company had Rs.10 lakhs overdraft upto 31\textsuperscript{st} July, surplus cash in August and again overdraft of over Rs.10 lakhs from 01-09-2002. The company had a strike during June and hence could not continue the work during June. Work was again commenced on 1\textsuperscript{st} July and all the works were completed on 30\textsuperscript{th} September. Assume that expenditure were incurred on 1\textsuperscript{st} Day of each month. Calculate:

1. Interest to be capitalized
2. Give reasons wherever necessary.

**QUESTION NO 8**

G company has incurred an amount of Rs.80 lakhs as borrowing cost during the year ended 31.12.2002 calculated as under:

<table>
<thead>
<tr>
<th>Amount borrowed</th>
<th>Date on which borrowing is made</th>
<th>Amount (Rs. in lacs)</th>
<th>Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>14%Debentures</td>
<td>1.12.2001</td>
<td>200</td>
<td>28</td>
</tr>
<tr>
<td>12%Term loan</td>
<td>1.12.2001</td>
<td>300</td>
<td>36</td>
</tr>
<tr>
<td>16% Secured loan</td>
<td>1.10.2002</td>
<td>400</td>
<td>16</td>
</tr>
</tbody>
</table>
The 16% secured loan has been specifically raised for construction of factory building. The plant is likely to be completed in two years. The other qualifying assets & expected time to complete the assets in which these funds have been utilized are:

<table>
<thead>
<tr>
<th>Plant</th>
<th>Amount</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant 1</td>
<td>200Lacs</td>
<td>18 months</td>
</tr>
<tr>
<td>Internal roads</td>
<td>100Lacs</td>
<td>14 months</td>
</tr>
<tr>
<td>Plant 11</td>
<td>100Lacs</td>
<td>20 months</td>
</tr>
</tbody>
</table>

Compute the amount of borrowing costs to be capitalized for the year ended 31.3.2002.

**QUESTION NO 9**

**ICS & company** is a sugar company. Due to the regulations by Central Government, the company cannot decide the quantity to be sold in the market. It is regulated on the basis of release orders issued by the Central government on a monthly basis. Because of the seasonal nature of production, the company has to carry large inventories throughout the year. The average holding period of the sugar stock is generally 12-15 months. In the years when there is surplus stock of sugar, the government creates a buffer stock and reimburses the carrying charges to the sugar factories, for the inventory to be carried by the sugar mill, which includes interest. Sweet & company incurs high interest costs since borrowings are required to meet the large demand for the working capital and payment to sugarcane producers. Interest costs are the second largest item in the Profit and Loss account of the company next to raw material consumed. Can interest be capitalized under IND AS-23 as a part of inventory.

**QUESTION NO 10**

The main object of a company is to undertake plantation activities, raising of teak and other forestry operations. It takes about 10 to 15 years for the teak trees to grow. The company has issued Debentures for the fund to meet all the expenses. The company included all cost of plantation and interest paid in the valuation of stock of teak. Give comment.

**QUESTION NO 11**

In May, 2004 speed Ltd. took a bank loan to be used specifically for the construction of a new factory building. The construction was completed in January 2005 and the building was put to its use immediately thereafter. Interest on the actual amount used for construction of the building till its completion was Rs.18 lakhs, whereas the total interest payable to the bank on the loan for the period till 31st March, 2005 amounted to Rs.25 lakhs. Can Rs.25 lakhs be treated as a part of the cost of factory building and thus be capitalized on the plea that the loan was specifically taken for the construction of factory building.
QUESTION NO 12 (EXPECTED COST OF COMPLETION)

A fixed asset is in the construction period. Actual costs incurred till date and expected costs to complete along with borrowings and planned borrowings are given below:

(Rs. in lacs)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Estimated</th>
<th>Money specifically borrowed</th>
<th>Planned borrowings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td></td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>100</td>
<td>80</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>60</td>
<td></td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
<td></td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

Borrowed funds costs @ of 12% per annum. Determine the estimated cost of the asset at the end of 5th year.

QUESTION NO 13

Advise X Ltd. on the weighted average cost of borrowing and the interest cost to be capitalized based on the following:

Total borrowings and interest of X Ltd. for year ending 31.3.2003 are as follows:

<table>
<thead>
<tr>
<th>Borrowings</th>
<th>Date of borrowing</th>
<th>Amount ('000)</th>
<th>Interest ('000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18% Bank loan</td>
<td>1.5.2001</td>
<td>1,000</td>
<td>180</td>
</tr>
<tr>
<td>14% debentures</td>
<td>1.10.2002</td>
<td>2,000</td>
<td>140</td>
</tr>
<tr>
<td>16% term loan</td>
<td>1.7.2002</td>
<td>3,000</td>
<td>360</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6,000</td>
<td>680</td>
</tr>
</tbody>
</table>

Qualifying assets & Actual time of work during the year in which these borrowed funds are utilized are:

<table>
<thead>
<tr>
<th>Assets</th>
<th>Rs.('000)</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory shed</td>
<td>2,500</td>
<td>12 months</td>
</tr>
<tr>
<td>Plant 1</td>
<td>1,500</td>
<td>9 months</td>
</tr>
<tr>
<td>Plant 2</td>
<td>1,000</td>
<td>7 months</td>
</tr>
</tbody>
</table>
QUESTION NO 14

Determine the dates from which capitalization should cease

**Building A**  
Stage of completion  
Completed in full in March

**Building B**  
Completed in full in April but not accessible until Building C is completed.

**Building C**  
Completed in December

**Building D**  
Completed in June but got electricity connection and was ready for intended use in July.
**QUESTIONS FOR SELF PRACTICE**

**QUESTION NO 15**
What do you understand by the term Borrowing costs? Briefly indicate the items which are included in the expression “Borrowing cost” as explained in Ind AS 23

**ANSWER:**
Borrowing costs are interest and other costs incurred by an enterprise in connection with the borrowing of funds. Borrowing costs may include:

(a) Interest and commitment charges on bank borrowing and short term and long term borrowings as per effective rate of interest method
(b) Finance charges in respective of assets acquired under finance leases or under other similar arrangements
(c) Exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

**QUESTION NO 16**
The notes to accounts of Sharma Ltd. for the year ended 31st March includes the following “interest on bridge loan from bank and financial institutions and on debentures specifically obtained for the company’s fertilizer project amounting to Rs.1,80,80,000 has been capitalized during the year, which includes approximately Rs.1,70,33,465 capitalized in respect of the utilization of loan and debentures money for the said purpose”. Is the treatment correct? Briefly comment

**ANSWER:**
For specific borrowing, amount to be capitalized = actual borrowing cost on that borrowing during the period less income on the temporary investment of those borrowings, if any. Hence the amount of capitalized borrowing cost can not exceed actual interest cost.

For general borrowing and use of Capitalization rate, IND AS-23 provides the amount of borrowing costs Capitalized during a period should not exceed the amount of Borrowing cost incurred during that period.

The given case is one of specific Borrowings for fertilizer project and hence the Capitalized Borrowing cost is restricted to the actual amount of interest expenditure that is Rs.1,70,33,465. Capitalization of Rs.1,80,80,000 has resulted in over statement of profit and assets by Rs.10,46,535.

Hence the company’s policy is not in accordance with IND AS-23.
**QUESTION NO 17**

*(INCOME ON INVESTMENT MADE OUT OF BORROWED FUNDS)*

Jindal Ltd. borrowed Rs.12Crores for its capital expansion which lasted for 18 months. The relevant borrowing rate was 12.5%. During this period the company invested the temporary surplus funds at 4.5% on short term basis and earned an interest of 25lakhs Which was offered as miscellaneous income in the profit and loss account. The company has Capitalized the entire interest cost and added to its plant and machinery. Is this correct?

**ANSWER:**

For specific borrowing, amount to be capitalized = actual borrowing cost on that borrowing during the period less income on the temporary investment of those borrowings, if any.

In the above case, the correct accounting treatment will be:

- Actual borrowing cost (12crores*12.5%*18months) = 2.25Crores
- Less: interest on temporary investment = 0.25Crores
- Borrowing cost to be Capitalized under IND AS-23 = 2.00Crores

The company’s treatment in crediting the amount of 0.25crores as miscellaneous income is not proper. This amount should be used to reduce the amount of Borrowing cost eligible for Capitalization.

**QUESTION NO 18**

*(CALCULATION OF COST PPE INCLUDING INTEREST)*

Kapil Ltd. purchased machinery from Parveen Ltd. on 30.09.2001. The price was Rs.370.44 lakhs after charging 8% sales tax and giving a trade discount of 2% on the quoted price. Transport charges were 0.25% on the quoted price and installation charges 1% on the quoted price.

A loan of Rs.300 lakhs was taken on the trial from the bank on which interest at 15% per annum was to be paid. Expenditure incurred on the trial run was materials Rs.35,000, wages Rs.25,000 and overheads Rs.15,000.

The machinery was ready for use on 1.12.2001, but it was actually put to use only on 1.5.2002. Find out the cost of the machine and suggest the accounting treatment for the expenses incurred in the interval between the dates 1.12.2001 to 1.05.2002. the entire loan amount remained unpaid on 1.5.2002.
ANSWER:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Computations</th>
<th>Rs. in lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quoted price</td>
<td>((370.44/108*100)*100/98)</td>
<td>3,50,000</td>
</tr>
<tr>
<td>Less: discount 2%</td>
<td>2% of 3,50,000</td>
<td>7,000</td>
</tr>
<tr>
<td>Net price</td>
<td></td>
<td>3,43,000</td>
</tr>
<tr>
<td>Add: sales tax 8%</td>
<td>8% of 3,43,000</td>
<td>27,440</td>
</tr>
<tr>
<td>Add: Transportation</td>
<td>0.25% on quoted price of 3,50,000</td>
<td>0.875</td>
</tr>
<tr>
<td>Add: installation</td>
<td>1.00% of quoted price of 3,50,000</td>
<td>3.500</td>
</tr>
<tr>
<td>Add: trial run expense</td>
<td>Material+ wages+ OH=0.35+0.25+0.15</td>
<td>0.750</td>
</tr>
<tr>
<td>Add: Borrowing cost</td>
<td>300*15%*2/12(30.9.2001 to 1.12.2001)</td>
<td>7.500</td>
</tr>
<tr>
<td>Total cost of asset</td>
<td></td>
<td>383.065</td>
</tr>
</tbody>
</table>

- Capitalization of Borrowing costs should cease when substantially all the activities necessary to prepare the qualifying asset for its intended use are complete. In the above case, this period ends on 1-12-2001 when the asset was ready for use.
- Other Borrowing costs (i.e., not capitalized under IND AS 23) should be written off as an expense in the profit and loss account. Hence the interest for the period 1.12.2001 and 1.5.2002 on Rs.300 lakhs, amounting to Rs.18.75 lakhs should be expensed off.

**QUESTION NO 19 (SIMILAR AS QUESTION 4)**

Sadaanand Ltd. has obtained Institutional Term Loan of Rs. 580 Lakhs for modernization and renovation of its Plant & Machinery. Plant & Machinery acquired under the modernization scheme and installation completed on 31\(^\text{st}\) March amounted to Rs. 406 Lakhs. Rs. 58 Lakhs has been advanced to Suppliers for additional assets and the balance loan of Rs. 116 Lakhs has been utilized for Working Capital purpose. The accountant is in a dilemma as to how to account for the total interest of Rs. 52.20 Lakhs incurred during the year, on the entire Institutional Term Loan of Rs. 580 Lakhs. Give your view.

**SOLUTION**

Effective Interest Rate - \(\frac{52.20 \text{ Lakhs}}{580.00 \text{ Lakhs}}\) = 9%.

The treatment for the Total Interest of Rs.52.20 Lakhs is as under:-
### IND AS 23: BORROWING COST

#### Purpose/Utilisation

<table>
<thead>
<tr>
<th>Purpose/Utilisation</th>
<th>Loan Amt.</th>
<th>Interest Amount</th>
<th>Accounting Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant &amp; Machinery purchased under modernization scheme</td>
<td>Rs. 406 Lakhs</td>
<td>Rs. 406 x 9% = Rs. 36.54 Lakhs</td>
<td>Added to Cost of Plant and Machinery as per IND AS 23.</td>
</tr>
<tr>
<td>Advance to Suppliers for additional assets</td>
<td>Rs. 58 Lakhs</td>
<td>Rs. 58 x 9% = Rs. 5.22 Lakhs</td>
<td>Kept in Interest Suspense A/c. (Capital WIP A/c.) till the date of acquisition/installation of additional assets &amp; capitalized later on asset creation.</td>
</tr>
<tr>
<td>Working Capital</td>
<td>Rs. 116 Lakhs</td>
<td>Rs. 116 x 9% = Rs. 10.44 Lakhs</td>
<td>Written off to P&amp;L A/c. as Expense, as per IND AS 23</td>
</tr>
<tr>
<td>Total</td>
<td>Rs. 580 Lakhs</td>
<td>Rs. 52.20 Lakhs</td>
<td></td>
</tr>
</tbody>
</table>

### QUESTION NO 20 (SIMILAR AS QUESTION NO 4)

Harihara Limited obtained a Loan for Rs. 70Lakhs on 15th April 20X1 from a Nationalised Bank to be utilized as under:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of Factory Shed</td>
<td>25,00,000</td>
</tr>
<tr>
<td>Purchase of Machinery</td>
<td>20,00,000</td>
</tr>
<tr>
<td>Working Capital</td>
<td>15,00,000</td>
</tr>
<tr>
<td>Advance for Purchase of Truck</td>
<td>10,00,000</td>
</tr>
</tbody>
</table>

In March 20X2, Construction of the Factory Shed was completed and Machinery which was ready for its intended use installed. Delivery of Truck was received in the next Financial year. Total Interest RS. 9,10,000 charged by the Bank for the Financial year ending 31.03.20X1. Show the treatment of Interest under IND AS 23

#### SOLUTION

Effective Interest Rate = \[
\frac{9.10 \text{ Lakhs}}{70.00 \text{ Lakhs}} = 13\%.
\]

The treatment for the Total Interest of Rs. 9.10 Lakhs is as under:-
### QUESTION NO 21

On 1\textsuperscript{st} April, Aruna Construction Ltd. obtained a loan of Rs. 32 Crores to be utilized as under:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs. in Crores</th>
<th>Particulars</th>
<th>Rs. in Crores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of Sea link across 2 cities (work was held up totally for a month during the year due to high water levels)</td>
<td>25.00</td>
<td>Working Capital</td>
<td>2.00</td>
</tr>
<tr>
<td>Purchase of Equipment's and Machineries</td>
<td>3.00</td>
<td>Purchase of Vehicles</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advance for Tools/Cranes,etc.</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Purchase of Technical know-How</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Total Interest charged by the Bank for the relevant financial year in Rs. 80 Lakhs. Show the treatment of Interest by Aruna Construction Ltd. under IND AS 23.
SOLUTION

Effective Interest Rate = \( \frac{80.00 \text{ Lakhs}}{3,200.00 \text{ Lakhs}} = 2.5\% \).

The treatment for the Total Interest of Rs. 80 Lakhs is as under:-

**Note:** Interest Amount = Loan Amount = 2.5% Both Amounts in Rs. Lakhs

<table>
<thead>
<tr>
<th>Purpose/Utilisation</th>
<th>Loan Amt.</th>
<th>Interest Amount</th>
<th>Accounting Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Construction of Sea-Link across two cities</td>
<td>2,500</td>
<td>62.50</td>
<td>Added to Cost of Asset (It is assumed that during temporary suspension, some Administrative Activities were carried on)</td>
</tr>
<tr>
<td>2. Purchase of Equipments &amp; M/c.</td>
<td>300</td>
<td>7.50</td>
<td>Added to Cost of Equipments and Machineries</td>
</tr>
<tr>
<td>3. Working Capital</td>
<td>200</td>
<td>5.00</td>
<td>Written off to P&amp;L A/c. as Expense. IND AS 23</td>
</tr>
<tr>
<td>4. Purchase of Vehicles</td>
<td>50</td>
<td>1.25</td>
<td>Debited to P&amp;L A/c. (Assumed immediate delivery taken and it is ready for use and hence not a Qualifying Asset)</td>
</tr>
<tr>
<td>5. Advance for Tools/Cranes etc.</td>
<td>50</td>
<td>1.25</td>
<td>Kept in Interest Suspense A/c. (Capital WIP A/c) till the date of acquisition/installation of the Assets &amp; capitalized later. (Assumed as Qualifying Asset)</td>
</tr>
<tr>
<td>6. Purchase of Technical Know-how</td>
<td>100</td>
<td>2.50</td>
<td>Added to the cost of Intangibles.</td>
</tr>
<tr>
<td>Total Borrowing Cost</td>
<td>3,200.00</td>
<td>80.00</td>
<td></td>
</tr>
</tbody>
</table>

**QUESTION NO 22 (SIMILAR AS Q.2)**

Hariram Iron and Steel Ltd. is establishing an Integrated Steel Plant consisting of four phases. It is expected that the full Plant will be established over several years but Phase I and Phase II will be started as soon as they are completed.

Following are the details of work done on different phases of the Plant during the current year (in Rs.)
During the current year, Phases I and II have become operational. Find out the total amount to be capitalized and to be expensed during the year.

**SOLUTION**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particulars</th>
<th>Amount Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Interest Expense on Loan (Assuming that Loan is taken on the first day of the financial period concerned, and the work of asset creation had started on that date) = Rs. 2,40,00,000 at 16%</td>
<td>38,40,000</td>
</tr>
<tr>
<td>2.</td>
<td>Total Cost of Phases I and II (Rs. 48,00,000 + Rs. 75,00,000)</td>
<td>1,23,00,000</td>
</tr>
<tr>
<td>3.</td>
<td>Total Cost of Phases III and IV (Rs. 55,00,000 + Rs. 88,00,000)</td>
<td>1,43,00,000</td>
</tr>
<tr>
<td>4.</td>
<td>Total Cost of all 4 Phases</td>
<td>2,66,00,000</td>
</tr>
<tr>
<td>5.</td>
<td>Total Loan</td>
<td>2,40,00,000</td>
</tr>
<tr>
<td>6.</td>
<td>Proportionate Loan used for Phases I and II</td>
<td>1,10,97,744</td>
</tr>
<tr>
<td>7.</td>
<td>Proportionate Loan used for Phases III and IV</td>
<td>1,29,02,256</td>
</tr>
<tr>
<td>8.</td>
<td>Interest on Loan used for Phases I &amp; II, based on Proportionate Loan Amount = 1,10,97,744 at 16%</td>
<td>17,75,639</td>
</tr>
<tr>
<td>9.</td>
<td>Interest on Loan used for Phases III &amp; IV based on Proportionate Loan Amount = 1,29,02,256 x 16%</td>
<td>20,64,361</td>
</tr>
</tbody>
</table>

**Accounting Treatment:** Interest of Rs. 17,75,639 relating to Phases I and II should be expensed (in the ratio of Asset Costs 48:75), and not to be added to respective Assets in Phases I and II. Interest of Rs. 20,64,361 relating to Phases III and IV should be
held in Capital work in Progress till asset construction work is completed, and thereafter capitalized in the ratio of cost of assets.

**QUESTION NO 23**

The Notes to Accounts of Gopal Ltd. for the year ended 31st March includes the following -

"Interest on Bridge Loan from Banks and Financial Institutions and on Debentures specifically obtained for the Company’s Fertilizer Project amounting to Rs. 1,80,80,000 has been capitalized during the year, which includes approximately Rs. 1,70,33,465 capitalised in respect of the utilization of Loan and Debenture Money for the said purpose" is the treatment correct? Briefly comment.

**SOLUTION**

The given case is one of Specific Borrowings for Fertilizer Project and hence the capitalized Borrowing Cost should be restricted to the actual amount of interest expenditure i.e. Rs. 1,70,33,465. Capitalisation of Rs. 180,80,000 has been resulted in over-statement of profits and assets by Rs. 10,46,535.

**QUESTION NO 24 (SIMILAR AS QUESTION 17)**

Guha Limited borrowed an amount of Rs. 150 Crores on 1st April, for construction of Boiler Plant at 11% p.a. The Plant is expected to be completed in 4 years. The Weighted Average Cost of Capital is 13% p.a. The Accountant of Guha Ltd. capitalized interest of Rs. 19.50 Crores for the accounting period ending on 31st March. Due to Surplus Funds out of Rs. 150 Crores, an income Rs. 3.50Crores was earned and credited to P&L A/c. comment.

**SOLUTION**

1. Capitalization based on the Weighted Average Cost of Capital 13% is not proper in the above case, since the above is a case of Specific Borrowings.

2. Income received on Temporary Investments should be reduced from the Borrowing Cost and should not be credited to Profit & Loss A/c. The correct treatment is as under:-

<table>
<thead>
<tr>
<th></th>
<th>Actual Interest Cost = Rs. 150 Crores x 11%</th>
<th>Rs. 16.50 Crores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less: Income from Temporary Investments</td>
<td>Rs. 3.50 Crores</td>
<td></td>
</tr>
<tr>
<td>Borrowing Costs to be Capitalised under IND AS-23</td>
<td>Rs. 13.00 Crores</td>
<td></td>
</tr>
</tbody>
</table>
Parasuram Ltd. had the following borrowings during a year in respect of capital expansion.

<table>
<thead>
<tr>
<th>Plant</th>
<th>Cost of Asset</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant P</td>
<td>Rs. 100 Lakhs</td>
<td>No Specific Borrowings.</td>
</tr>
<tr>
<td>Plant Q</td>
<td>Rs. 125 Lakhs</td>
<td>Bank Loan of Rs. 65 Lakhs at 10%.</td>
</tr>
<tr>
<td>Plant R</td>
<td>Rs. 175 Lakhs</td>
<td>9% Debentures of Rs. 125 Lakhs were issued.</td>
</tr>
</tbody>
</table>

In addition to the above specific borrowings, the Company had obtained Term Loans from two Banks - (1) Rs. 100 Lakhs at 10% from Corporation Bank and (2) Rs. 110 Lakhs at 11.50% from Canara Bank, to meet its capital expansion requirements. What is the amount of Borrowing Costs to be capitalized in each of the above Plants?

**SOLUTION**

1. **Computation of Actual Borrowing Costs incurred during the year:**

<table>
<thead>
<tr>
<th>Source</th>
<th>Loan Amount</th>
<th>Interest Rate</th>
<th>Interest Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Loan</td>
<td>Rs. 65.00 Lakhs</td>
<td>10.00%</td>
<td>Rs. 6.50 Lakhs</td>
</tr>
<tr>
<td>9% Debentures</td>
<td>Rs.125.00 Lakhs</td>
<td>9.00%</td>
<td>Rs. 11.25 Lakhs</td>
</tr>
<tr>
<td>Term Loan from Corporation Bank</td>
<td>Rs. 100.00 Lakhs</td>
<td>10.00%</td>
<td>Rs. 10.00 Lakhs</td>
</tr>
<tr>
<td>Term Loan from Canara Bank</td>
<td>Rs. 110.00 Lakhs</td>
<td>11.50%</td>
<td>Rs. 12.65 Lakhs</td>
</tr>
<tr>
<td>Total</td>
<td>Rs. 400.00 Lakhs</td>
<td></td>
<td>Rs. 40.40 Lakhs</td>
</tr>
<tr>
<td>Specific Borrowings included in above</td>
<td>Rs. 190.00 Lakhs</td>
<td></td>
<td>Rs. 17.75 Lakhs</td>
</tr>
</tbody>
</table>

2. **Weighted Average Capitalisation Rate for General Borrowings** = 

   \[
   \frac{\text{Total Interest Less Interest on Specific Borrowings}}{\text{Total Borrowings Less Specific Borrowings}} = \frac{40.40 - 17.75}{400 - 190} = \frac{22.65}{210} = 10.79\%
   \]
3. **Capitalisation of Borrowing Costs under IND AS-23 will be as under:-**

<table>
<thead>
<tr>
<th>Plant</th>
<th>Borrowing</th>
<th>Loan Amount</th>
<th>Interest Rate</th>
<th>Interest Amount</th>
<th>Cost of Asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>General</td>
<td>Rs. 100 Lakhs</td>
<td>10.79%</td>
<td>Rs. 10.79 Lakhs</td>
<td>Rs. 110.79 Lakhs</td>
</tr>
<tr>
<td>Q</td>
<td>Specific</td>
<td>Rs. 65 Lakhs</td>
<td>10.00%</td>
<td>Rs. 6.50</td>
<td>Rs. 137.97 Lakhs</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>Rs. 60 Lakhs</td>
<td>10.79%</td>
<td>Rs. 6.47 Lakhs</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>Specific</td>
<td>Rs. 125 Lakhs</td>
<td>9.00%</td>
<td>Rs. 11.25</td>
<td>Rs. 191.64 Lakhs</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>Rs. 50 Lakhs</td>
<td>10.79%</td>
<td>Rs. 5.39</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Rs. 400 Lakhs</td>
<td></td>
<td>Rs. 40.40 Lakhs</td>
<td></td>
</tr>
</tbody>
</table>

Note: The amount of Borrowing Costs capitalized should not exceed the actual interest cost.

**QUESTION NO 26 (SAME AS QUESTION 7)**

Madhav Limited began construction of a New Plant on 1\textsuperscript{st} April 2013 and obtained a special Loan of Rs. 8 Lakhs at 10% p.a. to finance the construction of the Plant. The expenditure that was made on the project of Plant construction was as -

- On 01.04.2014 Rs. 10,00,000
- On 01.08.2014 Rs. 24,00,000
- On 01.01.2014 Rs. 4,00,000

The Company’s other outstanding Non-Specific Loan was Rs. 46,00,000 at an interest of 12% p.a. The construction of Plant was completed on 31.03.2014. Compute the amount of interest to be capitalized.

**SOLUTION**

**Computation of Interest Amount to be capitalized**

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount Spent (Rs.)</th>
<th>Computation</th>
<th>Interest Amount (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.04.2013</td>
<td>10,00,000</td>
<td>Rs. 8,00,000 from Specific Loan = Rs. 8,00,000 x 10%</td>
<td>80,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rs. 2,00,000 from Non Specific Loan = Rs. 2,00,000 x 12%</td>
<td>24,000</td>
</tr>
</tbody>
</table>
### Question No 27 (Para 6 E on Exchange Difference)

Harkishan Ltd. took a loan of USD 20,000 at 6% p.a. on 1\textsuperscript{st} April for a specific capital expansion project. The interest was payable annually. The Exchange Rate at the date of the loan was 1 USD = Rs. 52.00. However, the Company could have taken a corresponding Rupee Loan from Banks at 12% p.a. on that date. At the end of the year, the Exchange Rate was 1 USD = Rs. 55.00. How will you treat the Borrowing Costs and Exchange Differences in the above case?

Analyse the impact of the following changes independently. What would be the accounting treatment if the Rupees Loan were to carry interest at 14% p.a.? What will be the treatment if the Exchange Rate at the year end was 1 USD = Rs.53.00?

### Solution

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Particulars</th>
<th>Situation 1 Interest at 12%</th>
<th>Situation 2 Interest at 14%</th>
<th>Situation 3 1 USD = Rs. 53.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Interest on Local Currency Borrowings</td>
<td>$20,000 \times \text{Rs.}52 \times 12% = \text{Rs.}1,24,800</td>
<td>$20,000 \times \text{Rs.}52 \times 14% = \text{Rs.}1,45,600</td>
<td>$20,000 \times \text{Rs.}52 \times 12% = \text{Rs.}1,24,800</td>
</tr>
<tr>
<td>2.</td>
<td>Interest on Foreign Currency Borrowings</td>
<td>$20,000 \times 6% \times \text{Rs.}55 = \text{Rs.}66,000</td>
<td>$20,000 \times 6% \times \text{Rs.}55 = \text{Rs.}66,000</td>
<td>$20,000 \times 6% \times \text{Rs.}53 = \text{Rs.}63,600</td>
</tr>
<tr>
<td>3.</td>
<td>Interest Difference between Foreign &amp; Local Currency Borrowings = (1) - (2)</td>
<td>Rs. 58,800</td>
<td>Rs. 79,600</td>
<td>Rs. 61,200</td>
</tr>
</tbody>
</table>
4. **Exchange Difference in Principal repayable at the end of the year**

<table>
<thead>
<tr>
<th>Description</th>
<th>Result 1</th>
<th>Result 2</th>
<th>Result 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20,000 \times (55-52) = Rs.60,000</td>
<td>$20,000 \times (55-52) = Rs.60,000</td>
<td>$20,000 \times (53-52) = Rs.20,000</td>
<td></td>
</tr>
</tbody>
</table>

5. **Further Amt. to be treated as Borrowing Costs = (3) or (4), whichever is less.**

<table>
<thead>
<tr>
<th>Description</th>
<th>Result 1</th>
<th>Result 2</th>
<th>Result 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs. 58,800</td>
<td>Rs. 60,000</td>
<td>Rs. 20,000</td>
<td></td>
</tr>
</tbody>
</table>

6. **Exchange Difference to be taken to P&L /c. as per AS-11 = (4) - (5)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Result 1</th>
<th>Result 2</th>
<th>Result 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs. 1,200</td>
<td>Nil</td>
<td>Nil</td>
<td></td>
</tr>
</tbody>
</table>

7. **Borrowing Costs under IND AS-23 = (2)+(5)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Result 1</th>
<th>Result 2</th>
<th>Result 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs. 1,24,800</td>
<td>Rs. 1,26,000</td>
<td>Rs. 83,600</td>
<td></td>
</tr>
</tbody>
</table>

**QUESTION NO 28**

Srivats Co-operative Society Ltd. has borrowed a sum of US $ 12.50 Million at the commencement of the Financial year 2012-13 for its Solar Energy Project at LIBOR (London Interbank Offered Rate of 1%) + 4% Interest is payable at the end of the respective financial year. The Loan was availed at the then rate of Rs. 52 to the Dollar while the rate as on 31st March 2013, is Rs. 55 to the US Dollar. Had the Company borrowed the Rupee equivalent in India, the interest would have been 11%. Compute. Borrowing Cost, also showing the amount of Exchange Difference as per AS.

**SOLUTION**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Particulars</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Interest Payable if Borrowed in INR = (USD 12.50 Million x Opening Exchange Rate Rs. 52 x INR Loan Interest Rate 11%)</td>
<td>Rs. 71.50 Million</td>
</tr>
<tr>
<td>2.</td>
<td>Interest Actually Paid in Foreign Currency = Foreign Currency Loan USD 12.50 Million x Closing Exchange Rate Rs. 55 x USD Interest Rate 5%</td>
<td>Rs. 34.38 Millions</td>
</tr>
</tbody>
</table>
3. Notional Savings in Interest due to Foreign Currency Borrowings = (1-2) Rs. 37.12 Millions
4. Change in Carrying Amount of Principal due to Exchange Rate Difference =
   (Closing Exchange Rate Rs. 55 Less Opening Exchange Rate Rs. 52) x USD 12.5 Millions
   Note: Since Closing Rate > Opening Rate, there is an Increase in Carrying Amount in this case. Rs. 37.50 Millions
5. Further Amount to be treated as Borrowing Cost = Least of (3) and (4) Rs. 37.12 Millions
6. Aggregate Borrowing Cost as per IND AS-23 = Actual Interest as per (2) + Additional in (5) Rs. 71.50 Millions
7. Exchange Rate Less to be Recognized in Statement of P&L = (4-5) Rs. 38 Millions

**QUESTION NO 29**
Kaladhar Ltd. dealing in timber finds it advantageous to store selected grades of timber for a prolonged period in order to improve their quality. It desires to include an actual interest cost of holding the timber as part of the value of unsold timber in inventory, and consult you in order to determine whether in your opinion, such a method of valuation would be fair and reasonable and in accordance with generally accepted accounting principles. Give your opinion with reasons.

Would your answer be different if the Company did not actually incur any interest charges for holding the timber but desired to include notional interest charges which could be imputed to the Company’s own Paid-up Capital and Reserves which are invested in holding the timber for maturity?

(HINT: IND AS 23 IS NOT APPLICABLE FOR BIOLOGICAL ASSETS)

**QUESTION NO 30 (DATE WISE CAPITALISATION) (CLASS EXAMPLE)**
Assume NDA Limited begins construction on a new building on 1st January, 2004. In addition, NDA Limited obtained a Rs. 1 Lakh loan to finance the construction of the building on 1st January, 2004 at an annual interest rate of 10%. The company’s other outstanding debt during 2004 consists of two loans of Rs. 6 Lakhs and Rs. 8 Lakhs with interest rates of 11% and 13% respectively. Expenditures that were made on the building project were as follows:
January 2004 200000
April 2004 300000
July 2004 400000
December 2004 120000

Compute the cost to be capitalized including borrowing cost

**SOLUTION**

**STEP 1:**
Computation of average accumulated expenses

Rs. 200,000 x 12/12 (January - December) = Rs. 200,000
Rs. 300,000 x 9/12 (April - December) = Rs. 225,000
Rs. 400,000 x 6/12 (July-December) = Rs. 200,000
Rs. 120,000 x 1/12 (December) = Rs. 10,000
Rs. 1020,000 Average Accumulated Expenses = Rs. 635,000

**STEP 2**
Compute the average interest rate based on the other outstanding debt of the entity other than specific borrowings:

\[
\begin{align*}
600,000 \times 11\% & = \text{Rs. 66,000} \\
800,000 \times 13\% & = \text{Rs. 104,000} \\
\hline
1,400,000 & = \text{Rs. 170,000}
\end{align*}
\]

Average interest rate : Rs. 170,000/1,400,000 = 12.14%

**STEP 3**
Compute the interest on average accumulated expenses

<table>
<thead>
<tr>
<th>Average Accumulated Expenses (AAE)</th>
<th>Interest to be capitalized (based on AAE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000 (Specific borrowings) x 10%</td>
<td>= 10,000</td>
</tr>
<tr>
<td>535,000 (635,000 - 100,000) x 12.14%</td>
<td>= 64,950</td>
</tr>
<tr>
<td>635,000</td>
<td>= 74,950</td>
</tr>
</tbody>
</table>
**STEP 4**

Compute actual interest costs incurred during the year.

\[
\begin{align*}
100,000 \times 10\% & = Rs. \ 10,000 \\
600,000 \times 11\% & = Rs. \ 66,000 \\
800,000 \times 13\% & = Rs. \ 104,000 \\
\text{Total} & = Rs. \ 180,000 
\end{align*}
\]

Amount to be capitalized is Rs. 74,950 which is not more than actual interest of Rs. 180,000

(Amt. in Rs.)

<table>
<thead>
<tr>
<th>Building Account</th>
<th>Dr. 1094950</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Cash</td>
<td>1094950</td>
</tr>
</tbody>
</table>

**QUESTION NO 31 (BIOLOGICAL ASSETS)**

Dhangar Ltd. has a cattle field which serves the company milk, wool etc. The livestock is carried at Fair value. The Opening fair value of livestock is Rs. 54,40,000. The closing fair value Rs.67,33,000. Out of which Rs. 2,00,000 worth was purchased during the year. Fresh borrowings were taken at the beginning of the year to buy livestock. The total borrowings by the year end was Rs. 22,00,000 @ 12%. Calculate the borrowing cost as per Ind AS-23 and comment.

**SOLUTION**

Ind AS-23 is not applicable on Biological Assets. It is applicable on those assets which are carried at cost less depreciation. Also further the assets should be qualifying assets. In the present case the entire BC of Rs. 2,64,000 is charged to profit/loss account. BC should not be capitalized on biological assets.

**QUESTION NO 32 (HYPER INFLATIONARY SITUATION) (IND AS 29)**

Hyper Ltd is engaged in development of properties and further sell it in the open market. The development process takes substantial period of time. It has financed its inventories by taking loan from Yekoshore Development Bank £ 75 million. The economy is under hyper inflationary situation. The interest rate is 32%. The inflation is 200%. You are required to calculate the borrowing cost attributable towards the capitalization of asset as per Ind As 23

**SOLUTION**

Ind AS-23: In case of Hyperinflationary situation the borrowing costs relate to the inflationary element is charged to income statement and not to be capitalized.
Accordingly the effective (real element of) interest = \( \frac{32\%}{200\%} - 16\% \).

BC requires capitalization = \( 75 \times 16\% = £12\) million.

BC charged to P/L = \( 75 \times 32\% - 12 = £12\) million.

**QUESTION NO 33: DATE OF COMMENCEMENT**

X Ltd is commencing a new construction project, which is to be financed by borrowing. The key dates are as follows:

(i) 15 May 20X1: Loan interest relating to the project starts to be incurred

(ii) 2 June 20X1: Technical site planning commences

(iii) 19 June 20X1: Expenditure on the project started to be incurred

(iv) 18 July 20X1: Construction work commences

Identify commencement date.

**SOLUTION**

In the above case, the three conditions to be tested for commencement date would be:

- Borrowing cost has been incurred on: 15 May 20X1
- Expenditure has been incurred for the asset on: 19 June 20X1
- Activities necessary to prepare asset for its intended use or sale: 2 June 20X1

Commencement date would be the date when the above three conditions would be satisfied in all i.e 19 June 20X1.

**QUESTION NO 34 (PARA 6 E EXCHANGE DIFFERENCES)**

ABC Ltd. has taken a loan of USD 20,000 on April 1, 20X1 for constructing a plant at an interest rate of 5% per annum payable on annual basis.

On April 1, 20X1, the exchange rate between the currencies i.e. USD Vs INR was ₹45 per USD. The exchange rate on the reporting date i.e. March 31, 20X2 is ₹48 per USD.

The corresponding amount could have been borrowed by ABC Ltd from State bank of India in local currency at an interest rate of 11% per annum as on April 1, 20X1.

Compute the borrowing cost to be capitalized for the construction of plant by ABC Ltd.

**SOLUTION**

In the above situation, the Borrowing cost needs to determine for interest cost on such foreign currency loan and eligible exchange loss difference if any.
(a) Interest on Foreign currency loan for the period : USD 20,000 x 5% = USD 1,000
Converted in ₹ : USD 1,000 x ₹ 48/USD = ₹ 48,000
Increase in liability due to change in exchange difference :
USD 20,000 x (48 - 45) = ₹ 60,000

(b) Interest that would have resulted if the loan was taken in Indian Currency:
USD 20,000 x ₹ 45/USD x 11% = ₹ 99,000

(c) Difference between Interest on Foreign Currency borrowing and local Currency borrowing : ₹ 99,000 - 48,000 = ₹ 51,000

Hence, out of Exchange loss of ₹ 60,000 on principal amount of foreign currency loan, only exchange loss to the extent of ₹ 51,000 is considered as borrowing costs.

Total borrowing cost to be capitalized is as under :

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Interest cost on borrowing</td>
<td>48,000</td>
</tr>
<tr>
<td>(b)</td>
<td>Exchange difference to the extent considered to be an adjustment to Interest cost</td>
<td>51,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>99,000</td>
</tr>
</tbody>
</table>

The exchange difference of ₹ 51,000 has been capitalized as borrowing cost and the remaining ₹ 9,000 will be expensed off in the Statement of Profit and loss.

**QUESTION NO 35 CAPITALISATION RATE**

Beta Ltd had the following loans in place at the end of 31st March 20X2

(Amounts in ₹ 000s)

<table>
<thead>
<tr>
<th>Loan</th>
<th>1st April 20X1</th>
<th>31st March 20X2</th>
</tr>
</thead>
<tbody>
<tr>
<td>18% Bank Loan</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>16% Term Loan</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>14% Debentures</td>
<td>2,000</td>
<td></td>
</tr>
</tbody>
</table>

14% debenture was issued to fund the construction of Office building on 1st July 20X1 but the development activities has yet to be started.

On 1st April 20X1, Beta Ltd began the construction of a Plant being qualifying asset using the existing borrowings. Expenditure drawn down for the construction was: ₹ 500,000 on 1st April 20X1 and ₹ 2,500,000 on 1st January 20X2.
Required

Calculate the borrowing cost that can be capitalised for the plant.

**SOLUTION**

<table>
<thead>
<tr>
<th>Capitalisation rate</th>
<th>Calculation</th>
<th>16.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(18% x 1,000) + (16% x 3,000)</td>
<td>$\frac{1,000 + 3,000}{1,000 + 3,000}$</td>
<td></td>
</tr>
<tr>
<td>Borrowing Costs</td>
<td>(500,000 x 16.5%) + (2,500,000 x 16.5% x 3/12)</td>
<td>₹ 1,85,625</td>
</tr>
</tbody>
</table>
QUESTION 1 NOVEMBER 2019 EXAM

An entity constructs a new office building commencing on 1st September, 2018, which continues till 31st December, 2018 (and is expected to go beyond a year). Directly attributable expenditure at the beginning of the month on this asset are ₹ 2 lakh in September 2018 and ₹ 4 lakh in each of the months of October to December 2018.

The entity has not taken any specific borrowings to finance the construction of the building but has incurred finance costs on its general borrowings during the construction period. During the year, the entity had issued 9% debentures with a face value of ₹ 30 lakh and had an overdraft of ₹ 4 lakh, which increased to ₹ 8 lakh in December 2018. Interest was paid on the overdraft at 12% until 1st October, 2018 and then the rate was increased to 15%.

Calculate the capitalization rate for computation of borrowing cost in accordance with Ind AS ’Borrowing Cost’.

ANSWER

<table>
<thead>
<tr>
<th>Nature of general borrowings</th>
<th>Period of outstanding balance</th>
<th>Amount of loan (₹)</th>
<th>Rate of interest p.a.</th>
<th>Weighted average amount of interest (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9% Debentures</td>
<td>12 months</td>
<td>30,00,000</td>
<td>9%</td>
<td>2,70,000</td>
</tr>
<tr>
<td>Bank overdraft</td>
<td>9 months</td>
<td>4,00,000</td>
<td>12%</td>
<td>36,000</td>
</tr>
<tr>
<td></td>
<td>2 months</td>
<td>4,00,000</td>
<td>15%</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>1 month</td>
<td>8,00,000</td>
<td>15%</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46,00,000</td>
<td></td>
<td>3,26,000</td>
</tr>
</tbody>
</table>

Weighted average cost of borrowings

= {30,00,000 x (12/12)} + {4,00,000 x (11/12)} + {8,00,000 x (1/12)} = 34,33,334

Capitalisation rate = (Weighted average amount of interest / Weighted average of general borrowings) x 100

= (3,26,000 / 34,33,334) x 100 = 9.50% p.a.
**IND AS-36: IMPAIRMENT OF ASSETS**

**QUESTION 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

**QUESTION 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.

**QUESTION 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>
</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

**QUESTION 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 = 200</td>
<td></td>
</tr>
<tr>
<td>Higher of, 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 = 250-200</td>
<td>50</td>
</tr>
</tbody>
</table>

**QUESTION 5 (WE WILL COVER IT IN IND AS 12)**

Mercury Ltd has an identifiable asset with a carrying amount of ₹ 1,000. Its recoverable amount is ₹ 650. The tax rate is 30% and the tax base of the asset is ₹ 800. Impairment losses are not deductible for tax purposes. The effect of the impairment loss is as follows:
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.

**QUESTION 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, ie the mine as a whole.

**QUESTION 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.
QUESTION 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.

QUESTION 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.

**QUESTION 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.

**QUESTION 11 (CORPORATE ASSETS)**

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.

**QUESTION 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 management to replace the machine.

**Assumption 2:** budgets/forecasts approved by management reflect a commitment 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.

**QUESTION 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 entanglement 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.

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

**QUESTION 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></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>To Assets A/c</td>
<td>Dr.</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></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>To Impairment Loss A/c</td>
<td>Dr.</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>

QUESTION 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.

**QUESTION 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.

**QUESTION 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.
QUESTION 19 (INTER DEPTT. SALE: UNIT 3 IN CLASS NOTES)

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.
QUESTION 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.

QUESTION 21

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.
**QUESTION 22**

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.

**QUESTION 23**

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.

**QUESTION 24**

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.
Extra Practical Questions

Q.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.

Q.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) Remaining useful life</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>(₹ in crores) 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.
Q.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.

Q.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.

Q.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:
## Financial Year

<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.

### Q.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>

### Q.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:

<table>
<thead>
<tr>
<th>As on</th>
<th>Recoverable amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 31, 20X1</td>
<td>₹60 lakhs</td>
</tr>
<tr>
<td>March 31, 20X2</td>
<td>₹40 lakhs</td>
</tr>
<tr>
<td>March 31, 20X3</td>
<td>₹28 lakhs</td>
</tr>
</tbody>
</table>

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

Q.9: Cash flow is ₹ 100, ₹ 200 or ₹ 300 with probabilities of 10%, 60% and 30%, respectively. Calculate expected cash flows.

Q.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.

Q.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).
Q.12: X Ltd., is having a plant (asset) carrying amount of which is Rs. 100 lakhs on 31.3.2004. Its balance useful life is 5 years and residual value at the end of 5 years is Rs. 5 lakhs. Estimated future cash flow using the plant in next 5 years are:- For the year ended on Estimated cash flow (Rs. in lakhs)

<table>
<thead>
<tr>
<th>For the year ended on</th>
<th>Estimated cash flow (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.3.2005</td>
<td>50</td>
</tr>
<tr>
<td>31.3.2006</td>
<td>30</td>
</tr>
<tr>
<td>31.3.2007</td>
<td>30</td>
</tr>
<tr>
<td>31.3.2008</td>
<td>20</td>
</tr>
<tr>
<td>31.3.2009</td>
<td>20</td>
</tr>
</tbody>
</table>

Calculate “value in USE” for plant if the discount rate is 10% and also calculate the recoverable amount if net selling price of plant on 31.3.2004 is Rs. 60 lakhs.

ANSWER:

Present value of future cash flow

<table>
<thead>
<tr>
<th>Year ended</th>
<th>Future Cash Flow</th>
<th>Discount @ 10% Rate</th>
<th>Discounted cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.3.2005</td>
<td>50</td>
<td>0.909</td>
<td>45.45</td>
</tr>
<tr>
<td>31.3.2006</td>
<td>30</td>
<td>0.826</td>
<td>24.78</td>
</tr>
<tr>
<td>31.3.2007</td>
<td>30</td>
<td>0.751</td>
<td>22.53</td>
</tr>
<tr>
<td>31.3.2008</td>
<td>20</td>
<td>0.683</td>
<td>13.66</td>
</tr>
<tr>
<td>31.3.2009</td>
<td>20</td>
<td>0.620</td>
<td>12.40</td>
</tr>
</tbody>
</table>

Present value of residual price on 31.3.2009 = 5x 0.620

Present value of estimated cash flow by use of an asset and Residual value, which is called “value in use”.

If net selling price of plant on 31.3.2004 is Rs. 60 lakhs, the recoverable amount will be higher of Rs. 121.92 lakhs (value in use) and Rs. 6.60 lakhs (net selling price), hence recoverable amount is Rs. 121.92 lakhs

Q.13: Hari Ltd. gives following estimates to Cash Flows relating to a Fixed Asset on 31st December 2013. The Discount Rate is 15%.
Ind AS-36: Impairment of Assets

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flow (Rs. in Lakhs)</td>
<td>4000</td>
<td>6000</td>
<td>6000</td>
<td>8000</td>
<td>4000</td>
</tr>
</tbody>
</table>

Residual Value at the end of 2018  Rs. 1,000 Lakhs
Fixed Asset purchased on 01.01.2011  Rs. 40,000 Lakhs
Useful Life  8 Years
Net Selling Price on 31.12.2018  Rs. 20,000 Lakhs

Calculate -

(a) Value in Use on 31.12.2013
(b) Carrying Amount at the end of 2013
(c) Recoverable Amount on 31.12.2013
(d) Impairment Loss for the year ended 31.12.2013
(e) Revised Carrying Amount on 31.12.2013
(f) Depreciation charge for the year 2014.

Solution:

1. Computation of Value in Use

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow</th>
<th>Discount Rate at 15%</th>
<th>Discounted Cash Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Rs. 4,000 Lakhs</td>
<td>0.870</td>
<td>Rs. 3,480 Lakhs</td>
</tr>
<tr>
<td>2015</td>
<td>Rs. 6,000 Lakhs</td>
<td>0.756</td>
<td>Rs. 4,536 Lakhs</td>
</tr>
<tr>
<td>2016</td>
<td>Rs. 6,000 Lakhs</td>
<td>0.658</td>
<td>Rs. 3,948 Lakhs</td>
</tr>
<tr>
<td>2017</td>
<td>Rs. 8,000 Lakhs</td>
<td>0.572</td>
<td>Rs. 4,576 Lakhs</td>
</tr>
<tr>
<td>2018</td>
<td>Rs. 4,000 + Rs. 1,000 = Rs. 5,000 Lakhs</td>
<td>0.497</td>
<td>Rs. 2,485 Lakhs</td>
</tr>
</tbody>
</table>

Value in use  Rs. 19,025 Lakhs

2. Computation of Other Particulars

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs. Lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Original Cost</td>
<td>40,000</td>
</tr>
<tr>
<td>2. Depreciation for years 2011, 2012 &amp; 2013 (40,000 - 1,000) x 3/8</td>
<td>(14,625)</td>
</tr>
<tr>
<td>4. Recoverable Amount (Net Selling Price 20,000 (or) Value in Use 19,025 whichever is higher)</td>
<td>20,000</td>
</tr>
</tbody>
</table>
IND AS-36: IMPAIRMENT OF ASSETS

5. Impairment Loss – Carrying Amount Less Recoverable Amount (3-4)  5,375
6. Revised Carrying Amount = Old Carrying Amount Less Impairment Loss (3-5)  20,000
7. Depreciation Charge for 2014 (20,000 – 1,000) \( \div \) 5 years

Q.14: Upendra Ltd. is the sole manufacturer of Product X. A particular machine is exclusively used for production of Product X. The company had near monopoly of the product. A competitor has recently come out with a cheaper substitute of Product X. The company is anticipating significant fall in demand for its product and cash flow from the machine used in production of X is also expected to fall. As per the latest budget estimates taking the entry of the competitor in consideration, the Operating Pre-Tax Cash Flows from the machine expected over next 5 years are Rs. 9 Lakhs Rs. 8 Lakhs Rs. 6 Lakhs, Rs. 5.5 Lakhs and Rs. 5 Lakhs respectively. The expected life of the machine is 10 years. Declining growth rates for future cash flows are estimated from year 6 onwards at 10%, 20%, 30%, 40%, 60% respectively. The Disposal value (net of expected cost of disposal) realizable at the end of year 10 is Rs. 1 Lakh. The machine can be disposed off immediately for Rs. 25 Lakhs subject to payment of brokerage 2% on disposal value. The Carrying Amount of the machine on the current date is Rs. 35 Lakhs. Taking the risk involved in the use of the machine for production of X is consideration, a pre-tax rate of return of 10% seems to be appropriate. Determine the impairment Loss if any, and give the Journal Entries in the books of the Company.

SOLUTION:

1. Computation of Value in Use (in Rs.1000s)

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating Cash Flow</th>
<th>Disc Factor at 10%</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>900</td>
<td>0.909</td>
<td>818.10</td>
</tr>
<tr>
<td>2</td>
<td>800</td>
<td>0.826</td>
<td>660.00</td>
</tr>
<tr>
<td>3</td>
<td>600</td>
<td>0.751</td>
<td>450.0</td>
</tr>
<tr>
<td>4</td>
<td>550</td>
<td>0.683</td>
<td>375.60</td>
</tr>
<tr>
<td>5</td>
<td>500</td>
<td>0.621</td>
<td>310.50</td>
</tr>
<tr>
<td>6</td>
<td>500 - 10% = 450</td>
<td>0.564</td>
<td>253.00</td>
</tr>
<tr>
<td>7</td>
<td>450 - 20% = 360</td>
<td>0.513</td>
<td>184.60</td>
</tr>
<tr>
<td>8</td>
<td>360 - 30% = 252</td>
<td>0.467</td>
<td>117.60</td>
</tr>
<tr>
<td>9</td>
<td>252 - 40% = 151.20</td>
<td>0.424</td>
<td>64.11</td>
</tr>
<tr>
<td>10</td>
<td>151.20 - 60% = 60.48</td>
<td>0.386</td>
<td>23.35</td>
</tr>
<tr>
<td>10</td>
<td>Disposal Value 100</td>
<td>0.386</td>
<td>38.60</td>
</tr>
</tbody>
</table>

Total 3,297.87
2. Computation of Other Particulars

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs. Lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Carrying Amount given</td>
<td>35.00</td>
</tr>
<tr>
<td>2. Net Selling Price = Sale Price 25,00 less Brokerage at 2% thereon</td>
<td>24.50</td>
</tr>
<tr>
<td>3. Recoverable Amount (Net Selling Price 24,50 less (or) Value in Use 32,97,87 whichever is higher)</td>
<td>32.90</td>
</tr>
<tr>
<td>4. Impairment Loss = Carrying Amount Less Recoverable Amount (1-3)</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Journal Entries (Rs. 000s)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impairment Loss A/c.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Machine A/c.</td>
<td>Dr. 2,02</td>
<td></td>
</tr>
<tr>
<td>(Being Impairment Loss recognized)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit &amp; Loss A/c.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Impairment Loss A/c.</td>
<td>Dr. 2,02</td>
<td></td>
</tr>
<tr>
<td>(Being Impairment Loss transferred to Profit &amp; Loss Account)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q.15: From the following details provided for an asset, find out – (a) the Impairment Loss (b) Treatment of Impairment Loss, and (c) Current Year Depreciation.

| Cost of the Asset | Rs. 56 Lakhs |
| Life Period useful | 10 Years |
| Salvage Value | NIL |
| Upward Revaluation done last year | Rs. 14 Lakhs |
| Current Carrying Value | Rs. 27.30 Lakhs |
| Life remaining useful | 3 Years |
| Recoverable Amount | Rs. 12 Lakhs |

SOLUTION

1. Impairment Loss = Carrying Amount - Recoverable Amount = Rs. 27.30 Lakhs - Rs. 12.00 Lakhs = Rs. 15.30 Lakhs.

2. Treatment of Impairment Loss:
   (a) Adjusted against Revaluation Reserve to the extent amount available in the account.
   (b) Balance of Impairment loss, if any debited to Profit & Loss Account.
### Q.16: A Plant was acquired 15 years ago at a cost of Rs. 5 crores. Its Accumulated Depreciation as at 31.03.20X0 was Rs. 4.15 crores. Depreciation estimated for the Financial year 20X0-20X1 is Rs. 25 lakhs. Estimated Net Selling Price as 31.03.20X0 was Rs. 30 lakhs, which is expected to decline by 20% by the end of the next Financial year. Its Value in Use has been computed at Rs. 35 lakhs as on 01.04.20X0 which is expected to decrease by 30% by the end of the Financial year.

1. Assuming that other conditions for applicability of the impairment Accounting Standard are satisfied, what should be the Carrying Amount of this Plant as at 31.03.20X1?
2. How much will be amount of write off for the Financial year to end on 31.03.20X1?
3. If the Plant had been revalued ten years ago and the Current Reserves against this Plant were to be Rs. 12 lakhs, how would you answer to questions (1) and (2) above change?
4. If the Value in Use was zero and the Enterprise were required to incur a cost of Rs. 2 lakhs to dispose of the Plant, what would be your response to questions (1) and (2) above?
SOLUTION

1. Balances as on 31.03.20X1 (Rs. Lakhs)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Net Book Value</th>
<th>Net Selling Price</th>
<th>Value in Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31.03.2000</td>
<td>500-415 = 85.00</td>
<td>30.00</td>
<td>30% of 35.00 = 10.50</td>
</tr>
<tr>
<td>Less: Depreciation for 20X0-20X1 / Reduction</td>
<td>25.00</td>
<td>20% of 30.00 = 6.00</td>
<td>30% of 35.00 = 10.50</td>
</tr>
<tr>
<td>Balance on 31.03.20X1</td>
<td>60.00</td>
<td>24.00</td>
<td>24.50</td>
</tr>
</tbody>
</table>

Recoverable Amount = Higher of NSP Vs. VIU = Rs. 24.00 Vs Rs. 24.50 = Rs. 24.50 Lakhs

(a) Recoverable Amount of Rs. 24.50 Lakhs is lower than the Net Book Value of Rs. 60 Lakhs, and hence the Impairment Loss of Rs. 35.50 Lakhs should be recognized in FY 20X0-20X1.

(b) Carrying Amount of the Plant = Book Value Rs. 60 Lakhs Less Impairment Loss Rs. 3550 Lakhs = Rs. 24.50 Lakhs

(c) Amount written off in FY 20X0-20X1 = Depreciation Rs. 25.00 Lakhs + Impairment Loss Rs. 35.50 Lakhs = Rs. 60.50 Lakhs

2. Treatment if Assets were revalued earlier:

- Total Impairment Loss = Rs. 35.50 Lakhs
- Adjusted Against Revaluation Reserve = Rs. 12.00 Lakhs
- Balance Transferred to P&L A/c. = Rs. 23.50 Lakhs

3. If VIU is Zero (Rs. Lakhs)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Without Revaluation Reserve</th>
<th>With Revaluation Reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying Amount</td>
<td>60.00</td>
<td>60.00</td>
</tr>
<tr>
<td>Less: Recoverable Amount = VIU</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Impairment Loss</td>
<td>60.00</td>
<td>60.00</td>
</tr>
<tr>
<td>Less: Adjusted Against Revaluation Reserve</td>
<td>Nil</td>
<td>12.00</td>
</tr>
<tr>
<td>Charged to P&amp;L A/c.</td>
<td>60.00</td>
<td>48.00</td>
</tr>
<tr>
<td>Add: Additional Provision to be created for Disposal Expenses</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Total Debit to P&amp;L A/c.</td>
<td>62.00</td>
<td>50.00</td>
</tr>
</tbody>
</table>
QUESTION 1 NOVEMBER 2018

XYZ Limited has three cash-generating units - X, Y and Z, the carrying amounts of which as on 31st March, 2018 are as follows:

<table>
<thead>
<tr>
<th>Cash Generating Units</th>
<th>Carrying Amount (₹ in lakh)</th>
<th>Remaining useful life in years</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>800</td>
<td>20</td>
</tr>
<tr>
<td>Y</td>
<td>1000</td>
<td>10</td>
</tr>
<tr>
<td>Z</td>
<td>1200</td>
<td>20</td>
</tr>
</tbody>
</table>

XYZ Limited also has corporate assets having a remaining useful life of 20 years as given below:

<table>
<thead>
<tr>
<th>Corporate Assets</th>
<th>Carrying amount (₹ in lakh)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>800</td>
<td>The carrying amount of AU can be allocated on a reasonable basis to the individual cash generating units.</td>
</tr>
<tr>
<td>BU</td>
<td>400</td>
<td>The carrying amount of BU cannot be allocated on a reasonable basis to the individual cash-generating units.</td>
</tr>
</tbody>
</table>

Recoverable amounts as on 31st March, 2018 are as follows:

<table>
<thead>
<tr>
<th>Cash - generating units</th>
<th>Recoverable amount (₹ in lakh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>1000</td>
</tr>
<tr>
<td>Y</td>
<td>1200</td>
</tr>
<tr>
<td>Z</td>
<td>1400</td>
</tr>
<tr>
<td>XYZ Limited</td>
<td>3900</td>
</tr>
</tbody>
</table>

Calculate the impairment loss if any of XYZ Ltd. Ignore decimals.

ANSWER (A)

(i) Allocation of corporate assets to CGU

The carrying amount of AU 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 Y's cash-generating unit is 10 years, whereas the estimated remaining useful lives of X and Z's cash-generating units are 20 years.
(c) Weight based on useful life

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

(d) Carrying amount (after assigning weight) \((a \times c)\)

|   | 1,600 | 1,000 | 2,400 | 5,000 |

(e) Pro-rata allocation of AU

|   | 32% | 20% | 48% | 100% |

|   | \((1,600/500)\) | \((1,000/5,000)\) | \((2,400/5,000)\) |

(f) Allocation of carrying amount of AU \((32: 20: 48)\)

|   | 256 | 160 | 384 | 800 |

(g) Carrying amount (after allocation of AU) \((a + f)\)

|   | 1,056 | 1,160 | 1,584 | 3,800 |

(ii) Calculation of impairment loss

Step 1: 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>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount (after allocation of AU)</td>
<td>1,056</td>
<td>1,160</td>
<td>1,584</td>
</tr>
<tr>
<td>Recoverable amount</td>
<td>1,000</td>
<td>1,200</td>
<td>1,400</td>
</tr>
<tr>
<td>Impairment loss</td>
<td>56</td>
<td>Nil</td>
<td>184</td>
</tr>
</tbody>
</table>

b) Allocation of the impairment loss (after rounding off)

<table>
<thead>
<tr>
<th>Allocation to</th>
<th>X</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>14</td>
<td>(56 x 256/1,056)</td>
</tr>
<tr>
<td>Other assets in Cash-generating units</td>
<td>42</td>
<td>(56 x 800/1056)</td>
</tr>
<tr>
<td>Impairment loss</td>
<td>56</td>
<td>184</td>
</tr>
</tbody>
</table>

\(184 \times 1,200 / 1,584\)
**Step 2: Impairment loss for the larger cash-generating unit, i.e., XYZ Ltd. as a whole**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
<th>AU</th>
<th>BU</th>
<th>XYZ Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carrying amount</strong></td>
<td>800</td>
<td>1,000</td>
<td>1,200</td>
<td>800</td>
<td>400</td>
<td>4,200</td>
</tr>
<tr>
<td><strong>Impairment loss (Step 1)</strong></td>
<td>-42</td>
<td></td>
<td>-139</td>
<td>(59)*</td>
<td></td>
<td>-240</td>
</tr>
<tr>
<td><strong>Carrying amount (after Step 1)</strong></td>
<td>758</td>
<td>1,000</td>
<td>1,061</td>
<td>741</td>
<td>400</td>
<td>3,960</td>
</tr>
<tr>
<td><strong>Recoverable amount</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,960</td>
</tr>
<tr>
<td><strong>Impairment loss for the 'larger' cash-generating unit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

₹ 14 lakh + ₹ 45 lakh = ₹ 59 lakh.

**QUESTION 2 NOVEMBER, 2018 EXAM**

A Machine was acquired by ABC Ltd. 15 years ago at a cost of ₹ 20 crore. Its accumulated depreciation as at 31st March, 2018 was ₹ 16.60 crore. Depreciation estimated for the financial year 2018-19 is ₹ 1 crore. Estimated Net Selling Price of the machine as on 31st March, 2018 was ₹ 1.20 crore, which is expected to decline by 20 per cent by the end of the next financial year.

Its value in use has been computed at ₹ 1.40 crore as on 1st April, 2018, which is expected to decrease by 30 per cent by the end of the financial year. Assuming that other conditions of relevant Accounting Standard for applicability of the impairment are satisfied:

(i) What should be the carrying amount of this machine as at 31st March, 2019?

(ii) How much will be the amount of write off (impairment loss) for the financial year ended 31st March, 2019?

(iii) If the machine had been revaluation ten years ago and the current revaluation reserves against this plant were to be ₹ 48 lakh, how would you answer to questions (i) and (ii) above?

(iv) If the value in use was zero and the company was required to incur a cost of ₹ 8 lakh to dispose of the plant, what would be your response to questions (i) and (ii) above?

**Answer (A)** As per the requirement of the question, the following solution has been drawn on the basis of AS 28
### IND AS-36: IMPAIRMENT OF ASSETS

<table>
<thead>
<tr>
<th>(i) Carrying amount of plant (before impairment) as on 31&lt;sup&gt;st&lt;/sup&gt; March, 2019</th>
<th>₹ in crore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount of plant (after impairment) as on 31&lt;sup&gt;st&lt;/sup&gt; March, 2019</td>
<td>0.98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(ii) Amount of impairment loss for the financial year ended 31&lt;sup&gt;st&lt;/sup&gt; March 2019 (2.4 Cr.- 0.98 Cr)</th>
<th>₹ in crore</th>
</tr>
</thead>
<tbody>
<tr>
<td>(iii) If the plant had been revalued ten years ago</td>
<td></td>
</tr>
<tr>
<td>Debit to revaluation reserve</td>
<td>0.48</td>
</tr>
<tr>
<td>Amount charged to profit and loss (1.42 - 0.48)</td>
<td>0.94</td>
</tr>
</tbody>
</table>

| (iv) If Value in use was zero | |
| Value in use (a) | Nil |
| Net selling price (b) | -0.08 |
| Recoverable amount [higher of (a) and (b)] | Nil |
| Carrying amount (closing book value) | Nil |
| Amount of write off (impairment loss) (₹ 2.4 Cr - Nil) | 2.4 |

Entire book value of plant will be written off and charged to profit and loss account.

### Working Notes:

**Calculation of Closing Book Value, as at 31<sup>st</sup> March, 2019**

<table>
<thead>
<tr>
<th>₹ in crore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening book value as on 1.4.2018 (₹ 20 crore - 16.60 crore)</td>
</tr>
<tr>
<td>Less: Depreciation for financial year 2018-2019</td>
</tr>
<tr>
<td>Closing book value as on 31.3.2019 (before Impairment)</td>
</tr>
</tbody>
</table>

### Calculation of Estimated Net Selling Price on 31<sup>st</sup> March, 2019

<table>
<thead>
<tr>
<th>₹ in crore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated net selling price as on 1.4.2018</td>
</tr>
<tr>
<td>Less: Estimated decrease during the year (20% of ₹ 1.20 Cr.)</td>
</tr>
<tr>
<td>Estimated net selling Price as on 31.3.2019</td>
</tr>
</tbody>
</table>

### Calculation of Estimated Value in Use of Plant on 31<sup>st</sup> March, 2019

<table>
<thead>
<tr>
<th>₹ in crore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated value on use as on 1.4. 2018</td>
</tr>
<tr>
<td>Less: Estimated decrease during the year (30% of ₹ 1.40 Cr.)</td>
</tr>
<tr>
<td>Estimated value in use as on 31.3.2019</td>
</tr>
</tbody>
</table>
(4) Recoverable amount as on 31.3.2019 is equal to higher of Net selling price and value in use

<table>
<thead>
<tr>
<th></th>
<th>₹ in core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net selling price</td>
<td>0.96</td>
</tr>
<tr>
<td>Value in use</td>
<td>0.98</td>
</tr>
<tr>
<td>Recoverable amount</td>
<td>0.98</td>
</tr>
<tr>
<td>Impairment Loss [Carrying amount - Recoverable amount ie. (2.40 Cr. - 0.98 Cr)]</td>
<td>1.42</td>
</tr>
<tr>
<td>Revised carrying amount on 31.3.2019 is equal to Recoverable amount (after impairment)</td>
<td>0.98 Cr.</td>
</tr>
</tbody>
</table>
Entities frequently expend resources, or incur liabilities, on the acquisition, development, maintenance or enhancement of intangible resources such as:

- Scientific or technical knowledge
- Design and implementation of new processes or systems
- Licences
- Intellectual property
- Market knowledge and trademarks (including brand names and publishing titles).

**Common examples of items encompassed by these broad headings are:**

- Computer software
- Patents
- Copyrights
- Motion picture films
- Customer lists
- Mortgage servicing rights
- Fishing licences
- Import quotas
- Franchises
- Customer or supplier relationships
- Customer loyalty
- Market share and marketing rights.
QUESTION 1: IDENTIFIABILITY

Sun Ltd has an expertise in consulting business. In past years, company has gained a market share for its services of 30 percent and considers recognising it as an intangible asset. Is the action by company is justified?

SOLUTION:

Market share does not meet the definition of intangible assets as is not identifiable i.e. It is neither separable and nor arised from contractual or legal rights.

QUESTION 2: CONTROL

Company XYZ ltd has provided training to its staff on various new topics like GST, Ind AS etc to ensure the compliance as per the required law. Can the company recognise such cost of staff training as intangible asset?

SOLUTION:

It is clear that the company will obtain the economic benefits from the work performed by the staff as it increases their efficiency. But it does not have control over them because staff could choose to resign the company at any time.

Hence the company lacks the ability to restrict the access of others to those benefits. Therefore, the staff training cost does not meet the definition of an intangible asset.

QUESTION 3: IDENTIFIABILITY OF INTANGIBLE ASSETS

Pluto Ltd. intends to open a new retail store in a new location in the next few weeks. Pluto Ltd has spent a substantial sum on a series of television advertisements to promote this new store. The Company has paid an amount of ₹ 800,000 for advertisements before 31 March 20X1. ₹ 700,000 of this sum relates to advertisements shown before 31 March 20X1 and ₹ 100,000 to advertisements shown in April 20X1. Since 31 March 20X1, The Company has paid for further advertisements costing ₹ 400,000.

Pluto Ltd is of view that such costs can be carried forward as intangible assets. Since market research indicates that this new store is likely to be highly successful. Please explain and justify the treatment of the above costs in the financial statements for the year ended 31 March 20X1.

SOLUTION:

Under Ind AS 38 - Intangible Assets - intangible assets can only be recognised if they are identifiable and have a cost which can be reliably measured.

These criteria are very difficult to satisfy for internally developed intangibles.

For these reasons, Ind AS 38 specifically prohibits recognising advertising expenditure as
an intangible asset. The issue of how successful the store is likely to be does not affect this prohibition. Therefore such costs should be recognised as expenses.

However, the costs would be recognised on an accruals basis. Therefore, of the advertisements paid for before 31 March 20X1, ₹ 700,000 would be recognised as an expense and ₹ 100,000 as a pre-payment in the year ended 31 March 20X1. The ₹ 400,000 cost of advertisements paid for since 31 March 20X1 would be charged as expenses in the year ended 31 March 20X2.

**QUESTION 4**

Mercury Ltd is preparing its accounts for the year ended 31 March 20X2 and is unsure about how to treat the following items.

1. The company completed a grand marketing and advertising campaign costing ₹ 4.8 Lakh. The finance director had authorised this campaign on the basis that it would create ₹ 8 lakh of additional profits over the next three years.

2. A new product was developed during the year. The expenditure totalled ₹ 3 lakh of which ₹ 1.5 lakh was incurred prior to 30 September 20X1, the date on which it became clear that the product was technically viable. The new product will be launched in the next four months and its recoverable amount is estimated at ₹ 1.4 lakh.

3. Staff participated in a training programme which cost the company ₹ 5 lakh. The training organisation had made a presentation to the directors of the company outlining that incremental profits to the business over the next twelve months would be ₹ 7 lakh.

What amounts should appear as intangible assets in accordance with Ind AS 38 in Mercury's balance sheet as on 31 March 20X2?

**SOLUTION:**

The treatment in Mercury's financials as at 31 March 20X2 will be as follows:

1. **Marketing and advertising campaign:** no intangible asset will be recognised, because it is not possible to identify future economic benefits that are attributable only due to this campaign. All of the expenditure should be expensed in the statement of profit and loss.

2. **New product:** development expenditure appearing in the balance sheet will be valued at ₹ 1.5 lakh. The expenditure prior to the date on which the product becomes technically feasible is recognised in the statement of profit and loss.

3. **Training programme:** no asset will be recognised, because there is no control of the company over the staff and when staff leaves the benefits of the training, whatever they may be, also departs.
QUESTION 4: SEPARATE ACQUISITION

Venus India Private Ltd acquired a software for its internal use costing ₹10,00,000. The amount payable for the software was ₹600,000 immediately and ₹400,000 in one year time. The other expenditure incurred were:-

Purchase tax : ₹1,00,000
Entry Tax : 10% (recoverable later from tax department) Legal fees: ₹87,000
Consultancy fees for implementation : ₹1,20,000 cost of capital of the company is 10%.

Calculate the cost of the software on initial recognition using the principles of Ind AS 38 Intangible Assets.

QUESTION 5: BUSINESS COMBINATION

On 31st March 20X1, Earth India Ltd paid ₹50,00,000 for a 100% interest in Sun India Ltd. At that date Sun Ltd's net assets had a fair value of ₹30,00,000. In addition, Sun Ltd also held the following rights:

Trade Mark named “GRAND” - valued at ₹180,000 using a discounted cash flow technique.
Sole distribution rights to an electronic product. Future cash flows from which are estimated to be ₹150,000 per annum for the next 6 years.
10% is considered an appropriate discount rate. The 6 year, 10% annuity factor is 4.36.
Calculate goodwill and other Intangible assets arising on acquisition.

QUESTION 6: EXCHANGE OF ASSET

Sun Ltd acquired a software from Earth Ltd. in exchange for a telecommunication license. The telecommunication license is carried at ₹5,00,000 in the books of Sun Ltd. The Software is carried at ₹10,000 in the books of the Earth Ltd which is not the fair value.

Advise journal entries in the following situations in the books of Sun Ltd and Earth Ltd:-

1) Fair value of software is ₹5,20,000 and fair value of telecommunication license is ₹5,00,000.
2) Fair Value of Software is not measureable. However similar Telecommunication license is transacted by another company at ₹4,90,000.
3) Neither Fair Value of Software nor Telecommunication license could be reliably measured.
QUESTION 7: DEVELOPMENT PHASE

Expenditure on a new production process in 20X1-20X2:

<table>
<thead>
<tr>
<th></th>
<th>INR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st April to 31st December</td>
<td>2,700</td>
</tr>
<tr>
<td>1st January to 31st March</td>
<td>900</td>
</tr>
</tbody>
</table>

The production process met the intangible asset recognition criteria for development on 1st January 20X2. The amount estimated to be recoverable from the process is ₹ 1,000.

What is the carrying amount of the intangible asset at 31st March 20X2 and the charge to profit or loss for 20X1-20X2?

Expenditure incurred in FY 20X2-20X3 is ₹ 6,000.

At 31st March 20X3, the amount estimated to be recoverable from the process (including future cash outflows to complete the process before it is available for use) is ₹ 5,000.

What is the carrying amount of the intangible asset at 31st March 20X3 and the charge to profit or loss for 20X2-20X3?

QUESTION 8 : REVALUATION MODEL

1. Saturn Ltd. acquired an intangible asset on 31st March 20X1 for ₹ 1,00,000. The asset was revalued at ₹ 1,20,000 on 31st March 20X2 and ₹ 85,000 on 31st March 20X3.

2. Jupiter Ltd. acquired an intangible asset on 31st March 20X1 for ₹ 1,00,000. The asset was revalued at ₹ 85,000 on 31st March 20X2 and at ₹ 1,05,000 on 31st March 20X3.

Assuming that the year-end for both companies is 31st March, and that they both use the revaluation model, show how each of these transactions should be dealt with in the financial statements.

QUESTION 9

X Limited engaged in the business of manufacturing fertilisers entered into a technical collaboration agreement with a foreign company Y Limited. As a result, Y Limited would provide the technical know-how enabling X Limited to manufacture fertiliser in a more efficient way. X Limited paid ₹ 10,00,00,000 for the use of know-how for a period of 5 years. X Limited estimates the production of fertiliser as follows:
At the end of the 1st year, it achieved its targeted production. At the end of 2nd year, 65,000 metric tons of fertiliser was being manufactured, and X Limited considered to revise the estimates for the next 3 years. The revised figures are 85,000, 1,05,000 and 1,15,000 metric tons for year 3, 4 & respectively.

How will X Limited amortise the technical know-how fees as per Ind AS 38?

**QUESTION 10**

X Ltd. purchased a patent right on April 1, 20X1, for ₹ 3,00,000; which has a legal life of 15 years. However, due to the competitive nature of the product, the management estimates a useful life of only 5 years. Straight-line amortisation is determined by the management to be the best method. As at April 1, 20X2, management is uncertain that the process can actually be made economically feasible, and decides to write down the patent to an estimated market value of ₹ 1,50,000 and decides to amortise over 2 years. As at April 1, 20X3, having perfected the related production process, the asset is now appraised at a value of ₹ 3,00,000. Furthermore, the estimated useful life is now believed to be 4 more years. Determine the value of intangible asset at the end of each financial year?

**QUESTION 11**

X Pharmaceutical Ltd. seeks your opinion in respect of following accounting transactions:

1. Acquired a 4 year license to manufacture a specialised drug at a cost of ₹ 1,00,00,000 at the start of the year. Production commenced immediately.

2. Also purchased another company at the start of year. As part of that acquisition the company acquired a brand with a FV of ₹ 3,00,00,000 based on sales revenue. The life of the brand is estimated at 15 years.

3. Spent ₹ 1,00,00,000 on an advertising campaign during the first six months. Subsequent sales have shown a significant improvement and it is expected this will continue for 3 years.

4. It has commenced developing a new drug 'Drug-A'. The project cost would be ₹ 10,00,00,000. Clinical trial proved successful and such drug is expected to generate revenue over the next 5 years.
Cost incurred (accumulated) till March 31, 20X1 is ₹ 5,00,00,000.
Balance cost incurred during the financial year 20X1-20X2 is ₹ 5,00,00,000.

5. It has also commenced developing another drug 'Drug B'. It has incurred ₹50,00,000 towards research expenses till March 31, 20X2. The technological feasibility has not yet been established.

How the above transactions will be accounted for in the books of account of X Pharmaceutical Ltd?

**SOLUTION:**

1. It should recognize the drug license as an intangible asset, because it is a separate external purchase, separately identifiable asset and considered successful in respect of feasibility and probable future cash inflows.

   The drug license should be recorded at 1,00,00,000.

2. It should recognize the brand as an intangible asset because it is purchased as a part of acquisition and it is separately identifiable. The brand should be amortized over a period of 15 years. The brand will be recorded at 3,00,00,000.

3. The advertisement expenses of 1,00,00,000 should be expensed off.

4. The development cost incurred during the financial year 20X1-X2 should be capitalized.

   Cost of intangible asset (Drug A) (5crore+5crore=10Crores)

5. Research Expenses of 50,00,000 incurred for developing Drug B should be expenses off since technological feasibility has not yet established.

**QUESTION NO 12**

A Ltd. is developing a new production process. It has incurred the following expenditure. Find out value of Intangible Assets.

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Amount (Rs. in lacs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 31 March</td>
<td>Research expenditure when intention to</td>
<td>20</td>
</tr>
<tr>
<td>2001</td>
<td>commercialise was not establish</td>
<td></td>
</tr>
<tr>
<td>2001-02</td>
<td>Development expenses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Salaries and wages</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Overheads</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Staff Training</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Apportioned Administrative Expenses</td>
<td>10</td>
</tr>
<tr>
<td>2002-03</td>
<td>Salary and wages</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Recoverable Amount (AS-28)</td>
<td>70</td>
</tr>
</tbody>
</table>
QUESTION NO 13

An enterprise is developing a new production process. During the year 2001, expenditure incurred was Rs. 10 lakhs, of which Rs. 9 lakhs was incurred before 1 December 2001 and 1 lakh was incurred between 1 December 2001 and 31 December 2001. The enterprise is able to demonstrate that, at 1 December 2001, the production process met the criteria for recognition as an intangible asset. The recoverable amount of the know-how embodied in the process (including future cash outflows to complete the process before it is available for use) is estimated to be Rs. 5 lakhs.

ANSWER:

At the end of 2001, the production process is recognized as an intangible asset at a cost of Rs. 1 lakh (expenditure incurred since the date when the recognition criteria were met, that is, 1 December 2001). The Rs. 9 lakhs expenditure incurred before 1 December 2001 is recognized as an expense because the recognition criteria were not met until 1 December 2001. This expenditure will never form part of the cost of the production process recognized in the balance sheet.

QUESTION NO 14

A pharma company spent Rs. 33 lakhs during the year to develop a drug on AIDS. It will take four years to establish whether the drug will be successful. The company wants to treat the expenditure as deferred revenue expenditure.

ANSWER

With the introduction of IND AS 38, the concept of deferred revenue expenditure does not any more exist barring few exceptions. In the given case, the pharma company should not capitalise Rs. 33 lakhs since capitalization conditions as per IND AS 38 are not fulfilled. The same should charged to the P&L account.

QUESTION NO 15

A company with a turnover of Rs. 250 crores and an annual advertising budget of Rs. 2 crore had taken up the marketing of a new product. It was estimated that the company would have a turnover of Rs. 25 crores from the new product. The company had debited to its Profit and Loss Account the total expenditure of Rs. 2 crore incurred on extensive special initial advertisement campaign for the new product.

Is the procedure adopted by the company correct?

ANSWER:

With the introduction of IND AS 38 - “Intangible Assets”, the concept of deferred revenue expenditure no longer prevails except in respect of a very few items, such as ancillary costs.
on borrowings, share issue expenses, etc. IND AS 38 does not permit the capitalization of expenses incurred on advertising or brand promotion, etc. Thus the accounting treatment by the company of debiting the entire advertising expenditure of Rs. 50 lakhs to the profit and loss account of the year is correct.

**QUESTION NO 16 (R&D WITH IMPAIRMENT LOSS)**

Ganguly International Ltd. is developing a new production process. During the financial year ended 31st March 2004, the total expenditure incurred on this process was Rs. 50 lakhs. The production process met the criteria for recognition as an intangible asset on 1st December 2003. Expenditure incurred till this date was Rs. 22 lakhs.

Further expenditure incurred on the process for the financial year ending 31st March 2005 was Rs. 80 lakhs. As at 31st March 2005, the recoverable amount of the know-how embodied in the process is estimated to be Rs. 72 lakhs. This includes estimates of future cash outflow as well as inflows:

You are required to work out:

What is the expenditure to be charged to the P &L Account for the financial year ended 31st March 2004 ? (Ignore depreciation for this purpose)

(i) What is the carrying amount of the intangible asset as at 31st March 2004 ?

(ii) What is the expenditure to be charged to the P &L Account for the financial year 2005 (Ignore depreciation for this purpose)

(iii) What is the carrying amount of the intangible asset as at 31st March 2005 ?

**SOLUTION:**

(a) Expenditure incurred up to 1.12.2009 will be taken up to profit and loss account for the financial year ended 31.3.2010 = Rs. 22 Lakhs.

(b) Carrying amount as on 31.3.2010 will be the expenditure incurred after 1.12.2009 = Rs. 28 Lakhs.

(c) Book cost of intangible asst as on 31.3.2011 is worked out as:

| Carrying amount as on 31.3.2010 | - Rs. 28 Lakhs |
| Expenditure during 2010-11 | - Rs. 80 Lakhs |
| Total Book Cost | - Rs. 108 Lakhs |
| Recoverable amount, as estimated | - Rs. 72 Lakhs |

Difference to be charged to Profit and loss account as impairment.

(d) Carrying amount as on 31.3.2011 will be (cost less Impairment loss) Rs. 72 Lakhs
Question No 17

Sunny Limited is developing a new production process. During the financial year ended 31st March 2013, the Company has incurred total expenditure of Rs. 40 Lakhs on the process. On 1st December 2012, the process has met the norms to be recognized as “Intangible Assets” and the expenditure incurred till that date is Rs. 16 Lakhs. During the financial year ending on 31st March 2014, the Company has further incurred Rs. 70 Lakhs. The Recoverable Amount as on 31st March 2014 of the process is estimated to be Rs. 62 Lakhs. You are required to work out:

(i) Expenditure to be charged to Profit and Loss Account for the financial year ending on 31st March 2013 and 31st March 2014 (ignore Depreciation).


Solution:

1. Expenditure charged to P&L for 2012-2013: Rs. 16 Lakhs will be recognized as an Expense because the recognition criteria were not met until 1st December 2012. The expenditure will not form part of the cost of the Production Process recognized in the Balance Sheet.

2. Carrying Amount of Intangible Asset as on 31.03.2013: The Production Process will be recognized (i.e. Carrying Amount), as an Intangible Asset at a cost of Rs. 24 Lakhs (i.e. expenditure incurred till the date in which recognition criteria were met, i.e. Total during FY 2012-2013 Rs. 40 Lakhs less Expenses upto 1st Dec. 2012 Rs. 16 Lakhs).

3. Expenditure charged to P&L A/c. for 2013-2014:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs. Lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book Value on 31.3.2014 = Carrying Amt. on 31.3.2013 + Expenditure in 2013-2014 = 24 + 70</td>
<td>94</td>
</tr>
<tr>
<td>Less: Recoverable Amount</td>
<td>62</td>
</tr>
<tr>
<td>Impairment Loss to be charged to P&amp;L A/c.</td>
<td>32</td>
</tr>
</tbody>
</table>

4. Carrying Amount of Intangible Asset as on 31.03.2014: The Production Process will be shown at Book value Rs. 94 Lakhs, or Recoverable Amount Rs. 62 Lakhs, whichever is less, hence at Rs. 62 Lakhs as above.

Question No 18

An Enterprise has incurred expense for purchase of Technical Know-how for manufacturing a Moped. The Enterprise has paid Rs. 5 crores for the use of Know-how for a period of 4 years. The Enterprise estimates the production of mopeds as follows:
On going into production, at the end of the 1st year it achieved its targeted production, but considered to revise the estimates for the next 3 years as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Mopeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25,000</td>
</tr>
<tr>
<td>2</td>
<td>50,000</td>
</tr>
<tr>
<td>3</td>
<td>75,000</td>
</tr>
<tr>
<td>4</td>
<td>1,00,000</td>
</tr>
</tbody>
</table>

(a) How will the Enterprise amortise the Technical Know-how Fees as per A IND AS 38
(b) Whether this amortisation should be directly charged as an expense or should form part of Production Cost of the Mopeds.

ANSWER:

Based on the revised estimate, total sales is 2,05,000 the first year charge should be a proportion of 25,000 / 2,05,000 on Rs. 5 crores, second year will be 35,000 / 2,05,000, and so on unless the estimates are again revised. If these estimates cannot be determined reliably it would be preferable to charge them off on a straight line basis, otherwise, as can be seen from the above example, significant amortisation amount is inappropriately postponed to later years. As already mentioned above, there will rarely, if ever, be persuasive evidence to support an amortisation method for intangible assets that results in a lower amount of accumulated amortisation than under the straight-line method. In the given case, amortisation expense will be included as cost of inventory.

QUESTION NO 19

Swift Ltd. acquired a Patent at a cost of Rs. 80,00,000 for a period of 8 years and the product life-cycle is also 8 years. The company capitalized the cost and started amortizing the asset at Rs. 10,00,000 per annum. After two years it was found that the product life-cycle may continue for another 5 years from then. The net cash flows from the product during these 5 years were expected to be Rs. 36,00,000; Rs. 46,00,000; Rs. 44,00,000; Rs. 40,00,000 and Rs. 34,00,000. Find out the amortization cost of the patent for each of the years.
Hint: Ratio of cash inflow should be used to write off the intangible asset of 60,00,000 (36:46:44:40:34).

SOLUTION:

As per IND AS 38 “Intangible Assets”, the amortization method used should reflect the pattern in which the asset’s economic benefits are consumed by the enterprise, if that pattern cannot be determined reliably, the straight-line method should be used.

In the instant case, pattern of economic benefit in the form of net cash flows is determined reliably after two years. In the initial two years the pattern of economic benefits could not have been reliably estimated therefore amortization was done at straight-line method i.e. Rs. 10 Lakhs per annum. However, after two years pattern of economic benefits for next five years in the form net cash flows is reliably estimated as under and therefore amortization will also be done as per the pattern of cash in flows:-

<table>
<thead>
<tr>
<th>Cash in flows (Rs.)</th>
<th>Amt. of amortization in next 5 years (Rs.)</th>
<th>Balance WDV</th>
</tr>
</thead>
<tbody>
<tr>
<td>36,00,000</td>
<td>10,80,000 (60,00,000 x 36,00,000/200,00,000)</td>
<td></td>
</tr>
<tr>
<td>46,00,000</td>
<td>13,80,000 (60,00,000 x 46,00,000/200,00,000)</td>
<td></td>
</tr>
<tr>
<td>44,00,000</td>
<td>13,20,000 (60,00,000 x 44,00,000/200,00,000)</td>
<td></td>
</tr>
<tr>
<td>40,00,000</td>
<td>12,00,000 (60,00,000 x 40,00,000/200,00,000)</td>
<td></td>
</tr>
<tr>
<td>34,00,000</td>
<td>10,20,000 (60,00,000 x 34,00,000/200,00,000)</td>
<td></td>
</tr>
<tr>
<td>200,00,000</td>
<td>60,00,000</td>
<td></td>
</tr>
</tbody>
</table>

QUESTION NO 20

While executing a new project, the company had to pay Rs. 50 lakhs to the State Government as part of the cost of roads built by the State Government in the vicinity of the project for the purpose of carrying machinery and materials to the project site. The road so built is the property of the State Government.

Advice the company about the accounting treatment.

Hint: Refer class notes on toll road licence accounting as per schedule ii given in ppe ind as 16

QUESTION NO 21

During the Financial year 2014-2015, Power Ltd. had the following transactions.

(i) ON 01.04.2014 Power Ltd. purchased a new Asset of Dark Ltd. for Rs. 11,40,000. The fair Value of Dark Ltd.’s identifiable Net Assets was Rs. 8,50,000. Power Ltd. is of the view that due to popularity of Dark Ltd.’s product the life of Goodwill is 10 years.
(ii) On 01.05.2014 Power Ltd. purchased a franchise to operate Transport Service from the Government for Rs. 12,00,000 and at a Annual Fee of 4% of Transport Revenues. The Franchise expires after 5 years. Transport Revenue were Rs.1,20,000 for Financial year 2014-2015. Power Ltd. projects future Revenue of Rs. 2,40,000 in 2015-2016 and Rs. 3,50,000 p.a. for 3 years thereafter.

(iii) On 5.07.2014, Power Ltd. was granted a Patent that had been applied for by Dark Ltd. During 2014-2015, Power Ltd. incurred Legal Cost of Rs. 1,10,000 to register the Patent and an additional Rs.3,00,000 to successfully prosecute a Patent infringement suit against a Computer. Power Ltd. expects the Patent's economic life to be 10 years. Power Ltd. follows an Accounting Policy to amortize all Intangibles on SLM basis over a maximum period permitted by Accounting Standard, taking a full year amortization in the year of acquisition.

Prepare:

(a) A Schedule showing the intangible section in Power Ltd. Balance Sheet at 31st March 2015.

(b) A Schedule showing the related expense that would appear in the Statement of Profit and Loss of Power Ltd. for 2014-2015.

SOLUTION:

1. Treatment under IND AS 38

<table>
<thead>
<tr>
<th>Point</th>
<th>Principle and Treatment (amounts in Rs.000s)</th>
</tr>
</thead>
</table>
| (i)   | * The excess of consideration paid over the Fair value of identifiable Net Asset is recognized as Goodwill, Hence, Goodwill= 1140-850=290.  
|       | * IND AS 38 assumes that the useful life does not exceed 10 years. So, the amortization over 10 years is proper.  
|       | Amortisation p.a. = \( \frac{290}{10} \) = 29  |
| (ii)  | · Lumpsum franchise fee 1200 would be recognized as Intangible Asset.  
|       | · The Depreciation Amount should be allocated over the assets useful i.e, on a systematic basis, (e.g. SLM, or Radio of Revenues to be earned, etc.)  
|       | · In this case Total Revenues to be earned in 5 years are -  
|       | ![Revenue and Amortisation Table]  
|       | · Alternatively, Amortisation p.a. under SLM = 1200 / 5 = 240  |
Revenue in each year and 4% Annual Fee should be recognized as Income/Expenses in P&L of each year.

Note: Impairment Testing nor considered in this cases.

(iii) • Cost of Patent = Registration + Directly attributable Cost = 110+300=410
• Amortisation p.a. = 410 /10 years = 41
• Note: Assumed that 410 represents cost relating to right to use, and hence capitalized under IND AS 38.

2. Balance Sheet of Power Ltd. (extract) (Rs.000)

<table>
<thead>
<tr>
<th>Particulars as at 31st March 2015</th>
<th>Note</th>
<th>This Year</th>
<th>Prev. Yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Non-Current Assets: Intangible Assets</td>
<td>1</td>
<td>1,728</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>XXXX</td>
<td></td>
</tr>
</tbody>
</table>

Note for WN 2: Intangible Assets:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Gross Block (Cost)</th>
<th>Accumulated Amortisation</th>
<th>Net Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Goodwill</td>
<td>-</td>
<td>290</td>
<td>290</td>
</tr>
<tr>
<td>(b) Transport Franchise</td>
<td>-</td>
<td>1200</td>
<td>1200</td>
</tr>
<tr>
<td>(c) Patent</td>
<td>-</td>
<td>410</td>
<td>410</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>1900</td>
<td>1900</td>
</tr>
</tbody>
</table>

3. Profit and Loss Statement (extract) (Rs 000)

<table>
<thead>
<tr>
<th>Particulars as at 31st March 2015</th>
<th>Note</th>
<th>This Year</th>
<th>Prev. Yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation and Amortisation Expense</td>
<td>1</td>
<td>172</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>XXXX</td>
<td></td>
</tr>
</tbody>
</table>
Note:

<table>
<thead>
<tr>
<th>1. Depreciation and Amortisation Expenses</th>
<th>2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Goodwill</td>
<td>20</td>
</tr>
<tr>
<td>(b) Transport Service Franchise</td>
<td>102</td>
</tr>
<tr>
<td>(c) Patent</td>
<td>41</td>
</tr>
</tbody>
</table>

QUESTION NO 22

Srimathi Ltd. acquired patent right for Rs. 400 Lakhs. The product life cycle has been estimated to be 5 years and the amortization was decided in the ratio of estimated future cash flows which are as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Future Cash Flows (Rs. in Lakhs)</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

After the 3rd year, it was ascertained that the Patent would have an estimated balance future life of 3 years and the Estimated Cash Flow after 5th year is expected to be Rs. 50 Lakhs each year. Determine the amortization under IND AS 38.

SOLUTION:

1. Initial Estimate of Total Cash Inflow = 200+200+200+100+100 = Rs. 800 Lakhs.
2. So, as per initial estimate, the cost of Patent should be written off in the ratio 2:2:2:1:1 i.e. (Rs. Lakhs) 100, 100, 100, 50 and 50 respectively, for the five years.
3. Unamortised Amount (WDV) of Patent at the end of 3rd year = 400 - (100+100+100) = Rs. 100 Lakhs.
4. Revised Estimate of Useful Life at the end of 3rd year = 3 future years, with estimated Cash Inflows being as under - Year 4 Rs. 100 Lakhs Year 5 Rs. 100 Lakhs, year 6: Rs. 50 Lakhs.
5. Hence, the unamortized Carrying Amount should be written off over the next 3 years, in the ratio of 100:100:50, i.e. Rs. 40 Lakhs, Rs. 40 Lakhs and Rs. 20 Lakhs respectively for years 4, 5 and 6.

Hence, If it is assumed that the Patent Right is not renewable, the present unamortized amount of Rs. 100 Lakhs may be written off in years 4 and 5, as per initial estimate, at Rs. 50 Lakhs p.a.
Preetha Ltd. got a license to manufacture certain medicines for 10 years at a License Fee of Rs. 200 Lakhs. Given below is the pattern of expected production and expected Operating Cash Inflow:

<table>
<thead>
<tr>
<th>Year</th>
<th>Production in Bottles (in Lakhs)</th>
<th>Net Operating Cash Flow (Rs. in Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>300</td>
<td>900</td>
</tr>
<tr>
<td>2</td>
<td>600</td>
<td>1800</td>
</tr>
<tr>
<td>3</td>
<td>650</td>
<td>2300</td>
</tr>
<tr>
<td>4 to 10</td>
<td>800 p.a.</td>
<td>3200 p.a.</td>
</tr>
</tbody>
</table>

Net Operating Cash Flow has increased for third year because of better Inventory management and handling method. Suggest the amortization method.

**SOLUTION:**

As per IND AS 38, Amortisation Method should be based on the expected pattern of consumption of economic benefits. Hence, the ratio of Net Operating Cash Flow can be used for amortization purposes.
QUESTION NO 24

A Company has deferred R&D Cost of Rs. 150 Lakhs. Sales expected in the subsequent years are as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (Rs. in Lakhs)</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Suggest how R&D Cost should be charged to Profit & Loss Account. Also, if at the end of the III year, it is felt that no further benefit will accrue in the IV year, how the unamortized expenditure would be dealt with in the accounts of the Company?

SOLUTION:

1. The Deferred Research and Development costs is to be charged to P&L A/c. on the basis of Expected Sales as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (Rs. Lakhs)</th>
<th>Percentage of R&amp;D Costs to be amortized in each year (on the basis of Sales)</th>
<th>Amount charged to P&amp;L Account (Rs. Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>400</td>
<td>40%</td>
<td>150x40% = 60</td>
</tr>
<tr>
<td>II</td>
<td>300</td>
<td>30%</td>
<td>150x30% = 45</td>
</tr>
<tr>
<td>III</td>
<td>200</td>
<td>20%</td>
<td>150x20% = 30</td>
</tr>
<tr>
<td>IV</td>
<td>100</td>
<td>10%</td>
<td>150x10% = 15</td>
</tr>
</tbody>
</table>

2. Requirements under IND AS 38:
   (a) The period of Amortization should be reviewed periodically to determine proper method of amortization.
   (b) Change of Amortization period: If the expected benefit from the asset is significantly different from the previous estimates, the amortization period should be changed accordingly.
EXTRA QUESTIONS TO BE COVERED

Q.1: X Ltd. is engaged in the business of publishing Journals. They acquired 50% stake in Y Ltd., a company in the same industry. X Ltd. paid purchase consideration of ₹10,00,00,000 and fair value of net asset acquired is ₹8,50,00,000. The above purchase consideration includes:

(a) ₹30,00,000 for obtaining the skilled staff of Y Ltd.
(b) ₹50,00,000 by way of payment towards ‘Non-compete Fee’ so as to restrict Y Ltd. to compete in the same line of business for next 5 years.

How should the above transactions be accounted for by X Ltd?

Q.2: X Ltd. purchased a franchise from a restaurant chain at a cost of ₹1,00,00,000 and the franchise has 10 years life. In addition, the franchise agreement mentions that the franchisee would also pay the franchisor royalty as a percentage of sales made. Can the franchise rights be treated as an intangible asset under Ind AS 38?

Q.3: An entity regularly places advertisements in newspapers advertising its products and includes a reply slip that informs individuals replying to the advertisement that the entity may pass on the individual’s details to other sellers of similar products, unless the individual ticks a box in the advertisement.

Over a period of time the entity has assembled a list of customers’ names and addresses. The list is provided to other entities for a fee. The entity would like to recognise an asset in respect of the expected future economic benefits to be derived from the list. Can the customer list be treated as an intangible asset under Ind AS 38?

Q.4: A software company X Ltd. is developing new software for the telecom industry. It employs 100 employees trained in that particular discipline who are engaged in the development of the software. X Ltd. feels that it has an excellent HR policy and does not expect any of its employees to leave in the near future. It wants to recognise these set of engineers as a human resources asset in the form of an intangible asset. What would be your advice to X Ltd?

Q.5: X Ltd. has acquired a telecom license from Government to operate mobile telephony in two states of India. Can the cost of acquisition be capitalised as an intangible asset under Ind AS 38?

Q.6: X Ltd. purchased a standardised finance software at a list price of ₹30,00,000 and paid ₹50,000 towards purchase tax which is non-refundable. In addition to this, the
entity was granted a trade discount of 5% on the initial list price. X Ltd. incurred cost of ₹ 7,00,000 towards customisation of the software for its intended use. X Ltd. purchased a 5 year maintenance contract with the vendor company of ₹ 2,00,000. At what cost the intangible asset will be recognised?

Q.7: X Limited in a business combination, purchased the net assets of Y Limited for ₹ 4,00,000 on March 31, 20X1. The assets and liabilities position of Y Limited just before the acquisition is as follows:

<table>
<thead>
<tr>
<th>Assets</th>
<th>Cost (in ₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property, Plant &amp; Equipment</td>
<td>1,00,000</td>
</tr>
<tr>
<td>Intangible asset 1</td>
<td>20,000</td>
</tr>
<tr>
<td>Intangible asset 2</td>
<td>50,000</td>
</tr>
<tr>
<td>Cash &amp; Bank</td>
<td>1,30,000</td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
</tr>
<tr>
<td>Trade payable</td>
<td>50,000</td>
</tr>
</tbody>
</table>

The fair market value of the PPE, intangible asset 1 and intangible asset 2 is available and they are ₹ 1,50,000, ₹ 30,000 and ₹ 70,000 respectively.

How would X Limited account for the net assets acquired from Y Limited?

Q.9: X Ltd. acquired Y Ltd. on April 30, 20X1. The purchase consideration is ₹50,00,000. The fair value of the tangible assets is ₹ 45,00,000. The company estimates the fair value of “in-process research projects” at ₹10,00,000. No other Intangible asset is acquired by X Ltd. in the transaction. Further, cost incurred by X Ltd. in relation to that research project is as follows:

(a) ₹ 5,00,000 - as research expenses
(b) ₹ 2,00,000 - to establish technological feasibility
(c) ₹7,00,000 - for further development cost after technological feasibility is established.

At what amount the intangible asset should be measured under Ind AS 38?

Q.10: X Ltd. acquired a patent right of manufacturing drug from Y Ltd. In exchange X Ltd. gives its intellectual property right to Y Ltd. Current market value of the patent and intellectual property rights are ₹ 20,00,000 and ₹ 18,00,000 respectively. At what value patent right should be initially recognised in the books of X Ltd. in following two situations?
(a) X Ltd. did not pay any cash to Y Ltd.
(b) X Ltd. pays ₹ 2,00,000 to Y Ltd.

Q.11: X Garments Ltd. spent ₹ 1,00,00,000 towards promotions for a fashion show by way of various on-road shows, contests etc.
After that event, it realised that the brand name of the entity got popular and resultantly, subsequent sales have shown a significant improvement. It is further expected that this hike will have an effect over the next 2-3 years.
How the entity should account for the above cost incurred on promoting such show?

Q.12: An entity is developing a new production process. During 20X1-20X2, expenditure incurred was ₹ 1,000, of which ₹ 900 was incurred before March 1, 20X2 and ₹ 100 was incurred between March 1, 20X2 and March 31, 20X2. The entity is able to demonstrate that at March 1, 20X2, the production process met the criteria for recognition as an intangible asset. The recoverable amount of the know-how embodied in the process (including future cash outflows to complete the process before it is available for use) is estimated to be ₹ 500.
During 20X2-20X3, expenditure incurred is ₹ 2,000. At the end of 20X3, the recoverable amount of the know-how embodied in the process (including future cash outflows to complete the process before it is available for use) is estimated to be ₹ 1,900.

Q.13: X Ltd. is engaged in developing computer software. The expenditures incurred by X Ltd. in pursuance of its development of software is given below:
(a) Paid ₹ 2,00,000 towards salaries of the program designers.
(b) Incurred ₹ 5,00,000 towards other cost of completion of program design.
(c) Incurred ₹ 2,00,000 towards cost of coding and establishing technical feasibility.
(d) Paid ₹ 7,00,000 for other direct cost after establishment of technical feasibility.
(e) Incurred ₹ 2,00,000 towards other testing costs.
(f) Cost of producing product masters for training material is ₹ 3,00,000.
(g) A focus group of other software developers was invited to a conference for the introduction of this new software. Cost of the conference aggregated to ₹ 70,000.
(h) On March 15, 20X0, the development phase was completed and a cash flow budget was prepared.
Net profit for the year was estimated to be equal ₹ 40,00,000. How X Ltd. should account for the above mentioned cost?
Q.14: X Ltd. has started developing a new production process in financial year 20X1-20X2. Total expenditure incurred till September 30, 20X3, was ₹1,00,00,000. The expenditure on the development of the production process meets the recognition criteria on July 1, 20X1. The records of X Ltd. show that, out of total ₹1,00,00,000, ₹70,00,000 were incurred during July to September 20X1. X Ltd. publishes its financial results quarterly. How X Ltd. should account for the development expenditure?

Q.15: X Ltd. decides to revalue its intangible assets on April 1, 20X1. On the date of revaluation, the intangible assets stand at a cost of ₹1,00,00,000 and accumulated amortisation is ₹40,00,000. The intangible assets are revalued at ₹1,50,00,000. How should X Ltd. account for the revalued intangible assets in its books of account?
PAST EXAMINATION QUESTIONS

QUESTION 1 MAY 2019 EXAM

CARP Ltd. is engaged in developing computer software. The expenditures incurred by CARP Ltd. in pursuance of its development of software is given below:

(i) Paid ₹ 1,50,000 towards salaries of the program designers.
(ii) Incurred ₹ 3,00,000 towards other cost of completion of program design.
(iii) Incurred ₹ 80,000 towards cost of coding and establishing technical feasibility.
(iv) Paid ₹ 3,00,000 for other direct cost after establishment of technical feasibility.
(v) Incurred ₹ 90,000 towards other testing costs.
(vi) A focus group of other software developers was invited to a conference for the introduction of this new software. Cost of the conference aggregated to ₹ 60,000.
(vii) On March 15, 2018, the development phase was completed and a cash flow budget was prepared.

Net profit for the year 2017-18 was estimated to be equal ₹ 30,00,000.

How CARP Ltd. should account for the above mentioned cost as per relevant Ind AS?

ANSWER

Costs incurred in creating computer software, should be charged to research & development expenses when incurred until technical feasibility/asset recognition criteria have been established for the product. Here, technical feasibility is established after completion of detailed program design.

In this case, ₹ 5,30,000 (salary cost of ₹ 1,50,000, program design cost of ₹ 3,00,000 and coding and technical feasibility cost of ₹ 80,000) would be recorded as expense in Profit and Loss since it belongs to research phase.

Cost incurred from the point of technical feasibility are capitalised as software costs. But the conference cost of ₹ 60,000 would be expensed off.

In this situation, direct cost after establishment of technical feasibility of ₹ 3,00,000 and testing cost of ₹ 90,000 will be capitalised.

The cost of software capitalised is = ₹ (3,00,000 + 90,000) = ₹ 3,90,000.
CONCEPT 1: BASIC KNOWLEDGE

A real estate property that has been purchased with the intention of earning return on the investment (purchase) either through rent (income), the future resale of the property or both. An investment property is like any other investment, the goal is to generate a profit. In real estate, this is achieved through income (rent, for example) or through a profitable resale. The way in which a property is used has a significant impact on its value. Investors sometimes conduct studies to determine the best and most profitable use of a property. This is often referred to as its highest to as its highest and best use.

CONCEPT 2: COVERAGE

This standard prescribes criteria for the accounting treatment for, and disclosures relating to, investment property. The Standard shall be applied in the recognition, measurement, and disclosure of investment property.

- The standard applies to the measurement in a lessee’s financial statements of investment property held under a finance lease and to the measurement in the lessor’s financial statements of investment property leased out under an operating lease.
- However this Standard does not apply
- To the matter covered in Ind AS-17, Leases.
- To biological assets related to agricultural activity (IndAS-41) or,
- To mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources.

CONCEPT 3: CLASSIFICATION OF PROPERTY

1. Investment property – Land or building, or part of a building, or both, held by the owner or the lessee under a finance lease to earn rentals and/or for capital appreciation, rather than for:
   - Use in production or supply of goods and services or
   - Use in administrative purposes or
   - Sale in the ordinary course of business.

2. Owner-occupied property – Property held by the owner or the lessee under a finance lease for use in production or supply of goods and services or for administrative purposes.

One of the distinguishing characteristics of investment property (compared to owner-occupied property) is that it generates cash flows that are largely independent from
other assets held by an entity. Owner-occupied property is accounted for under Ind AS-16, Property, plant, and Equipment.

In some instances, an entity occupies part of a property and leases out the balance. If the two portions can be sold separately, each is accounted for appropriately. If the portions cannot be sold separately, then the entire property is treated as investment property only if an insignificant proportion is owner-occupied.

An issue arises with groups of companies wherein one group company leases a property to another. At group, or consolidation level, the property is owner-occupied. However, at individual company level, the owning entity treats the building as investment property. Appropriate consolidation adjustments would need to be made in the group accounts.

**EXAMPLES OF INVESTMENT PROPERTIES**

The following are examples of investment property:

- Land held for long-term capital appreciation rather than for short-term sale in the ordinary course of business
- Land held for a currently undetermined future use. (If an entity has not determined that it will use the land as owner-occupied property or for short-term sale in the ordinary course of business, the land is regarded as held for capital appreciation.)
- A building owned by the entity (or held by the entity under a finance lease) and leased out under one or more operating leases.
- A building that is vacant but is held to be leased out under one or more operating leases.
- Property that is being constructed or developed for future use as investment property.

The following are examples of items that are not investment property and are therefore outside the scope of this Standard:

- Property intended for sale in the ordinary course of business or in the process of construction or development for such sale (Ind AS-2, Inventories), for example, property acquired exclusively with a view to subsequent disposal in the near future or for development and resale.
- Owner-occupied property (IndAS-16), including (among other things) property held for future use as owner-occupied property, property held for future development and subsequent use as owner-occupied property, property occupied by employees (whether or not the employees pay rent at market rates) and owner-occupied property awaiting disposal.
- Property that is leased to another entity under a finance lease.
CONCEPT 4: MIXED CASES OF PROPERTIES

CASE 1: PROPERTY USED IN BUSINESS AS WELL AS FOR RENTAL
Some properties comprise a portion that is held to earn rentals or for capital appreciation and another portion that is held for use in the production or supply of goods or services or for administrative purposes. If these portions could be sold separately (or leased out separately under a finance lease), an entity accounts for the portions separately. If the portions could not be sold separately, the property is investment property only if an insignificant portion is held for use in the production or supply of goods or services or for administrative purposes.

CASE 2: PROPERTY ON THE BASIS OF ANCILLARY SERVICES
In some cases, an entity provides ancillary services to the occupants of a property it holds. An entity treats such a property as investment property if the services are significant to the arrangement as a whole. An example is when the owner of an office building provides security and maintenance services to the lessees who occupy the building.

- In other cases, the services provided are significant. For example, if an entity owns and manages a hotel, services provided to guests are significant to the arrangement as a whole. Therefore, an owner-managed hotel is owner-occupied property, rather than investment property.
- It may be difficult to determine whether ancillary services are so significant that a property does not qualify as investment property. For example, the owner of a hotel sometimes transfers some responsibilities to third parties under a management contract.
- The terms of such contracts vary widely. At one end of the spectrum, the owner's position may, in substance, be that of a passive investor. At the other end of the spectrum, the owner's may simply have outsourced day-to-day functions while retaining significant exposure to variation in the cash flows generated by the operations of the hotel.
- Judgment is needed to determine whether a property qualifies as investment property. An entity develops criteria so that it can exercise that judgment consistently in accordance with the definition of investment property requires an entity to disclose these criteria when classification is difficult.

CASE 3: TREATMENT OF PROPERTY IN CONSOLIDATED STATEMENTS
In some cases, an entity owns property that is leased to, and occupied by, its parent or another subsidiary. The property does not qualify as investment property in the consolidated financial statements, because the property is owner-occupied from the perspective of the group.
However, from the perspective of the entity that owns it, the property is investment property if it meets the definition of investment property. Therefore, the lessor treats the property as investment property in its individual financial statements.

**CONCEPT 5: RECOGNITION**

Investment property shall be recognized as an asset when and only when:

- It is probable that future economic benefits will flow to the entity; and
- The cost of the investment property can be measured reliably.

**CONCEPT 6: INITIAL MEASUREMENT**

An investment property shall be measured initially at its cost, including transaction charges.

**CASE 1: PURCHASE BY CASH**

The cost of a purchased investment property comprises its purchase price and any directly attributable expenditure. Directly attributable expenditure includes for example, professional fees for legal services, property transfer taxes and other transaction costs.

However, cost of an investment property does not include:

- Start-up costs (unless they are necessary to bring the property to the condition necessary for it to be capable of operating in the manner intended by management),
- Operating losses incurred before the investment property achieves the planned level of occupancy, or
- Abnormal amounts of wasted material, labour or other resources in constructing or developing the property,
- Interest cost in case of deferred payment - If payment for an investment property is deferred, its cost is the cash price equivalent. The difference between this amount and the total payments is recognized as interest expense over the period of credit.

**CASE 2: INVESTMENT PROPERTY ACQUIRED IN EXCHANGE**

One or more investment properties may be acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets. The cost of such an investment property is measured at fair value unless:

- The exchange transaction lacks commercial substance; or
- The fair value of neither the asset received nor the asset given up is reliably measurable.

If the acquired asset is not measured at fair value, its cost is measured at the carrying amount of the asset given up.
CASE 3: PURCHASE ON LEASE

However, property held under a finance lease shall be measured initially using the principles contained in Ind AS-17, Leases – at the lower of the fair value and the present value of the minimum lease payments. A key matter here is that the item accounted for at fair value is not the property itself but the lease interest.

CONCEPT 7: MEASUREMENT AFTER RECOGNITION

An entity shall also measure subsequently after initial recognition all its investment property at cost. In other words, the investment properties shall be carried in the balance sheet at its cost less any accumulated depreciation and any accumulated impairment losses.

This Standard requires all entities to measure the fair value of investment property, for the purpose of disclosure even though they are required to follow the cost model. An entity is encouraged, but not required, to measure the fair value of investment property on the basis of a valuation by an independent valuer who holds a recognised and relevant professional qualification and has recent experience in the location and category of the investment property being valued.

The investment property which meets the criteria to be classified as held for sale (or are included in a disposal group that is classified as held for sale) in accordance with Ind AS-105, Non-current Assets Held for Sale and Discontinued Operations such Investment properties shall be measured in accordance with Ind AS-105.

CONCEPT 8: TRANSFERS

Transfers to, or from, investment property shall be made when, and only when, there is a change in use, evidenced by:

- Commencement of owner-occupation, for a transfer from investment property to owner-occupied property;
- Commencement of development with a view to sale, for a transfer from investment property to inventories;
- End of owner-occupation, for a transfer from owner-occupied property to investment property;
- Commencement of an operating lease to another party, for a transfer from inventories to investment property.

Transfers between investment property, owner-occupied property and inventories do not change the carrying amount of the property transferred and they do not change the cost of that property for measurement or disclosure purposes.
CONCEPT 9: DISPOSAL

An investment property shall be derecognized on disposal or at the time that no benefit is expected from future use or disposal. Any gain or loss is determined as the difference between the net disposal proceeds and the carrying amount and is recognized in the income statement.

CONCEPT 10: DISCLOSURE

- Classification criteria (to distinguish owner-occupied investment property, property held for sale in situations where classification is difficult).
- Methods and assumptions used to determine fair value.
- Extent of involvement of independent used to determine fair value.
- Extent of involvement of independent, professional and recently experienced valuers in the determination of fair value (whether used as measurement basis or disclosed)
  Amounts included in profit or losses for:
  - Rental income
  - Direct operating expenses from rented property
  - Direct operating expenses from non-rented property
- Restrictions on realisability or property or remittance of income/disposal proceeds
- Material contractual obligation:
  - To purchase, construct or develop investment property; or
  - For repair, maintenance or enhancements
- Depreciation method used
- Useful lives or depression rates used
- Gross carrying amount, accumulated depreciation and impairment losses at beginning and end of period
- Reconciliation of brought forward and carried forward amounts.
- The fair value of investment property (or an explanation why it cannot be determined).
**QUESTION 1**

Sun Ltd owns a building having 15 floors of which it uses 5 floors for its office; the remaining 10 floors are leased out to tenants under operating leases. According to law company could sell legal title to the 10 floors while retaining legal title to the other 5 floors.

**SOLUTION**

In the given scenario, the remaining 10 floors should be classified as investment property, since they are able to split the title between the floors.

**QUESTION 2**

Moon Ltd uses 35% of the office floor space of the building as its head office. It leases the remaining 65% to tenants, but it is unable to sell the tenant’s space or to enter into finance leases related solely to it.

**SOLUTION**

Therefore, the company should not classify the property as an investment property as the 35% of the floor space used by the company is significant.

**QUESTION 3**

An entity owns a hotel, which includes a health and fitness centre, housed in a separate building that is part of the premises of the entire hotel. The owner operates the hotel and other facilities on the hotel with the exception of the health and fitness centre, which can be sold or leased out under a finance lease. The health and fitness centre will be leased to an independent operator. The entity has no further involvement in the health and fitness centre.

**SOLUTION**

In this scenario, management should classify the hotel and other facilities as property plant and equipment and the health and fitness centre as investment property.

If the health and fitness centre could not be sold or leased out separately on a finance lease, then because the owner-occupied portion is not insignificant, the whole property would be treated as an owner-occupied property.

**QUESTION 4**

The owner of an office building provides security and maintenance services to the lessees who occupy the building.
**SOLUTION**

In such a case, since the services provided are insignificant, the property would be treated as an investment property.

**QUESTION 5**

If an entity owns and manages a hotel, services provided to guests are significant to the arrangement as a whole.

**SOLUTION**

In such case, an owner-managed hotel is owner-occupied property, rather than investment property.

**QUESTION 6**

Classify the following cases of given properties & tell which ind as should be applied on these properties:

**Summarisation**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Property</th>
<th>Does it meet definition of Investment Property</th>
<th>Which Ind AS is Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Owned by a Co and leased out under an Operating Lease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Held Under Finance Lease and Leased out under an Operating Lease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Held under Finance Lease and Leased out under Finance Lease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Property acquired with a view for development and resale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Property developed on behalf of 3rd party</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Property partly owner occupied and partly leased out under Operating Lease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Land held for currently undetermined use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Property occupied by Employees paying rent at less than market rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Investment Property held for sale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Existing Investment Property that is being redeveloped for continued use as Investment Property.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**QUESTION 7**

X Limited owns a building which is used to earn rentals. The building has a carrying amount of ₹ 50,00,000. X Limited recently replaced interior walls of the building and the cost of new interior walls is ₹ 5,00,000. The original walls have a carrying amount of ₹ 1,00,000. How X Limited should account for the above costs?

**SOLUTION**

Under the recognition principle, an entity recognises in the carrying amount of an investment property the cost of replacing part of an existing investment property at the time that cost is incurred if the recognition criteria are met and the carrying amount of those parts that are replaced is derecognised.

So, X Limited should add the cost of new walls and remove the carrying amount of old walls. The new carrying amount of the building = ₹ 50,00,000 + ₹ 5,00,000 - ₹ 1,00,000 = ₹ 54,00,000.

**QUESTION 8**

Sun Ltd acquired a building in exchange of a warehouse whose fair value is ₹ 5,00,000 and payment of cash is ₹ 2,00,000. The fair value of the building received by the Company is ₹ 8,00,000.

**SOLUTION**

The company decided to keep that building for rental purposes. The Building is acquired with the purpose to earn rentals. Hence, it is a case of Investment.

Property acquired in exchange for a combination of monetary and non-monetary asset.

Therefore

**Journal entry at the time of acquisition is:**

<table>
<thead>
<tr>
<th>Investment Property (Building)</th>
<th>Dr 8,00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Cash</td>
<td>2,00,000</td>
</tr>
<tr>
<td>To PPE(Property Plant and Equipment) i.e. Warehouse</td>
<td>5,00,000</td>
</tr>
<tr>
<td>To Gain on exchange (Profit or Loss)</td>
<td>1,00,000</td>
</tr>
</tbody>
</table>
**QUESTION 9**

X Limited purchased a building for ₹ 30,00,000 in May 1, 20X1. The purchase price was funded by a loan. Property transfer taxes and direct legal costs of ₹ 1,00,000 and ₹ 20,000 respectively were incurred in acquiring the building. In 20X1-20X2, X Limited redeveloped the building into retail shops for rent under operating leases to independent third parties. Expenditures on redevelopment were:

- ₹ 2,00,000 planning permission.
- ₹ 7,00,000 construction costs (including ₹ 40,000 refundable purchases taxes).

The redevelopment was completed and the retail shops were ready for rental on September 2, 20X1. What is the cost of building at initial recognition?

**SOLUTION**

The cost of a purchased investment property comprises its purchase price and any direct attributable expenditure.

So, the cost of the building = ₹ (30,00,000 + 1,00,000 + 20,000 + 2,00,000 + 7,00,000 - 40,000) = ₹ 39,80,000.

**QUESTION 10**

X Limited purchased a land worth of ₹ 1,00,00,000. It has option either to pay full amount at the time of purchases or pay for it over two years for a total cost of ₹ 1,20,00,000. What should be the cost of the building under both the payments method?

**SOLUTION**

Using either payment method, the cost will be ₹ 1,00,00,00. If the second payment option is used, ₹ 20,00,000 will be treated as interest expenses over the period of credit i.e., 2 years.

**QUESTION 11**

X Limited (as the lessee) has taken a building under finance lease from the owner. It classifies its interest in the leasehold building as investment property and after initial recognition measures the property interest at fair value. The present value of the minimum lease payment is ₹ 40,000. At what value, X Limited will recognise its investment property?

**SOLUTION**

X Limited shall initially recognise the property interest at ₹ 40,000. A corresponding lease liability of ₹ 40,000 will be recognised as follows:
**QUESTION 12**
Moon Ltd has purchased a building on 1st April 20X1 at a cost of ₹ 10 million. The building was used as a factory by the Moon Ltd and was measured under cost model. The expected useful life of the building is estimated to be 10 years. Due to decline in demand of the product, the Company does not need the factory anymore and has rented out the building to a third party from 1st April 20X5. On this date the fair value of the building is ₹ 8 million. Moon Ltd uses cost model for accounting of its investment property.

**QUESTION 13**
On April 1, 20X1 an entity acquired an investment property (building) for ₹ 40,00,000. Management estimates the useful life of the building as 20 years measured from the date of acquisition. The residual value of the building is ₹ 2,00,000. Management believes that the straight-line depreciation method reflects the pattern in which it expects to consume the building’s future economic benefits. What is the carrying amount of the building on March 31, 20X2?

**QUESTION 14**
X Limited has an investment property (building) which is carried in Balance Sheet on March 31, 20X1 at ₹ 15,00,000. During the year X Limited has stopped letting out the building and used it as its office premise. On March 31, 20X1, management estimates the recoverable amount of the building as ₹ 10,00,000 and its remaining useful life as 20 years and residual value is nil. How should X Limited account for the above investment property as on March 31, 20X1?

**QUESTION 15**
In financial year 20X1-20X2, X Limited incurred the following expenditure in acquiring property consisting of 6 identical houses each with separate legal title including the land on which it is built.

The expenditure incurred on various dates is given below:

On April 1, 20X1 - Purchase cost of the property ₹ 1,80,00,000.
On April 1, 20X1 - Non-refundable transfer taxes ₹ 20,00,000 (not included in the purchase cost).
On April 2, 20X1- Legal cost related to property acquisition ₹ 5,00,000. On April 6, 20X1- Advertisement campaign to attract tenants ₹ 3,00,000.
On April 8, 20X1 - Opening ceremony function for starting business ₹ 1,50,000.
Throughout 20X1-20X2, incurred ₹ 1,00,000 towards day-to-day repair maintenance and other administrative expenses.
X Limited uses one of the six houses for office and accommodation of its few staffs. The other five houses are rented to various independent third parties.
How X Limited will account for all the above mentioned expenses in the books of account?

**QUESTION 16**

S1 Ltd. lets out a property to S2 Ltd. under operating lease both the companies are subsidiary of P Ltd.
Analyse how different companies treat the property in their respective separate financial statements and consolidated financial statements.

**QUESTION 17**

S1 Ltd. lets out a property to S2 Ltd. under finance lease.
Both the companies are subsidiary of P Ltd.
S2 Ltd. sub-let out a portion of the property to K Ltd. under operating lease.
Analyse how different companies would treat the property in their respective separate financial statements and consolidated financial statements.

**QUESTION 18**

[Aquisition of investment property on deferred payments basis]
X Ltd. acquired an investment property under defer payment plan Down payment on date of acquisition ₹ 50,00,000
After 6 months ₹ 120,00,000
After 1 year ₹ 5,00,00,000
The incremental borrowing rate of the company is 11%. Find out cost of investment property at initial recognition? How should X Ltd. account for the difference?

**QUESTION 19**

[Component-wise depreciation of investment property]
X Ltd. acquired and land for ₹ 15 cr. And constructed buildings at a cost of ₹ 40 cr. To be used for letting out for commercial and residential purposes under varied lease terms. Interior walls in the common spaces were decorated at a cost of ₹ 120 lakhs. The useful life of the building is estimated at 50 years and that of interior decoration 15 years. After
10 years, the entity changed the interior decoration at a cost of ₹ 1.50 cr. And estimated new useful life of 15 years.

Find out depreciation charge during 1-11 years and show accounting entry for the replacement of interior walls.

**QUESTION 20**

The fair value of an investment property at the beginning of the year 2015-16 is € 25 million and at end of 2015-16 is € 25 million.

There is an air-conditioning plant which was purchased at the beginning of 2013-14 for € 1 million. It is depreciated @ 10% p.a. and lift installed at the beginning of 2011-12 costing € 1.2 million which is also depreciated @ 10% p.a. As per Paragraph 50 of Ind AS 40, the company wishes to present an all-inclusive fair value of investment property. Assume that depreciated book value of equipment represents the fair value at the end of the year.

The company is in a dilemma about the procedure to be followed for fair value measurement.

**QUESTION 21**

X Ltd. has the following four properties:

(i) Property A used as office building of the company - Cost ₹ 30 cr. Accumulated depreciation ₹ 20 cr., Net ₹ 10 cr.
   The company puts the property into renovation and intended to lease out under one or more operating leases.

(ii) Property B used under operating leases -Cost ₹ 50 cr. Accumulated depreciation ₹ 20 cr. Net ₹ 30 cr.
    The property is put into renovation for sale.

(iii) Property C used under operating leases - Cost ₹ 40 cr. accumulated depreciation ₹ 20 cr., Net ₹ 20 cr.
    The property is put into sale.

(iv) Property D used under operating lease - Cost ₹ 40 cr. accumulated depreciation ₹ 20 cr., Net ₹ 20 cr.
    The property is put into renovation and intended to be used as office building after the renovation.

How should the transfer be evidenced? How would these transfers change the classification of the respective property?
Q1: K Ltd is a supplier of industrial products. In 2013, the company purchased a plot of lands on the outskirts of a major city. The area has mainly low-cost public housing and very limited public transport facilities. The government has plans to develop the area as an industrial park in 5 years times and the land is expected to greatly appreciate in value if the government process with the plan. K Ltd’s management classifies such a property that is held for undermined future use?

Solution: Management should classify the property as an investment property. Although management has not determined a use for the property after the parks’ development takes place, in the medium-term the land is held for capital appreciation. Standard considers land as held for capital appreciation, if K Ltd has not determined that it will use the land either as owner-occupied property or for short-term sale in the ordinary course of business.

Q2: M. Ltd owns a hotel resort, which includes a casino, housed in a separate building that is part of the premises of the entire hotel resort. Its patrons would be largely limited to tourists and non-resident visitors only.

Solution: The owner operates the hotel and other facilities on the hotel resort, with the exception of the casino, which can be sold or leased out under a finance lease. The casino will be leased to an independent operator. M Ltd has no further involvement in the casino. The casino operator will not be prepared to operate it without the existence of the hotel and other facilities.

In this scenario, management should classify the hotel and other facilities as property, plant and equipment and the casino as investment property. As explained in Ind AS-40, the casino can be sold separately or leased out under finance lease.

Q3: K Ltd owns a hotel, B Ltd, a fellow subsidiary of K Ltd manages a chain of hotels, and receives management fees for operating its chains, except for the hotel owned by K Ltd. K Ltd’s owned hotel is leased to B Ltd for ₹ 20,00,000 a month for a period of 5 years. Any profit or losses from operating K Ltd’s hotel rests with B Ltd the hotel that K Ltd owns has an estimated remaining useful life of 4 years.

Solution: In the consolidated financial statement, the hotel should be classified as property, plant and equipment. This is because it is both owned and managed by the group from the perspective for the group and therefore, it should be recognized as owner-occupied for the use in the supply of goods or services.
**Q4:** An investment property company has been constructing a new cinema as 31\textsuperscript{st} December 2016, the cinema was nearing completion and the costs incurred to date were:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material, labour and sub-contractors</td>
<td>148 lakhs</td>
</tr>
<tr>
<td>Other directly attributable overheads</td>
<td>25 lakhs</td>
</tr>
<tr>
<td>Interest on borrowings</td>
<td>13 lakhs</td>
</tr>
</tbody>
</table>

In its company’s policy to capitalize interest on specific borrowing raised for the purpose of financing a construction. The amount of borrowings outstanding at 31\textsuperscript{st} December 2016 in respect of this project is ₹ 180 lakhs and annual interest rate is 9.5%.

During the 3 months to 31\textsuperscript{st} March 2017 the cinema was completed, with the following additional costs incurred.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material, labour and sub-contractors</td>
<td>17 lakhs</td>
</tr>
<tr>
<td>Other overheads</td>
<td>3 lakhs</td>
</tr>
</tbody>
</table>

The company was not able to determine the fair value of the property reliably the construction period and so valued it at cost pending completion (as allowed Ind AS-40).

On 31\textsuperscript{st} March 2010, the company obtained a professional appraisal of the cinema’s fair value and the valuer concluded that it was worth ₹ 240 lakhs. The fee for this appraisal was ₹ 1 lakh and has not been included in the above figures for costs incurred during the 3 months.

The cinema was taken by a notional multiplex chain on an operating lease as at 1\textsuperscript{st} April 2017 and was immediately welcoming capacity crowds. Following a complete valuation of the company’s investment properties at 31\textsuperscript{st} December 2017, the fair value of the cinema was established at ₹ 280 lakhs.

**Required:** Set out the accounting entries in respect of the cinema complex for the year ended 31\textsuperscript{st} December 2017

**Solution:** On 1\textsuperscript{st} January 2010 the property would have been valued at its cost of ₹ 186 lakhs as the fair value was not determinable during the period for construction. Costs incurred in the 3 months to 31\textsuperscript{st} March 2010

<table>
<thead>
<tr>
<th>Description</th>
<th>Dr.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset under construction</td>
<td>17 lakhs</td>
<td></td>
</tr>
<tr>
<td>To Cash/ Payable</td>
<td></td>
<td>17 lakhs</td>
</tr>
<tr>
<td>Asset under construction</td>
<td>3 lakhs</td>
<td></td>
</tr>
<tr>
<td>To Cash/ Payable</td>
<td></td>
<td>3 lakhs</td>
</tr>
<tr>
<td>Asset under construction</td>
<td>4.30 lakhs</td>
<td></td>
</tr>
<tr>
<td>To Interest Expense</td>
<td></td>
<td>4.30 lakhs</td>
</tr>
</tbody>
</table>
Working

Outstanding borrowing: ₹ 180 lakhs

Interest for 3 months: ₹ 180 lakhs × 3/12 × 9.5% = ₹ 430,000

Accumulated costs at the date of transfer into investment properties

Cost to 31st December 2009 (148+25+13+) 186.00
Cost to 31st March 2010 (17+3+4.3) 24.30

Fair value of the investment property as on 31st March 2017 and 31st Dec 2017 would be disclosed in the financial statement for these period as per Ind AS-40. Fees paid to the valuer of ₹ 1 lakhs will be expensed in Profit or loss.

Q5: Phoenix Mills Ltd, a listed company in India ventured into construction of a mega shopping mall in India, which is rated as the largest shopping mall of India. The company’s board of directors after market research decided that instead of selling the shopping mall to a local investor, who had approached them several times during the construction period with excellent affairs which he progressively increased ruing the year of construction, the company would hold this property for the purposes of earning rentals by letting out space in the shopping mall to tenants. For this purpose it used the service of a real estate company to find an anchor tenant (a major international retail chain) that then attracted other important retailers locally to rent space in the mega shopping mall, and within months of the completion of the construction the shopping mall was fully let out.

The construction of the shopping mall was completed and the property was placed in service at the end of 2016. According to the company’s engineering department the computed total cost of the construction of the shopping mall was ₹ 100 core.

The independent valuation expert was of the opinion that the useful life of the shopping mall was 10 years and its residual value was ₹ 10 core.

What would be the impact on the profit and loss account of the company under the Cost Model?

Solution: Under the cost model Company would have to provide depreciation over 10 years and also to provide impairment losses if any. The asset should be carried at its cost less accumulated depreciation and any accumulated impairment losses. The annual depreciation which is computed based on the acquisition cost of the investment property will be the only charge to the net profit or loss for each period (unless there is impairment which will also be a charge to the net profit or loss for the year).

Based on the acquisition cost of ₹ 100 Crores (assuming there is no subsequent expenditure that would be capitalized), a residual value of ₹ 10 crores, a useful life of 10 years, and using the straight-line method of depreciation, the annual impact of depreciation on the Net
profit or loss for each year would be ₹ (100-10)/10 Crore = 9 Crore besides this the annual rent will be shown as an income in the Statement of Profit and loss.

**SHORT QUESTIONS FOR CROSS CHECKING OF GRIP ON TOPIC**

**Q1:** An investment property should be measured initially at
(a) Cost  
(b) Cost less accumulated impairment losses  
(c) Depreciable cost less accumulated impairment losses  
(d) Fair value less accumulated impairment losses

**Answer:** (a)

**Q2:** The applicable IFRS/IAS for PPE being constructed or developed for future use as investment property is
(a) IAS 2, Inventories, until construction is complete and then it is accounted for under IAS 40, Investment Property.  
(b) IAS 40, Investment Property.  
(c) IAS 11, Construction Contracts, until construction is complete and then it is accounted for under IAS 40, Investment Property.  
(d) IAS 16, Property, Plant, and Equipment, until construction is complete and then it is accounted for under IAS 40, Investment Property.

**Answer:** (d)

**Q3:** In case of property held under an operating lease and classified as investment property
(a) The entity has to account for the investment property under the cost model only.  
(b) The entity has to use the fair value model only.  
(c) The entity has the choice between the cost model and the fair value model.  
(d) The entity needs only to disclose the fair value and can use the cost model under Ind AS-40.

**Answer:** (d)

**Q4:** Transfer from investment property to property plant, and equipment are appropriate
(a) When there is change of use.  
(b) Based on the entity’s discretion
(c) Only when the entity adopts the fair value model under Ind AS-40.

(d) The entity can never transfer property into another classification on the balance sheet once it is classified as investment property.

Answer: (a)

Q.5: An investment property is derecognized (eliminated from the balance sheet) when

(a) It is disposed to a third party.
(b) It is permanently withdrawn from use.
(c) No future economic benefits are expected from its disposal.
(d) In all of the above cases.

Answer: (d)
UNIT 1: ASSETS HELD FOR SALE

CONCEPT 1: OBJECTIVE

- Non-Current assets held for sale are presented separately from other assets in the Balance Sheet as their classification will change and the value will be principally recovered through sale transaction rather than through continuous use in operations of the entity. This standard specifies the accounting for assets held for sale.

- Results of Discontinuing Operations should be separately presented in the Statement of Profit and loss as it affects the ability of the entity to generate future cash flows. This standard specifies the presentation and disclosure of discontinued operations.

Hence, two core objectives of the standard is as follows:

- Accounting for Assets held for sale
  - Measured at Fair Value less Cost to sell; Depreciation on such assets to cease
  - Presented separately in the Balance Sheet

- Presentation and Disclosure of Discontinued Operations
  - Results to be presented separately in the Statement of Profit & Loss

CONCEPT 2: SCOPE

- The classification and presentation requirements of this Ind AS apply to all recognised non-current assets and to all disposal groups of an entity.

- The measurement requirements of this Ind AS also apply to all recognised non-current assets and to all disposal groups of an entity except few exceptions mentioned below.
Assets classified as non-current in accordance with Ind AS 1, Presentation of Financial Statements, shall not be reclassified as current assets until they meet the criteria to be classified as held for sale in accordance with this Ind AS.

The classification, presentation and measurement requirements in this Ind AS applicable to a non-current asset (or disposal group) that is classified as held for sale apply also to a non-current asset (or disposal group) that is classified as held for distribution to owners acting in their capacity as owners.

The measurement provisions of this Ind AS do not apply to the following assets (which are covered by the Ind ASs listed either as individual assets or as part of a disposal group):

<table>
<thead>
<tr>
<th>Measurement Provisions of Ind AS 105 do not apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred tax Assets</td>
</tr>
<tr>
<td>Assets arising from Employee benefits</td>
</tr>
<tr>
<td>Financial Assets</td>
</tr>
<tr>
<td>Within the scope of Ind AS 109</td>
</tr>
<tr>
<td>Ind AS 12</td>
</tr>
<tr>
<td>Ind AS 19</td>
</tr>
<tr>
<td>Non-current Assets</td>
</tr>
<tr>
<td>Within the scope of Ind AS 109</td>
</tr>
<tr>
<td>Which are measured at Fair value less cost to sell in Ind AS 41</td>
</tr>
<tr>
<td>Which are measured at Fair value less costs to sell in accordance with Ind AS 41</td>
</tr>
<tr>
<td>Contractual rights under Insurance contracts</td>
</tr>
<tr>
<td>As defined in Ind AS 104</td>
</tr>
</tbody>
</table>

### Concept 3: Relevant Definitions

The following are the key terms used in this standard:

- **Non-current assets** are assets that do not meet the definition of current assets.

- **Current asset** An entity classifies an asset as current when:
  
  (a) it expects to realise the asset, or intends to sell or consume it, in its normal operating cycle;

  (b) it holds the asset primarily for the purpose of trading;

  (c) it expects to realise the asset within twelve months after the reporting period; or
(d) the asset is cash or a cash equivalent (as defined in Ind AS 7) unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

- **Disposal group** is a group of assets to be disposed of, by sale or otherwise, together as a group in a single transaction, and liabilities directly associated with those assets that will be transferred in the transaction. A disposal group may be a group of cash-generating units, a single cash-generating unit, or part of a cash-generating unit.

- **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.

- **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)

- **Costs to sell** are the incremental costs directly attributable to the disposal of an asset (or disposal group), excluding finance costs and income tax expense.

- **A discontinued operation** is a component of an entity that either has been disposed of or is classified as held for sale and:
  
  (a) represents a separate major line of business or geographical area of operations; or
  
  (b) is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations; or
  
  (c) is a subsidiary acquired exclusively with a view to resale.

- **A component of an entity comprises** operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity.

- **Highly Probable** Significantly more likely than probable. (Probable means more likely than not)

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**CONCEPT 4: CLASSIFICATION OF NON-CURRENT ASSETS (OR DISPOSAL GROUPS) AS HELD FOR SALE OR AS HELD FOR DISTRIBUTION TO OWNERS**

An entity is required to classify a non-current asset (or disposal group) as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use.
Asset must be available for immediate sale in its present condition and Sale must be highly probable are the two key requirements to classify a non-current asset as held for sale.

**Available for Immediate Sale**

The asset (or disposal group) must be available for immediate sale in its present condition. The terms that are usual and customary for sale of similar assets (or disposal group) doesn't disqualify to being classified as held for sale.

However they will not be considered as available for immediate sale if they continue to be vital for the entity's ongoing operations or being refurbished to enhance their value. Thus, an asset (or disposal group) cannot be classified as a non-current asset (or disposal group) held for sale, if the entity intends to sell it in a distant future.

**Examples – Available for Immediate Sale**

1. A property being held by the entity needs to be vacated before it can be sold. The time required to vacate the building is usual and customary for sale of such assets. Hence the criteria for classification as held for sale would be met.

2. In above example, if property can be vacated only after a replacement is available then this may indicate that the property is not available for immediate sale, but only after the replacement becomes available.

3. An entity can’t classify a manufacturing facility as held for sale if prior to selling the facility it needs to clear a backlog of uncompleted order.

4. In above example, if entity intends to sell the manufacturing facility along with the uncompleted orders it can be classified as held for sale.

5. An entity plans to renovate some of its property to increase its value prior to selling it to a third party. The entity is already searching for a buyer at current market values. But due to the plans to renovate the property prior to sale. The property may not be meeting condition of available for immediate sale.

6. A company has put a property on the market and expects that all the conditions of classification as held for sale is meeting. Any buyer will undertake searches and valuations before making an offer and exchanging contracts: Such conditions are
normal for properties and any delays that might arise from such legal processes do not preclude the property from being classified as held for sale.

**Sale must be highly probable**

This Standard defines ‘highly probable’ as ‘significantly more likely than probable’ where probable means more likely than not.

Ind AS 105 prescribes following five conditions to be satisfied for the sale to qualify as highly probable:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The appropriate level of management must be committed to a plan to sell the asset (or disposal group).</td>
</tr>
<tr>
<td>2.</td>
<td>An active programme to trace a buyer and complete the selling plan must have been initiated.</td>
</tr>
<tr>
<td>3.</td>
<td>The asset (or disposal group) must be marketed for sale at a price that is reasonable in relation to its current fair value.</td>
</tr>
<tr>
<td>4.</td>
<td>The sale transaction is expected to be completed within one year from the date of classification.</td>
</tr>
<tr>
<td>5.</td>
<td>Significant changes to or withdrawal from the plan to sell the asset are unlikely.</td>
</tr>
</tbody>
</table>

**EXAMPLE**

An entity is committed to its selling plan of a manufacturing facility in its present condition and so classifies it as held for sale. After a firm purchase commitment, the buyer’s inspection identifies environmental damages not previously known to exist. The entity is required by the buyer to make good the damage, which will extend the timeframe of one year to complete the sale within one year. However the entity has initiated actions to make good the damage and satisfactory rectification is highly probable. In this situation exception to one year requirement will met.

**Sale includes exchange**

Sale transaction includes exchange of non-current assets for other non-current assets when the exchange has commercial substance in accordance of Ind AS 16 Property, Plant and Equipment.

**Asset acquired exclusively with a view to subsequent disposal**

When an entity acquires a non-current asset (or disposal group) exclusively with a view to its subsequent disposal, the non-current asset (or disposal group) is classified as held for sale at the acquisition date. This standard provides a short period (usually three months)
to meet the classification criteria that don’t met at the acquisition except requirement of one year.

Example:
An entity has acquired a building exclusively with a view of its subsequent disposal. The management is highly confident that the property can be sold in one year. The property requires refurbishing it to enhance its value which is highly probable to be completed in less than a period of three months. The building will be classified as held for sale on the date of acquisition itself even though it is not immediately available for sale.

**CONCEPT 5: MEASUREMENT OF NON-CURRENT ASSETS (OR DISPOSAL GROUPS) CLASSIFIED AS HELD FOR SALE**

Measurement at the lower of carrying amount and fair value less cost to sell

- An entity should measure a non-current asset (or disposal group) classified as held for sale at the **lower** of its **carrying amount** and **fair value less costs to sell**.
- If a newly acquired asset (or disposal group) meets the criteria to be classified as held for sale, it will be measured on initial recognition at the lower of its carrying amount had it not been so classified (for example, cost) and fair value less costs to sell. Hence, if the asset (or disposal group) is acquired as part of a business combination, it will be measured at fair value less costs to sell.
- Immediately **before the initial classification** of the asset (or disposal group) as held for sale, the carrying amounts of the asset (or all the assets and liabilities in the group) is measured in accordance with applicable Ind AS.
- On subsequent remeasurement of a disposal group, the carrying amounts of any assets and liabilities that are not within the scope of the measurement requirements of this Ind AS, but are included in a disposal group classified as held for sale, should be remeasured in accordance with applicable Ind Ass before the fair value less costs to sell of the disposal group is remeasured.
- Depreciation and amortization shall be immediately stopped from the moment the asset has been classified as held for sale.
- Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale shall continue to be recognised.
- When the sale is expected to occur beyond one year, the entity should measure the costs to sell at their present value. Any increase in the present value of the costs to sell that arises from the passage of time shall be presented in profit or loss as a financing cost.
- Non-current asset (or disposal group) classified as held for distribution are also measured on same line as non-current asset (or disposal group) classified as held for sale.

**QUESTION 1**

**Measurement prior to classification as held for sale**

An item of property, plant and equipment that is measured on the cost basis should be measured in accordance with Ind AS 16.

Entity ABC owns an item of property and it was stated at the following amounts in its last financial statements:

31st December 20X1

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>12,00,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>(6,00,000)</td>
</tr>
<tr>
<td>Net book value</td>
<td>6,00,000</td>
</tr>
</tbody>
</table>

The asset is depreciated at an annual rate of 10% (1,20,000)

During July 20X2 entity ABC decides to sell the asset and on 1st August it meets the conditions to be classified as held for sale. Analyse.

**SOLUTION**

At 31st July entity ABC should ensure that the asset is measured in accordance with Ind AS 16. It should be depreciated by a further 70,000 (7 months × 10,000) and should be carried at 5,30,000 before it is measured in accordance with Ind AS 105.

**Note:** From the date the asset is classified as held for sale no further depreciation will be charged.

**Example - Classification as held for sale**

A Ltd acquired a property for ₹ 2,00,000. After few years the cumulative depreciation on the property is of ₹ 80,000 has been recognised and subsequently the property is classified as held for sale under Ind AS 105.

At the time of classification as held for sale it will be measured at lower of its carrying amount which is ₹ 1,20,000 (2,00,000 - 80,000) and fair value less costs to sell as estimated at ₹ 1,00,000.

Accordingly, there is a write-down on initial classification of property as held for sale and accordingly the property is carried at ₹ 1,00,000. A loss of ₹20,000 is recognised in profit or loss.
On next reporting date, the property's fair value less costs to sell is estimated at ₹ 85,000. Accordingly, a loss of ₹ 15,000 is recognised in profit or loss and the property is carried at ₹ 85,000.

Subsequently, the property is sold for ₹ 90,000. A gain of ₹ 5,000 is recognised.

**Recognition of impairment losses and reversals**

- An entity should recognise an impairment loss for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell, to the extent that it has not been recognised in accordance with above.

- An entity should recognise a gain for any subsequent increase in fair value less costs to sell of an asset, but not in excess of the cumulative impairment loss that has been recognised either in accordance with this Ind AS or previously in accordance with Ind AS 36, Impairment of Assets.

- An entity should recognise a gain for any subsequent increase in fair value less costs to sell of a disposal group:
  - (a) to the extent that it has not been recognised in the remeasurement of scoped out non-current assets, current assets and liabilities; but
  - (b) not in excess of the cumulative impairment loss that has been recognised, either in accordance with this Ind AS or previously in accordance with Ind AS 36, on the non-current assets that are within the scope of the measurement requirements of this Ind AS.

- The impairment loss (or any subsequent gain) recognised for a disposal group should reduce (or increase) the carrying amount of the non-current assets in the group that are within the scope of the measurement requirements of this Ind AS, in the order of allocation set out in paragraphs 104(a) and (b) and 122 of Ind AS 36.

As per Para 104 (a) and (b) of Ind AS 36, Impairment of Assets, The impairment loss shall be allocated to disposal groups in the following order:

- (i) first, to reduce the carrying amount of any goodwill allocated to the disposal group; and
- (ii) then to the other assets of the disposal group pro rata on the basis of the carrying amount of each asset in the group.

- A gain or loss not previously recognised through remeasurement by the date of the sale of a noncurrent asset (or disposal group) should be recognised at the date of derecognition.

Requirements relating to derecognition are set out in:

(a) paragraphs 67-72 of Ind AS 16 for property, plant and equipment; and
(b) paragraphs 112-117 of Ind AS 38, Intangible Assets, for intangible assets.
**QUESTION 2**

<table>
<thead>
<tr>
<th>Disposal Group</th>
<th>Carrying amount at the reporting date before classification as held for sale</th>
<th>Carrying amount as remeasured immediately before classification as held for sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Property, Plant and Equipment</td>
<td>4,600</td>
<td>4,000</td>
</tr>
<tr>
<td>Building (carried at cost)</td>
<td>5,700</td>
<td>5,700</td>
</tr>
<tr>
<td>Inventory</td>
<td>2,400</td>
<td>2,200</td>
</tr>
<tr>
<td>Investment in Equity Instruments</td>
<td>1,800</td>
<td>1,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16,000</strong></td>
<td><strong>14,900</strong></td>
</tr>
</tbody>
</table>

The entity estimated that fair value less costs to sell of the disposal group amounts to ₹13,000.

Suppose, at the end of reporting period the fair value less cost to sell is increased and estimated at ₹15,500.

**CONCEPT 6: PRESENTATION AND DISCLOSURES OF A NON-CURRENT ASSET (OR DISPOSAL GROUP) CLASSIFIED AS HELD FOR SALE**

Non - current assets and disposal groups classified as held for sale

Entity shall present and disclose information about non - current asset (or disposal group) classified as held for sale in such a manner that enable the user of financial statements to evaluate financial effects of non-current asset (or disposal group) classified as held for sale.

**Presentation**

- An entity is required to present a non-current asset classified as held for sale and the assets of a disposal group classified as held for sale separately from other assets in the balance sheet.
- The liabilities of a disposal group classified as held for sale should be presented separately from other liabilities in the balance sheet. Those assets and liabilities should not be offset and presented as a single amount.
- The major classes of assets and liabilities classified as held for sale should be separately disclosed either in the balance sheet or in the notes, except when the disposal group is a newly acquired subsidiary that meets the criteria to be classified as held for sale on acquisition.

- An entity should present separately any cumulative income or expense recognised in other comprehensive income relating to a non-current asset (or disposal group) classified as held for sale.

- If the disposal group is a newly acquired subsidiary that meets the criteria to be classified as held for sale on acquisition, disclosure of the major classes of assets and liabilities is not required.

- Comparative amounts for non-current assets or for the assets and liabilities of disposal groups classified as held for sale in the balance sheets for prior periods are not reclassified or re-presented to reflect the classification in the balance sheet for the latest period presented.

- Any gain or loss on the remeasurement of a non-current asset (or disposal group) classified as held for sale that does not meet the definition of a discontinued operation shall be included in profit or loss from continuing operations.

**Example: Presentation of Disposal group**

<table>
<thead>
<tr>
<th>Property, Plant and Equipment</th>
<th>4,900</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>1,700</td>
</tr>
<tr>
<td>Investment in equity instruments</td>
<td>1,400</td>
</tr>
<tr>
<td>Liabilities</td>
<td>(3,300)</td>
</tr>
<tr>
<td><strong>Net Carrying Amount</strong></td>
<td><strong>4,700</strong></td>
</tr>
</tbody>
</table>

An amount of ₹ 400 relating to these assets has been recognised in other comprehensive income and accumulated in equity.

The presentation of disposal group in entity's Balance Sheet is as follows:

<table>
<thead>
<tr>
<th>Assets</th>
<th>20X1-20X2</th>
<th>20X2-20X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Current Assets</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>AAA</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>BBB</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CCC</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Current Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>DDD</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>EEE</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Non-Current Assets Classified as Held for Sale</td>
<td>8,000</td>
<td>-</td>
</tr>
<tr>
<td>Total Assets</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equity and Liabilities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity attributable to equity holders of the parent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FFF</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>GGG</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Amounts recognised in other comprehensive income and accumulated in equity relating to non-current assets held for sale</td>
<td>400</td>
<td>-</td>
</tr>
<tr>
<td>Non-Controlling Interests</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Total Equity</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Current Liabilities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HHH</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>III</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KKK</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>LLL</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>MMM</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Liabilities directly associated with non-current assets classified as held for sale</td>
<td>3,300</td>
<td>-</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Total Equity and liabilities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CONCEPT 7: DISCLOSURES

- An entity should disclose the following information in the notes to the financial statements in the period in which a non-current asset (or disposal group) has been either classified as held for sale or sold:
  
  (a) Description of the non-current asset (or disposal group);
  
  (b) Description of facts and circumstances of the sale, or leading to the expected disposal and the expected manner and timing of that disposal;
  
  (c) Gain or loss recognised and if not presented separately on the face of the income statement, the caption in the income statement that includes that gain or loss.
  
  (d) If applicable, the reportable segment in which the non-current asset (or disposal group) is presented in accordance of Ind AS 108 Operating Segments.
  
  (e) If there is a change of plan to sell, a description of facts and circumstances leading to the decision and its effect on results.

QUESTION 3

S Ltd purchased a property for ₹ 6,00,000 on 1 April 20X1. The useful life of the property is 15 years. On 31 March 20X3 S Ltd classify the property as held for sale. The impairment testing provides the estimated recoverable amount of ₹ 4,70,000.

The fair value less cost to sell on 31 March 20X3 was ₹ 4,60,000. On 31 March 20X4 management change the plan as property no longer met the criteria of held for sale. The recoverable amount as at 31 March 20X4 is ₹ 5,00,000.

Value the property at the end of 20X3 and 20X4.
UNIT 2: DISCONTINUED OPERATIONS

Discontinued operation - definition

- Ind AS 105 defines Discontinued Operation as: A component of an entity that either has been disposed of or is classified as held for sale and:
  
  (a) represents a separate major line of business or geographical area of operations; or
  
  (b) is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations; or
  
  (c) is a subsidiary acquired exclusively with a view to resale.

- A component of an entity comprises operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity. In other words, a component of an entity will have been a cash-generating unit or a group of cash-generating units while being held for use.

QUESTION 4

Sun Ltd is a retailer of takeaway food like burger and pizzas. It decides to sell one of its outlets located in chandni chowk in New Delhi. The company will continue to run 200 other outlets in New Delhi.

All Ind AS 105 criteria for held for sale classification were first met at 1st October 20X1. The outlet will be sold in June 20X2.

Management believes that outlet is a discontinued operation and wants to present the results of outlet as 'discontinued operations'. Analysis

SOLUTION

The chandani chowk outlet is a disposal group; it is not a discontinued operation as it is only one outlet. It is not a major line of business or geographical area, nor a subsidiary acquired with a view to resale.

Separate presentation of discontinued operations

An entity should present and disclose information that enables users of the financial statements to evaluate the financial effects of discontinued operations and disposals of non-current assets (or disposal groups).

This allows the user to distinguish between the operations which will continue in the future and those which will not and make it more predictable the ability of entity to generate future cash flows.
Presentation in the statement of profit and loss

An entity shall disclose a single amount in the statement of profit and loss comprising the total of:

(a) the post-tax profit or loss of discontinued operations; and
(b) the post-tax gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation.

In addition, this single amount must be analysed into:

(a) the revenue, expenses and pre-tax profit or loss of discontinued operations;
(b) the related income tax expense as required by paragraph 81(h) of Ind AS12;
(c) the gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation; and
(d) the related income tax expense as required by paragraph 81(h) of Ind AS12.

- The analysis may be presented in the notes or in the statement of profit and loss. If it is presented in the statement of profit and loss it should be presented in a section identified as relating to discontinued operations, i.e. separately from continuing operations. The analysis is not required for disposal groups that are newly acquired subsidiaries that meet the criteria to be classified as held for sale on acquisition.

- Entities are required to disclose the amount of income from continuing operations and from discontinued operations attributable to owners of the parent. These disclosures may be presented either in the notes or in the statement of profit and loss.

Disclosures in the statement of cash flows

The net cash flows attributable to the operating, investing and financing activities of discontinued operations. These disclosures may be presented either in the notes or in the financial statements. These disclosures are not required for disposal groups that are newly acquired subsidiaries that meet the criteria to be classified as held for sale on acquisition.

When the amounts relating to discontinued operations are presented separately, the comparative figures for prior periods are also re-presented, so that the disclosures relate to all operations that have been discontinued by the end of the reporting period for the latest period presented.

Adjustment to prior period disposals

Adjustments in the current period to amounts previously presented in discontinued operations that are directly related to the disposal of a discontinued operation in a prior period should be classified separately in discontinued operations. The nature and amount
of such adjustments are disclosed. Examples of circumstances in which these adjustments may arise include the following:

(a) the resolution of uncertainties that arise from the terms of the disposal transaction, such as the resolution of purchase price adjustments and indemnification issues with the purchaser;

(b) the resolution of uncertainties that arise from and are directly related to the operations of the component before its disposal, such as environmental and product warranty obligations retained by the seller; and

(c) the settlement of employee benefit plan obligations, provided that the settlement is directly related to the disposal transaction.

**Change to a plan of sale**

If an entity ceases to classify a component of an entity as held for sale, the results of operations of the component previously presented in discontinued operations should be reclassified and included in income from continuing operations for all periods presented. The amounts for prior periods should be described as having been re-presented.

**Loss of Control in Subsidiary**

An entity that is committed to a sale plan involving loss of control of a subsidiary should disclose the information as above when the subsidiary is a disposal group that meets the definition of a discontinued operation.

**Example:**

**Presentation of Discontinued Operations in the Statement of profit and loss.**

Statement of profit and loss for the year ended 31st March 20X3

<table>
<thead>
<tr>
<th></th>
<th>20X1-20X2</th>
<th>20X2-20X3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuing Operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Cost of Sales</td>
<td>(XX)</td>
<td>(XX)</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Other Income</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Distribution Costs</td>
<td>(XX)</td>
<td>(XX)</td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>(XX)</td>
<td>(XX)</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>(XX)</td>
<td>(XX)</td>
</tr>
<tr>
<td>Finance Costs</td>
<td>(XX)</td>
<td>(XX)</td>
</tr>
<tr>
<td>Share of Profit of Associates</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Profit before Tax</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Income Tax Expense</td>
<td>(XX)</td>
<td>(XX)</td>
</tr>
<tr>
<td>Profit for the period from Continuing Operation</td>
<td>XX</td>
<td>XX</td>
</tr>
</tbody>
</table>

**Discontinued Operations**

<table>
<thead>
<tr>
<th>Profit for the period from discontinued Operations*</th>
<th>XX</th>
<th>XX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit for the period</td>
<td>XX</td>
<td>XX</td>
</tr>
</tbody>
</table>

**Attributable to:**

**Owner of the parent**

<table>
<thead>
<tr>
<th>Profit for the period from continuing operations</th>
<th>XX</th>
<th>XX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit for the period from discontinued operations</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Profit for the period attributable to owners of the parent</td>
<td>XX</td>
<td>XX</td>
</tr>
</tbody>
</table>

**Non-Controlling Interests**

<table>
<thead>
<tr>
<th>Profit for the period from continuing operations</th>
<th>XX</th>
<th>XX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit for the period from discontinued operations</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Profit for the period attributable to non-controlling interests</td>
<td>XX</td>
<td>XX</td>
</tr>
</tbody>
</table>

**Note (a)** the required analysis would be given in the notes

**QUESTION 5**

On November 30, 20X1, Entity X becomes committed to a plan to sell a property. However, it plans certain renovations to increase its value prior to selling it. The renovations are expected to be completed within a short span of time i.e., 2 months.

Can the property be classified as held for sale at the reporting date i.e. December 31, 20X1?

**QUESTION 6**

On March 1, 20X1, entity R decides to sell one of its factories. An agent is appointed and the factory is actively marketed. As on March 31, 20X1, it is expected that the factory will be sold by February 28, 20X2. However, in May 20X1, the market price of the factory deteriorated. Entity R believed that the market will recover and thus did not reduce the price of the factory. The company’s accounts are authorised for issue on June 26, 20X1.

Should the factory be shown as held for sale as on March 31, 20X1?
QUESTION 7

On June 1, 20X1, entity X plans to sell a group of assets and liabilities, which is classified as a disposal group. On July 31, 20X1, the Board of Directors approves and becomes committed to the plan to sell the manufacturing unit by entering into a firm purchase commitment with entity Y. However, since the manufacturing unit is regulated, the approval from the regulator is needed for sale. The approval from the regulator is customary and highly probable to be received by November 30, 20X1 and the sale is expected to be completed by March 31, 20X2. Entity X follows December year end. The assets and liabilities attributable to this manufacturing unit are as under:

<table>
<thead>
<tr>
<th>Particular</th>
<th>Carrying value as on December 31, 20X0</th>
<th>Carrying value as on July 31, 20X1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Plant and Machinery</td>
<td>1,000</td>
<td>900</td>
</tr>
<tr>
<td>Building</td>
<td>2,000</td>
<td>1,850</td>
</tr>
<tr>
<td>Debtors</td>
<td>850</td>
<td>1,050</td>
</tr>
<tr>
<td>Inventory</td>
<td>700</td>
<td>400</td>
</tr>
<tr>
<td>Creditors</td>
<td>(300)</td>
<td>(250)</td>
</tr>
<tr>
<td>Loans</td>
<td>(2,000)</td>
<td>(1,850)</td>
</tr>
<tr>
<td></td>
<td>2,750</td>
<td>2,600</td>
</tr>
</tbody>
</table>

The fair value of the manufacturing unit as on December 31, 20X0 is ₹2,000 and as on July 31, 20X1 is ₹1,850. The cost to sell is 100 on both these dates. The disposal group is not sold at the period end i.e., December 31, 20X1. The fair value as on December 31, 20X1 is lower than the carrying value of the disposal group as on that date.

Required:

1. Assess whether the manufacturing unit can be classified as held for sale and reasons there for. If yes, then at which date?
2. The measurement of the manufacturing unit as on the date of classification as held for sale.
3. The measurement of the manufacturing unit as at the end of the year.
PB Limited purchased a plastic bottle manufacturing plant for ₹ 24 lakh on 1st April, 2015. The useful life of the plant is 8 years. On 30th September, 2017, PB Limited temporarily stops using the manufacturing plant because demand has declined. However, the plant is maintained in a workable condition and it will be used in future when demand picks up.

The accountant of PB Limited decide to treat the plant as held for sale until the demand picks up and accordingly measures the plant at lower of carrying amount and fair value less cost to sell. The accountant has also stopped charging depreciation for rest of the period considering the plant as held for sale. The fair value less cost to sell on 30th September, 2017 and 31st March, 2018 was ₹ 13.5 lakh and ₹ 12 lakh respectively.

The accountant has made the following working:

<table>
<thead>
<tr>
<th>Carrying amount on initial classification as held for sale</th>
<th>₹</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price of Plant</td>
<td>24,00,000</td>
<td></td>
</tr>
<tr>
<td>Less: Accumulated Depreciation [(₹ 24,00,000/8)]x2.5 years</td>
<td>7,50,000</td>
<td>16,50,000</td>
</tr>
<tr>
<td>Fair value less cost to sell as on 31st March, 2017</td>
<td>12,00,000</td>
<td></td>
</tr>
<tr>
<td>The value lower of the above two</td>
<td>12,00,000</td>
<td></td>
</tr>
</tbody>
</table>

Balance Sheet extracts as on 31st March, 2018

<table>
<thead>
<tr>
<th>Particulars</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Current Assets</td>
<td></td>
</tr>
<tr>
<td>Other Current Assets</td>
<td></td>
</tr>
<tr>
<td>Assets classified as held for sale</td>
<td>12,00,000</td>
</tr>
</tbody>
</table>

**Required:**

Analyze whether the above accounting treatment is in compliance with the Ind AS. If not, advise the current treatment showing necessary workings.

**ANSWER**

As per Ind AS 105’ Non-current Assets Held for Sale and Discontinued Operations’, an entity shall classify a non-current asset as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use.

For asset to be classified as held for sale, it must be available for immediate sale in its
present condition subject only to terms that are usual are customary for sales of such assets and its sale must be highly probable. In such a situation, an asset cannot be classified as a non-current asset held for sale, if the entity intends to sell it in a distant future.

For the sale to be highly probable, the appropriate level of management must be committed to a plan to sell the asset, and an active programme to locate a buyer and complete the plan must have been initiated. Further, the asset must be actively marketed for sale at price that is reasonable in relation to its current fair value. In addition, the sale should be expected to qualify for recognition as a completed sale within one year from the date of classification and actions required to complete the plant should indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

Further Ind AS 105 also states that an entity shall not classify as held for sale a non-current asset that is to be abandoned. This is because its carrying amount will be recovered principally through continuing use.

An entity shall not account for a non-current asset that has been temporarily taken out of use as if it had been abandoned.

In addition to Ind AS 105, Ind AS 16 states that depreciation does not cease when the asset becomes idle or is retired from active use unless the asset is fully depreciated.

The Accountant of PB Ltd. has treated the plant as held for sale and measured it at the fair value less cost to sell. Also, the depreciation has not been charged thereon since the date of classification as held for sale which is not correct and not in accordance with Ind AS 105 and Ind AS 16.

Accordingly, the manufacturing plant should neither be treated as abandoned asset nor as held for sale because its carrying amount will be principally recovered through continuous use. PB Ltd shall not stop charging depreciation on treat the plant as held for because its carrying amount will be recovered principally through continuing use to the end of their economic life.

The working of the same for presenting in the balance sheet will be as follows:

<table>
<thead>
<tr>
<th>Calculation of carrying amount as on 31st March, 2018</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Price of Plant</td>
<td>24,00,000</td>
</tr>
<tr>
<td>Less: Accumulated depreciation (24,00,000/ 8 years) x 3 years</td>
<td>-9,00,000</td>
</tr>
<tr>
<td>Carrying amount before impairment</td>
<td>15,00,000</td>
</tr>
<tr>
<td>Less: Impairment loss (Refer Working Note)</td>
<td>-3,00,000</td>
</tr>
<tr>
<td>Revised carrying amount after impairment</td>
<td>12,00,000</td>
</tr>
</tbody>
</table>
Balance Sheet extracts as on 31st March 2018

<table>
<thead>
<tr>
<th>Assets</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Current Assets</td>
<td></td>
</tr>
<tr>
<td>Property, Plant and Equipment</td>
<td>12,00,000</td>
</tr>
</tbody>
</table>

Working Note:

Fair value less cost to sell of the Plat = ₹ 12,00,000

Value in Use (not given) or = Nil (since plant has temporarily not been used for manufacturing due to decline in demand)

Recoverable amount= higher of above i.e. ₹ 12,00,000

Impairment loss = Carrying amount – Recoverable amount

Impairment loss = ₹ 15,00,000 – ₹ 12,00,000

= ₹ 3,00,000

QUESTIONS 2 NOVEMBER 2019 EXAM

On June 1, 2018, entity D Limited plans to sell a group of assets and liabilities, which is classified as a disposal group. On July 31, 2018, the Board of Directors approved and committed to the plan to sell the manufacturing unit by entering into a firm purchase commitment with entity G Limited.

However, since the manufacturing unit is regulated, the approval from the regulator is needed for sale. The approval from the regulator is customary and highly probable to be received by November 30, 2018 and the sale is expected to be completed by 31st March, 2019. Entity D Limited follows December year end. The assets and liabilities attributable to this manufacturing unit are as under:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Carrying value as on 31st December, 2017</th>
<th>Carrying value as on 31st July, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Plant and Machinery</td>
<td>2,000</td>
<td>1,800</td>
</tr>
<tr>
<td>Building</td>
<td>4,000</td>
<td>3,700</td>
</tr>
<tr>
<td>Debtors</td>
<td>1,700</td>
<td>2,100</td>
</tr>
<tr>
<td>Inventory</td>
<td>1,400</td>
<td>800</td>
</tr>
<tr>
<td>Creditors</td>
<td>(600)</td>
<td>(500)</td>
</tr>
<tr>
<td>Loans</td>
<td>(4,000)</td>
<td>(3,700)</td>
</tr>
<tr>
<td>Net</td>
<td>5,500</td>
<td>5,200</td>
</tr>
</tbody>
</table>

The fair value of the manufacturing unit as on December 31, 2017 is ₹ 4,000 lakh and as on July 31, 2018 is ₹ 3,700 lakh. The cost to sell is ₹ 200 lakh on both these dates. The disposal group is not sold at, the period end i.e., December 31, 2018. The fair value as on
31st December, 2018 is lower than the carrying value of the disposal group as on that date.

Required:

i) Assess whether the manufacturing unit can be classified as held for sale and reasons thereof. If yes, then at which date?

ii) The measurement of the manufacturing unit as on the date of classification as held for sale.

iii) The measurement of the manufacturing unit as at the end of the year.

ANSWER

(i) Assessment of manufacturing unit whether to be classified as held for sale

The manufacturing unit can be classified as held for sale due to the following reasons:

(a) The disposal group is available for immediate sale and in its present condition. The regulatory approval is customary and it is expected to be received in one year. The date at which the disposal group is classified as held for sale will be 31st July, 2018, i.e. the date at which management becomes committed to the plan.

(b) The sale is highly probable as the appropriate level of management i.e., board of directors in this case have approved the plan.

(c) A firm purchase agreement has been entered with the buyer.

(d) The sale is expected to be complete by 31st March, 2019, i.e., within one year from the date of classification.

(ii) Measurement of the manufacturing unit as on the date of classification as held for sale

Following steps need to be followed:

Step 1: Immediately before the initial classification of the asset (or disposal group) as held for sale, the carrying amounts of the asset (or all the assets and liabilities in the group) shall be measured in accordance with applicable Ind AS.

This has been done and the carrying value of the disposal group as on 31st July, 2018 is determined at ₹ 5,200 lakh. The difference between the carrying value as on 31st December, 2017 and 31st July, 2018 is accounted for as per Ind AS 36.

Step 2: An entity shall measure a non-current asset (or disposal group) classified as held for sale at the lower of its carrying amount and fair value less costs to sell.

The fair value less cost to sell of the disposal group as on 31st July, 2018 is ₹ 3,500 lakh (i.e. ₹ 3,700 lakh - ₹ 200 lakh). This is lower than the carrying value of ₹ 5,200 lakh. Thus, an impairment loss needs to be recognised and allocated first towards goodwill and thereafter pro-rata between assets of the disposal group which are within the scope of Ind AS 105 based on their carrying value.
Thus, the assets will be measured as under:

(₹ In lakh)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Carrying value – 31st July, 2018</th>
<th>Impairment</th>
<th>Carrying value as per Ind AS 105 – 31st July, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td>1,000</td>
<td>-1,000</td>
<td></td>
</tr>
<tr>
<td>Plant and Machinery Building</td>
<td>1,800</td>
<td>-229</td>
<td>-1,571</td>
</tr>
<tr>
<td>Debtors</td>
<td>3,700</td>
<td>(Refer WN)</td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>2,100</td>
<td>-471</td>
<td>3,229</td>
</tr>
<tr>
<td>Creditors</td>
<td>800</td>
<td>-</td>
<td>2,100</td>
</tr>
<tr>
<td>Loans</td>
<td>-500</td>
<td>-3,700</td>
<td>-500</td>
</tr>
<tr>
<td></td>
<td>5,200</td>
<td></td>
<td>-3,700</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-1,700</td>
<td>3,500</td>
</tr>
</tbody>
</table>

**Working Note:**

Allocation of impairment loss to Plant and Machinery and Building

After adjustment of impairment loss of ₹ 1,000 lakh from the full value of goodwill, the balance ₹ 700 lakh (₹ 1,700 lakh - ₹ 1,000 lakh) is allocated to plant and machinery and Building on proportionate basis.

Plant and machinery - ₹ 700 lakh x ₹ 1,800 lakh / ₹ 5,500 lakh = ₹ 230 lakh (rounded off)

Building - ₹ 700 lakh x ₹ 3,700 lakh / ₹ 5,500 lakh = ₹ 470 lakh (rounded off)

1. Measurement of the manufacturing unit as on the date of classification as at the year end
2. The measurement as at the year-end shall be on similar lines as done above.
CONCEPT 1: APPLICATION & OBJECTIVE

Ministry of Corporate Affairs (MCA) has notified new standard on leases i.e Ind AS 116 vide its notification dated 30th March, 2019. Lease accounting has undergone significant changes on introduction of Ind AS 116 which is fully converged With IFRS 16. This new standard replaced the erstwhile Ind AS 17 and is effective from financial periods beginning on or after 1st April, 2019.

Ind AS 17 was based on dual classification model of operating and finance leases with different classification and measurement guidance for each of team. The dual classification model did not account for the assets and liabilities associated with the rights and obligations that arise out of the most “operating leases.

Ind AS 116, Leases, requires most leases to be recognised on the balance sheet and requires enhanced disclosers. It is believed that will result in more faithful representation of leases. Assets and liabilities and greater transparency about the lessee’s obligations and leasing activities However, Ind AS 116 does not make fundamental changes to existing lessor accounting model.

The objective of this standard is to ensure that lessees and lessors provide relevant information in a manner that faithfully represents those transactions. This information gives a basis for users of financial statements to assess the effect that leases have on the financial position, financial performance and cash flows of an entity. This standard requires an entity to consider the terms and conditions of contracts and relevant facts and circumstances, and to apply the standard consistently to contracts with similar characteristics and in similar circumstances.

CONCEPT 2: ASSETS OUT OF SCOPE

Ind AS 116 shall be applied to ALL LEASES EXCEPT for:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Particulars</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leases to explore for or use minerals oil, natural gas and similar non- regenerative resources</td>
<td>Within the scope of Ind AS 106 ‘Exploration for and Evaluation of Mineral Resources</td>
</tr>
<tr>
<td>2</td>
<td>Leases of biological assets held by a lessee</td>
<td>Within the scope of Ind AS 41’ Agriculture’</td>
</tr>
<tr>
<td>3</td>
<td>Service concession arrangements</td>
<td>Within the scope of Appendix D of Ind AS 115 ‘Revenue from Contracts with Customers’</td>
</tr>
</tbody>
</table>
INDIAN ACCOUNTING STANDARD 116: LEASES

<table>
<thead>
<tr>
<th>4</th>
<th>Licences of intellectual property granted by a lessor</th>
<th>Within the scope of Ind AS 115 Revenue from Contracts with Customers'</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Rights held by a lessee under licensing agreements for such items as motion picture films, video recordings, plays, manuscripts, patents and copyrights</td>
<td>Within the scope of Ind AS 38 'Intangible Assets'</td>
</tr>
</tbody>
</table>

**CONCEPT 3: EXEMPTIONS UNDER IND AS 116**

In addition to above scope exclusions, a lessee can elect not to apply Ind AS 116's recognition requirements to:

1. Short-term leases; and
2. Leases for which the underlying asset is of low-value.

If a lessee elects to apply the above recognition exemption, the lessee shall recognise the lease payments associated with those leases as an expense on either a straight-line basis over the lease term or another systematic basis, if that basis is more representative of the pattern of the lessee's benefit.

**A. SHORT TERM LEASE**

A short-term lease is a lease that, at the commencement date, has a lease term of 12 months or less and does not include an option to purchase the underlying asset.

As the determination is made at the commencement date, a lease cannot be classified as short-term if the lease term is subsequently reduced to less than 12 months.

**GROUP OF ASSETS**

The short-term lease exemption can be made by class of underlying asset to which the right of use related. A class of underlying asset is a grouping of underlying assets of a similar nature and use in an entity's operations.

**EXAMPLE**

An entity which has leased several items of office equipment - some of them for them than 12 months and some for more than 12 months, with none containing purchase options. Assuming that the items of office equipment are all considered to be the same class, if the entity wished to use the short term lease exemption it must apply that exemption for all of the leases with terms of 12 months or less. The leases with terms longer than 12
months will be accounted for in accordance with the general recognition and measurement requirements for lessees.

A lessee that makes this election must make certain quantitative and qualitative disclosures about short-term leases. Once a lessee establishes a policy for a class of underlying assets, all further short-term leases for that class requires to be accounted for in accordance with the lessee's policy.

**QUESTION 1 SHORT-TERM LEASE**

**Scenario A:**
A lessee enters into a lease with a nine-month non-cancellable term with an option to extend the lease for four months. The lease does not have a purchase option. At the lease commencement date, the lessee is reasonably certain to exercise the extension option because the monthly lease payment during the extension period are significantly below market rates. Whether the lessee can take a short-term exemption in accordance with IndAS 116?

**Scenario B:**
Assume the same facts as Scenario A except, at the lease commencement, date the lessee is not reasonably certain to exercise the extension option because the monthly lease payments during the optional extension period are at what the lease expects to be market rates and there are no other factors that would make exercise of the renewal option reasonably certain. Will your answer be different in this case?

**SOLUTION**

**Scenario A:**
As the lease is reasonably certain to exercise the extension option (Refer section 3.2 lease them), the lease term is greater than 12 months (i.e., 13 months) therefore, the lease will not account for the lease as a short-term lease.

**Scenario B:**
In this case, the lease term is less than 12 months, i.e., nine months, thus, the lessee may account for the said lease under the short-term lease exemption, i.e., it recognises lease payments as an expense on either a straight-line basis over the lease term or another systematic basis.
B. LOW VALUE ASSETS

Lessees can also make an election for leases for which the underlying asset is of low value (i.e. low-value assets).

Though Ind AS 116 does not explicitly define the leases of low-value assets, it provides the conditions based on which an asset can be treated as of low-value and the said exemption can be availed accordingly for such low-value asset(s). Following are the conditions:

An underlying asset can be of low value ONLY IF BOTH the following conditions are satisfied:

- The lessee can benefit from use of the underlying asset on its own
- The underlying asset is not highly dependent on, or highly interrelated with other assets

**EXAMPLE**

1. An entity may lease a car for use in the business and the lease included the use of the tyres attached to the car. To use the tyres for their intended purpose, they can only be used with the car and as such, they are depended on, or highly interrelated with car. Therefore, the tyres would not qualify for the low-value asset exemption.

2. An entity enters into a rental contract for a large number of laptops. Each laptop within the contract constitutes an identified asset. Entity has considered that the value of individual laptop would be low, even though the contract for all the laptops is not. The conditions of Ind AS 116 are satisfied i.e. the entity can benefit from use of an individual laptop together with other resources that are already available and each laptop does not need other assets to make it functional. Consequently, each laptop qualifies as a low value asset and the entity can elect to apply the low-value exemption to all laptops under the contract.

The exemption for leases of low-value items intends to capture leases that are high in volume but low in value - e.g. leases of small IT equipment (laptops, mobile phones, simple printers), leases of office furniture etc. Ind AS 116 is silent on any threshold to determine the value for classifying any asset as low value assets.
The following boxes depict the important points regarding the leases of low-value assets:

| Value of an underlying asset to be assessed based on the value of the asset when it is new, regardless of the *age* of the asset being leased | Leases of low-value assets are exempted regardless of whether those leases are material to the lessee |

Examples of low-value underlying assets can include:
- Tablet
- Personal computers,
- Small items of office furniture
- Telephones

*A lease of an underlying asset does not qualify as a lease of low value asset if the nature of the asset is such that, when new, the asset is typically not of low value, for e.g., leases of cars would not qualify as leases of low-value assets because a new car would typically not be of low value.*

**CONCEPT 4: MEANING OF LEASE**

At the inception of a contract, an entity shall assess whether the contract is or contains a lease. For the purpose, a lease is defined as a contract, or part of a contract that conveys the **right to control** the use of an **identified asset** for a **period of time** in **exchange for consideration**.

Ind AS 116 requires customers and suppliers to determine whether a contract is or contains a lease at the **inception of the contract**.

The **inception date** is defined as the **earlier** of the following dates:

- Date of a lease agreement
- Date of commitment by the parties to the principal terms and conditions of the lease

A **period of time** may be described in terms of the amount of use of an identified asset (for e.g. the number of production units an item of equipment will be used to produce). It includes any non-consecutive periods of time.
PART 1: IDENTIFIED ASSET

An Arrangement only contains a lease if there is an identified asset under Ind as 116, an identified asset can be explicitly specified in a contract or implicitly specified at the time that the asset is made available for use by the customer.


**QUESTION 2**

*Asset implicitly specified in a contract*

Customer XYZ enters into a ten-year contract with Supplier ABC for the use of rolling stock specifically designed for Customer XYZ.

The rolling stock is designed to transport materials used in Customer XYZ’s production process and is not suitable for use by other customers. The rolling stock is not explicitly specified in the contract (i.e., by serial number), but Supplier ABC owns only one rolling stock that is suitable for Customer XYZ’s use. If the rolling does not operate properly, the contract requires Supplier ABC to repair or replace the rolling stock.

Whether there is an identified asset?

**SOLUTION**

Yes, the said rolling stock is an identified asset.

Through the rolling stock is not explicitly specified in the contract (e.g., by serial number), it is implicitly specified because supplier ABC must use it to fulfil the contract.

**QUESTION 3**

*Asset implicitly specified in a contract*

Customer XYZ enters into a ten-year contract with Supplier ABC for the use of a car. The specification of the car is specified in the contract (i.e., Brand, type, colour, options, etc.). At inception of the contract, the car is not yet built.

Whether there is an identified Asset?

**SOLUTION**

Yes, the said car is an Identified asset.

Though the car cannot be identified at inception of the contract, it is *implicitly specified* at the time the same will be made available to Customer XYZ.
NO LEASE EVEN IF THERE IS AN IDENTIFIED ASSET

CASE I: SUBSTANTIVE SUBSTITUTION RIGHTS

This is a very important concept since without evaluating this condition the condition, as to whether there is identified asset cannot be attained. So, even if an asset is specified, an customer does not have the use an identified asset if, an inception of the contract, an supplier has the substantive right to substitute the asset throughout the period of use.

A supplier right to substitute an asset is **SUBSTANTIVE** when BOTH of the following conditions are met:

- The supplier has the PRACTICAL ABILITY to substitute alternative assets throughout the period of use (For e.g. the customer cannot prevent the supplier from substituting an asset and alternative assets are readily available to the supplier or could be sourced by the supplier within a reasonable period of time).
- The supplier would BENEFIT ECONOMICALLY From the exercise of its right to substitute the asset (i.e. the economic benefits associated with substituting the asset are expected to exceed the costs associated with substituting the asset).

Further, if the supplier has a right or an obligation to substantive the asset only on or after either a **particular date** or the occurrence of a specified event the supplier’s substitution right is **not substantive** because the supplier does **not have the practical ability** to substitute alternative assets **throughout the period of use**.

An entity’s evaluation of whether a supplier’s substitution right is substantive is based on **facts and circumstances at inception** of the contract. At inception of the contract, an entity should not consider future events that are not likely to occur. Ind AS 116 provides
the following examples of circumstances that, at inception of the contract, are not likely to occur and, thus, are **excluded** from the evaluation of whether a supplier's substitution right is substantive throughout the period of use:

1. An agreement by a future customer to pay an above market rate for use of the asset
2. The introduction of new technology that is not substantially developed at inception of the contract
3. A substantial difference between the market price of the asset during the period of use, and the market price considered likely at inception of the contract

Ind AS 116 further clarifies that a customer should **presume** that a supplier's substitution right is **not substantive** when the customer **cannot readily determine** whether the supplier has a substantive substitution right. This requirement is intended to clarify that a customer is not expected to exert undue effort to provide evidence that a substitution right is not substantive. However, suppliers should have sufficient information to make a determination of whether a substitution right is substantive.

**QUESTION 4**

Substantive Substitution Rights

**Scenario A:**

A electronic data storage provider (supplier provides services through a centralised data centre that involve the use of a specified server No. 10) The supplier maintains may identical servers in a single accessible location and determines, at inception of the contract, that it is permitted to and can easily substitute another server without the customer's consent throughout the period of use.

Further, the supplier would benefit economically from substituting an alternative asset, because doing this would allow the supplier to optimise the performance of its network at only a nominal cost. In addition, the supplier has made clear that it has negotiated right of substitution as an important rift in the arrangement, and the substitution right affected the pricing of the arrangement.

Whether the substitution rights are substantive and whether there is an identified asset?
Scenario B:
Assume the same facts as in Scenario A expect that Server No. 10 is customised, and the supplier does not have the practical ability to substitute the customised asset throughout the period of use. Additionally, it is unclear whether the supplier would benefit economically from sourcing a similar alternative asset.

Whether the substitution rights are substantive and whether there is an identified asset?

SOLUTION

Scenario A:
The customer does not have the right to use an identified asset because, at the inception of the contract the supplier has the practical ability to substitute the server and would benefit economically form such a substitution. thus there is no identified asset.

However, if the customer could not readily determine whether the supplier had a substantive substitution right (for e.g., there is insufficient transparency into the supplier’s operations), the customer would presume the substitution right is not substantive and conclude that there is an identified asset.

Scenario B:
The substitution right is not substantive, and Server No. 10. Would be an identified asset because the supplier does not have the practical ability to substitute the asset and there is no evidence to economic benefit to the supplier for substituting the asset. In this case, neither of the conditions of a substitution right is met (whereas both the conditions must be met for the supplier to have a substantive substitution right). Therefore, serve no 10 will be considered as an identified asset.

CASE II: IDENTIFIED ASSET – PHYSICALLY DISTINCT:

An identified asset must be physically distinct. A physically distinct asset may be an entire asset or a portion of an asset. For example, a building is generally considered physically distinct, but one floor within the building may also be considered physically distinct if it can be used independent of the other floors.

The term “substantially all is not defined in Ind AS 116.

This can be better understood with the help of the following illustrations:
QUESTION 5

Identified Asset - Physically Distinct):
Customer XYZ enters into a 15-year contract with supplier ABC for the right to use five fibres within a fibre cable between Mumbai and Pune. The contract identifies five of the cable’s 25 fibres for use by Customer XYZ. The five fibres dedicated solely to Customer XYZ’s data for the duration of the contract team. Assume that Supplier ABC does not have a substantive substitution right.

Whether there is an identified asset?

QUESTION 6

(Identified Asset - Not physically Distinct):

Scenario A:
Customer XYZ enters into a ten-year contract with supplier ABC for the right to transport oil from India to Bangladesh through Supplier ABC’s pipeline. The contract provides that Customer XYZ will have the right of 95% of the pipeline’s capacity throughout the term of the arrangement.

Whether there is an identified asset.

Scenario B:
Assume the same facts as in Scenario A, except the Customer XYZ has the right to use 65% of the pipeline’s capacity throughout the term arrangement.

Whether there is an identified asset?

SOLUTION:

Scenario A:
Yes the capacity portion of the pipeline is an identified asset.
While 95% of the pipeline’s capacity is not physically distinct from the remaining capacity of the pipeline, it represents substantially all of the capacity of the entire pipeline and thereby provides Customer XYZ with right to obtain substantially all the economic benefits from of the pipeline.

Scenario B:
No. The capacity portion of the pipeline is NOT an identified asset.
Since 65% XYZ does not have the right to obtain substantially all of the economic benefits from use of the pipeline.
CONCEPT 6: RIGHT TO CONTROL

To assess whether a contract conveys the right to control the use of an identified asset for a period of time, an entity shall assess whether, throughout the period of use, the customer has both of the following:

(a) The right to obtain **substantially all of the economic** from use of the identified asset; and
(b) The **right to direct the use** of the identified asset

The right to control the use of an asset may not necessarily be documented, in from, as a lease agreement. Often, the right to use an identified asset is embedded in an arrangement that may appear to be a supply arrangement or service contract. Therefore, a reporting entity should consider all of the terms of an arrangement of determine whether it contains a lease.

If the customer has the right to control the use of an identified asset for only a portion of the term of the contract, the contract contains a lease for that portion of the term.

QUESTION 7

(Right to use for a portion of the term of contract):

ABC Ltd enters into a contract with XYZ Ltd, which grants ABC Ltd exclusive rights to use a specific grain facility over a five-year period in the months of May and June. During these months ABC Ltd has the right to decide which crops are placed in storage and when to remove them. XYZ Ltd provides the loading and unloading services for the warehouse activities. During the other then months each year, XYZ Ltd has the right to determine how the warehouse will be used.

Which party has the right to control the use of the identified asset during the period of use?

SOLUTION:

In the above, ABC Ltd has the right to control the use the identified asset during the period of use because they have the power to determine how the warehouse be used during the contractually defined usage periods. The analysis should focus on the rights and economics of the use of the warehouse for the specified usage period (May and June). During the period of use, ABC Ltd has rights to determine how much of a crop to place in storage, and the timing of placing and removing it from storage. These rights are more significant to the economics of the use of the asset than the loading and unloading services performed by XYZ Ltd during the same period. ABC Ltd receives all of the economic benefit from use of the asset during those specified time period. Therefore, contract contains a lease for the specified period of team.
A. Right to Obtain Substantially All of the Economic Benefits

The first criterion in the control assessment is to determine whether the customer has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use (for e.g., by having exclusive use of the asset throughout that period).

A customer can obtain economic benefits either directly or indirectly (for e.g., by using holding or subleasing the asset). Economic benefits from use of an asset include:

♦ The asset’s primary outputs (i.e., goods or services)
♦ Any by-products (for e.g., renewable energy credits that are generated through the use of the asset), including potential cash flows derived from these items.
♦ Benefits from using the asset that could be realised from a commercial transaction with a third party (For e.g., subleasing the asset)

POINTS WHICH DO NOT AFFECT CUSTOMER’ RIGHT

A Right that solely protects the supplier’s interest in the underlying asset (e.g., limits on the number of miles a customer can drive a supplier’s vehicle) does not, in and of itself, prevent the customer from obtaining substantially all of the economic benefits from use of the asset and, therefore, are not considered when assessing whether a customer has the right to obtain substantially all of the economic benefits.

If a contract requires a customer to pay the supplier or another party a portion of the cash flows derived from the use of an asset as consideration (For e.g. if the customer is required to pay the supplier a percentage of sales from use of retail space as consideration for that use) that requirement does not prevent the customer from having the right to obtain substantially all of the economic benefits from use of the retail space.

QUESTION 8

(Right to obtain substantially all of the economic benefits):

Company MNO enters into a 15-year contract with power Company PQR purchase all of the electricity produced by a new solar farm. PQR owns the solar farm and will receive tax credits relating to the construction and ownership of the solar farm, and MNO will receive renewable energy credits that accrue from use of the solar farm.)

Who has the right to substantial benefits from the solar farm?

SOLUTION

Company MNO has the right to obtain substantially all of the economic benefit from use of the solar farm over the 15-yaer period because it obtains:
- The electricity produced by the farm over the lease term, i.e., the primary product from use of the asset; and
- the renewable energy credits, i.e., the byproduct from use of the asset.

Although PQR receives economic benefits from the solar farm in the form of tax credits, these economic benefits relate to the ownership of the solar farm. The tax credits do not relate to use of the solar farm; therefore, they are not considered in this assessment.

### B. Right to Direct the Use of the Identified Asset

The second criterion in the control assessment is to determine **whether the customer has the right to direct the use** of the identified asset throughout the period of use.

Decisions about **how and for what purpose an asset will be used** are the most relevant factors to consider when assessing which party directs the use of the identified asset.

How and for what purpose an asset is used is **single concept** (i.e., how an asset is used is not assessed separately from for what purpose an asset is used).

When evaluating whether a customer has the right to change how and for what purpose the asset is used throughout the period of use, the focus should be on whether the customer has the decision-making rights that will most affect the economic benefits that will be derived from the use of the asset. The decision-making rights that are most relevant are likely to depend on the nature of the asset and the terms and conditions of the contract.

Ind As 116 provides the following examples of decision-making rights that grant the right to change how and for what purpose an asset is used:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Examples</th>
</tr>
</thead>
</table>
| The right to change the type of output that is produced by the asset | (i) Deciding whether to use a shipping container to transport goods or for storage  
(ii) Deciding on the mix of products sold from a retail unit |
| The right to change when the output is produced  | Deciding when an item of machinery or a power plant will be used         |
| The right to change where the output is produced | (i) Deciding on the destination of a truck or a ship  
(ii) Deciding where a piece of equipment is used or deployed |
The right to change whether the output is produced and the quantity of that output | Deciding whether to produce energy from a power plant and how much energy to produce from that power plant

**IMPORTANT POINTS TO BE CONSIDERED**

1. The customer does not need the right to operate the underlying asset to have the right to direct its use, i.e., the customer may direct the use of an asset that is operated by supplier’s personnel.

2. The relevant decisions about how and for what purpose an asset is used are predetermined then significant judgement may be required to assess whether a customer designed the asset (or specific aspects of the asset) in a way that predetermines how and for what purpose the asset will be used throughout the period of use.

**QUESTION 9**

Right to direct the use of an asset

Customer X enters into a contract with Supplier Y to use a vehicle for a five-year period. The vehicle is identified in the contract. Supplier Y cannot substitute another vehicle unless the specified vehicle is out of operations (for e.g., if it breaks down). Under the contract:

- Customer X operates the vehicle (i.e., drives the vehicle) or directs other to operate the vehicle (for e.g., hires a driver).
- Customer X decided how to use the vehicle (within contracture limitations). For example, throughout the period or use, Customer X decides where the vehicle goes, as well as when or when or whether it is used and what it is used for. Customer X can also change these decisions throughout the period of use.
- Supplier Y prohibits certain used of the vehicle (for e.g., moving it overseas) and modifications to the vehicle to protect its interest in the asset.

Whether Customer X has the right to direct the use of vehicle throughout the period of lease?

**SOLUTION:**

Yes, Customer X has the right to direct the use of the identified vehicle throughout the period of use because it has the right to change how the vehicle is used, when or whether the vehicle is used, where the vehicle goes and what the vehicle is used for.

Supplier Y’s limits on certain uses for the vehicle and modifications to it are considered protective right that define the scope of Customer X’s use of the asset, but do not affect the assessment of whether Customer X directs the use of the asset.
**QUESTION 10**

Right to direct the use of an asset

Entity A contracts with Supplier H to manufacture parts in a facility. Entity A designed the facility and provided its specifications. Supplier H owns the facility and the land. Entity A specifies how many parts it needs and when it needs the parts to be available. Supplier H operates the machinery and makes all operation decisions including how and when the parts are to be produced, as long as it meets the contractual requirements to deliver the specified number on the specified date. Assuming supplier H cannot substitute the facility and hence is an identified asset.

Which party has the right to control the use of the identified asset (i.e. equipment) during the period of use?

**SOLUTION**

Entity A does not direct the use of the asset that most significantly drives the economic benefits because Supplier H determines how and when the equipment is operated once the contract is signed. Therefore, Supplier H has right to control the use of the identified asset during the period of use. Although Entity A stipulates the product to be provided and has input into the initial decisions regarding the use of the asset through its involvement in the design of the asset, it does not have decision making rights over how and for what purpose the asset will used over the asset during the period of use. This arrangement is a supply agreement, not a lease.

**QUESTION 11**

Right to direct the use of an asset

Entity L enters into a five-year contract with Company A ship over for the use of an identified ship. Entity L decides whether and what cargo will be transported, and when and to which ports the ship will sail throughout the period of use, subject to restrictions specified in the contract. These restrictions prevent Entity sailing the ship into waters at a high risk of piracy or carrying explosive materials as cargo. Company A operates and maintains the ship, and is responsible for safe passage.

Who has right to direct the use of the ship during the period of use?

**SOLUTION**

Entity L has the right to direct the use of the ship. The contractual restrictions are protective rights. In the scope of its right of use, Entity L determines how and for what purpose the ship is used throughout the five year period because it decides where and when the ship sails, as well as the cargo that it will transport. Entity L has the right to change these decisions throughout the period of use. Therefore, the contract contains a lease.
A. IDENTIFYING AND SEPARATING LEASE COMPONENTS OF A CONTRACT

Sometimes, there are contracts that contain rights to use multiple assets (For e.g., a building and an equipment, multiple pieces of equipment, etc.). The right to use each such asset is considered as a separate lease component ONLY IF BOTH the following conditions are satisfied:

♦ The lessee can benefit from the use of the asset either on its own OR together with other resources that are readily available to the lessee (i.e., goods or services that are sold or leased separately, by the lessor or other suppliers, or that the lessee has already obtained from the lessor or in other transactions or events) AND

♦ The underlying asset is neither dependent on, not highly interrelated with, the other underlying assets in the contract.

If one or both of these criteria are not met then, the right to use multiple assets is considered a single lease component, i.e., not a separate lease component. Let us have a look at the following illustration to have a better understanding:

QUESTION 12

Identifying and separating lease components

Scenario A:

A lessee enters a lease of an excavator and the related accessories (for e.g., excavator attachments) that are used for mining purposes. The lessee is a local mining company that intends to use the excavator at a copper mine. How many lease and non-lease components are there?

Scenario B:

Assume the same facts as in Scenario A, except that the contract also conveys the right to use an additional loading truck. This loading truck could be deployed by the lessee for other uses (for e.g. to transport iron ores at another mine).

SOLUTION:

Scenario A:

The lessee would be unable to benefit from use of the excavator without also using the accessories. Therefore, the excavator is dependent upon accessories. Thus, from the perspective of the lessee, the contract contains one lease component.
Scenario B:
The lessee can benefit from loading truck on its own together with other readily available resources because the loading truck could be deployed for other uses independent of the excavator the lessee can also benefit from the use of the excavator on its own or together with other readily available resources.
Thus, from the perspective of the lessee, the contract contains tow lease components, viz., a lease of the excavator (together with the accessories) and a lease of the loading truck.

B. SEPARATING LEASE COMPONENTS FROM NON-LEASE COMPONENTS

There may be many contracts containing a lease coupled with an agreement to purchase or sell other goods or services (i.e., the non-lease components under Ind AS 116). For example, a supplier may lease a truck and also operate the leased asset on behalf of a customer (i.e., provide a driver). This service is not related to securing the use of the truck. Only items that contribute to securing the output of the asset are lease components. In this example, only the use of the truck is considered a lease component. Similarly, costs incurred by a supplier to provide maintenance on an underlying asset, as well as the materials and supplies consumed as a result of the use of the asset, are not lease components.

The non-lease components are identified and accounted for separately from the lease component in accordance with other standards. For e.g., the non-lease components may be accounted for as executory arrangements by lessees (customers) or as contracts subject to Ind AS 115 by lessors (suppliers).

Costs related to property taxes and insurance do not involve the transfer of a good or service. Consequently, if these costs are fixed in the contract, they should be included in the overall contract consideration to be allocated to the lease and non-lease components.

QUESTION 13

Identifying different components in the contract
Entity L rents an office building from landlord M for a term of 10 years. The rental contract stipulates that the office is fully furnished and has a newly installed and tailored HVAC system. It also requires Landlord M to perform all common area maintenance (CAM) during the term of the arrangement. Entity L makes single monthly rental payment and does not pay for the maintenance separately. The office building has a useful life of 40 years and the HVAC system and office furniture each has a life of 15 years.

What are the units of account in the lease?
SOLUTION

There are three components in the arrangement- the building assets (office building and HVAC) the office furniture, and the maintenance agreement.

The office building and HVAC system are once lease component because they cannot function independently of each other. The HVAC system was designed and tailored specifically to integrated into the office building and cannot be removed and used in another building without incurring substantial costs. These building assets are a lease component because they are identified assets for which Entity L directs the use.

The office furniture functions independently and can be used on its own. It is also a lease component because it is a group of distinct asset for which Entity L directs the use.

The office furniture functions independently and can be used on its own. It is also a lease component because it is a group of distinct assets for which Entity L directs the use.

The maintenance agreement is a non-lease component because it is contract for service and not for the use of a specified asset.

C. OPTIONAL EXEMPTION OF USING PRACTICAL EXPEDIENT TO NOT TO SEPARATE NON-LEASE COMPONENT

Ind AS 116 provides a practical expedient that permits lessees to make an accounting policy election, by CLASS OF UNDERLYING ASSET, to account for each separate lease component of a contract and any associated non-lease components as a SINGLE LEASE COMPONENT. It is important to note the such practical expedient is not permissible for lessor.

Making this election relieves the lessee of the obligation to perform a pricing allocation, although it will increase the total lease liability to be recorded on its balance sheet. This expedient is not available for lessors. Lessees that make the policy election to account for each separate lease component of a contract and any associated non-lease components as a SINGLE LEASE COMPONENT, allocate ALL of the contract consideration to the lease component.

D. Determining and allocating the consideration in the contract – Lessee

Lessees that do not make an accounting policy election (by class of underlying asset) to use the practical expedient, as discussed above, to account for each separate lease component of a contract and any associated non-lease components as a single lease component, are required to allocate the consideration in the contract to the lease and non-lease components on a RELATIVE STAND-ALONE PRICE BASIS.
Lessees are required to use observable stand-alone prices (i.e., prices at which a customer would purchase a component of a contract separately) when available if observable stand-alone prices are not readily available, lessees estimate stand-maximising the use of observable information.

**QUESTION 14**

Activities which are not components of a lease contract

A lessee enters into a five-year lease of equipment, with fixed annual payment of ₹8,000 for rent, ₹1,500 for maintenance and ₹500 of administrative tasks. How the consideration would be allocated?

**SOLUTION**

The contract contains two components, viz a lease component (lease of equipment) and a non-lease component (maintenance) the amount paid for administrative task does not transfer a good service to the lessee.

Assuming that the lessee does not elect to use the practical expedient as per para 15 of Ind AS 116, both the lessee and the lessor account for lease of equipment and maintenance components separately and the administration Charge is included in the total consideration to be allocated between those components. Therefore, the total consideration in the contract of ₹50,000 will be allocated to the lease component (equipment) and the non-lease component (maintenance).

**QUESTION 15**

Allocating contract consideration to lease and non-lease component- Lessees

A lessee enters into a lease of equipment. The contract stipulates the lessor will perform maintenance of the leased equipment and receive consideration for the at maintenance service. The contract includes the following fixed prices for the lease and-lease component:

<table>
<thead>
<tr>
<th>Component</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lease</td>
<td>₹80,000</td>
</tr>
<tr>
<td>Maintenance</td>
<td>₹10,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>₹90,000</td>
</tr>
</tbody>
</table>

Assume the stand-alone prices cannot be readily observed, so the lessee makes estimates, maximising the use of observable information, of the lease and non-lease components, as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lease</td>
<td>₹85,000</td>
</tr>
</tbody>
</table>
In the given scenario, assuming lessee has not opted the practical expedient, how will the lessee allocate the consideration to lease and no-lease component?

**SOLUTION**

The stand-alone price for the lease component represents 85% (i.e., ₹ 85,000 / ₹ 1,00,000) of total estimated stand-alone prices. The lessee allocated the consideration in contract (i.e., ₹ 90,000), as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lease</td>
<td>₹ 76,500</td>
</tr>
<tr>
<td>Maintenance</td>
<td>₹ 13,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>₹ 90,000</strong></td>
</tr>
</tbody>
</table>

- 90,000×85%
- ₹ 90,000×15%

---

**E. CONTRACT COMBINATIONS**

Ind AS 116 requires that two or more contracts entered into at or near the same time with the same counterparty (or related parties of the counterparty) be considered a single contract IF ANY ONE of the following criteria is met:

- The contracts are negotiated as a package with an overall commercial objective that cannot be understood without considering the contracts together
- The amount of consideration to be paid in one contract depends on the price or performance of the other contract
- The right to use the underlying assets conveyed in the contracts (or some of the right to use underlying assets conveyed in each of the contracts) are a single lease component
F. PORTFOLIO APPLICATION

Ind AS 116 applies to individual leases. However, entities that have a large number of leases of similar assets (for e.g., leases of a fleet of similar rolling stock) may face practical challenges in applying the leases model on a lease-by-lease basis.

Thus, Ind AS 116 includes a practical expedient that allows entities to use a portfolio approach for lease with similar characteristics if the entity reasonably expects that the effects of the financial statements would not differ materially from the application of the standard to the individual leases in that portfolio.

CONCEPT 8: KEY CONCEPTS

A. INCEPTION AND COMMENCEMENT OF LEASE

Ind AS 116 requires customers and suppliers to determine whether a contract is or contains a lease at the inception of the contract.

The **inception date** is defined as the earlier of the following dates:

- Date of a lease agreement
- Date of commitment by the parties to the principal terms and conditions of the lease

The **commencement date** is defined as the date on which a lessor makes an underlying asset available for use by a lessee. Where the underlying asset is an asset that is the subject of a lease, for which the right to use that asset has been provided by lessor to a lessee.

If a lessee takes possession of, or is given control over, the use of the underlying asset before it begins operations or making lease payments under the terms of the lease, the lease term has commenced even if lessee is not required to pay rent or the lease arrangement states the lease commencement date is a later date.

The timing of when lease payments being under the contract **does not affect** the commencement date of the lease.

As discussed earlier, **inception date** is the date when an entity shall assess if the contract is or contains lease. While the **commencement date** is relevant because on that date:

(i) a lessee (except where the exemption of short-term lease or low-value asset is taken) **initially recognizes a lease liability** and related Right of Use Asset (hereinafter referred ROU Asset) on the commencement date

(ii) a lessor (for finance leases) initially recognises its net investment in the lease on the commencement date.

Where, **ROU Asset** is defined as an asset that represents a lessee’s right to use an underlying asset for the lease term.
B. LEASE TERM

Determination of lease term is a very crucial step before the calculation of Lease Liability and the corresponding ROU Asset. In simple terms, lease term is the summation of the following:

- **NON CANCELLABLE PERIOD**
- Periods covered by an option to EXTEND the lease if the lessee is reasonably certain TO exercise that option
- Periods covered by an option to TERMINATE the lease if the lessee is reasonably certain NOT TO exercise that option

**QUESTION 16 - DETERMINING THE LEASE TERM**

**Scenario A:**
Entity ABC enters into a lease for equipment that includes a non-cancellable term of six years and a two-year fixed prices renewal with future lease payment that are intended to approximate market rates at lease inception. There are no termination penalties or other factors indicating that Entity ABC is reasonably certain to exercise the renewal option. What is the lease term?

**Scenario B:**
Entity XYZ enters into a lease for a building that includes a non-cancellable term of eight years and a two-year market prices renewal option. Before it takes possession of the building, Entity XYZ pays for leasehold improvements. The leasehold improvements are expected to have significant value at the end of eighty years, and that value can only be realised through continued occupancy of the lease property. What is the lease term?

**Scenario C:**
Entity PQR enters into a lease for an identified retail space in a shopping centre. The retail space will be available to Entity PQR for only the months of October, November and December during a non-cancellable term of seven years. The lessor agrees to provide the same retail space for each of the seven years. What is the lease term?

**SOLUTION:**

**Scenario A:**
At the lease commencement date, the lease term is six years (being the non-cancellable period) the renewal period of two years is not taken into consideration since it is mentioned that Entity ABC is not reasonably certain to exercise the option.
Scenario B:

At the lease commencement, Entity XYZ determines that it is reasonably certain to exercise the renewal option because it would suffer a significant economic penalty if it abandoned the leasehold improvements at the end of the initial non-cancellable period of eight years. Thus, at the lease commencement, Entity XYZ concludes that the lease term is ten years (being eight years of non-cancellable period plus the renewal period of two years where the lessee is reasonably certain to exercise the option).

Scenario C:

At the lease commencement date, the lease term is 21 months (three months per year over the seven annual periods as specified in the contract), i.e., the period over which Entity PQR controls the right to use underlying asset.

C. CANCELLABLE LEASES

In determining the lease term and assessing the length of the non-cancellable period of a lease, an entity shall apply the definition of a contract and determine the period for which the contract is enforceable. A 'contract' is defined as an agreement between two or more parties that creates enforceable rights and obligations.

An arrangement is not enforceable if:

(i) both the lessor and lessee each have the right to terminate the lease without permission from the other party; AND

(ii) with no more than an insignificant penalty

Any non-cancellable periods (by the lessee and the lessor) in contracts that meet the definition of a lease are considered part of the lease term. If only the lessor has the right to terminate a lease, the period covered by the option to terminate the lease is included in the non-cancellable period of the lease. If only the lessee has the right to terminate a lease, that right is a termination option that is considered when determining the lease term.

If both the lessee and the lessor can terminate the contract without more than an insignificant penalty at any time at or after the end of the non-cancellable term, then there are no enforceable rights and obligations beyond the non-cancellable term (i.e., the lease term is limited to the non-cancellable term). However, if only the lessee holds a renewal option, there may be other factors to consider determining whether the lessee is reasonably certain to extend the lease, including economic disincentives (as discussed above).

This can be understood better with the help of the following illustrative situation:
Suppose the term of a contract is 10 years and the non-cancellable / lock-in period is 6 years. The lease term shall be as follows:

<table>
<thead>
<tr>
<th>If the termination option is with 'Lessor'</th>
<th>If the termination option is with 'Lessee'</th>
<th>If the termination option is with 'Both (i.e., any party can terminate)'</th>
</tr>
</thead>
<tbody>
<tr>
<td>The lease term shall be <strong>10 years</strong>.</td>
<td>The lease term shall be <strong>10 years</strong> reasonable certainty.</td>
<td>The lease term shall be <strong>6 years</strong>.</td>
</tr>
<tr>
<td>Because even after 6\textsuperscript{th} year, the lessee would be contractually bound refuse to make the payment till the expiry of the contract sand also, has the right unless lessor terminates the contract.</td>
<td>Because after the expiry of 6\textsuperscript{th} year, though the lessee is not contractually bound till 10\textsuperscript{th} year, i.e., the lessee can refuse to make payment anytime without lessor’s permission but, it is assumed that the lessee is reasonably certain that is will not exercise this option to terminate. Hence, though there is no enforceable obligation from lessee’s point of view beyond 6\textsuperscript{th} year but, basis the said assumption, the lease term shall be 10) years.</td>
<td>Because after 6\textsuperscript{th} year, either party can terminate the contract without the consent of the other party and hence, the contract is not enforceable after 6\textsuperscript{th} year <strong>ONLY</strong> in case there is insignificant penalty for termination.</td>
</tr>
</tbody>
</table>

**D. REASSESSMENT OF LEASE TERM AND PURCHASE OPTIONS (FOR LESSEES)**

After the lease commencement, Ind AS 116 requires lessees to monitor leases for **significant changes** that could trigger a change in the lease term. Lessees are required to **reassess** the lease term upon the occurrence of either a **significant event** OR A **significant change** in the circumstances that:

- **IS WITHIN THE CONTROL OF THE LESSEE**
- Affects whether the lessee is reasonably certain to exercise / not to exercise renewal, termination and/or purchase option, not previously included in its determination of the lease term

Following are some of the examples of **significant events** or **significant changes** in circumstances within the lessee’s control:
1) Constructing significant leasehold improvements that are expected to have significant economic value for the lessee when the option becomes exercisable
2) Making significant modifications or customisations to the underlying asset
3) Making a business decision that is directly relevant to the lessee's ability to exercise, or not to exercise, an option (e.g., extending the lease of a complementary asset or disposing of an alternative asset)
4) Subleasing the underlying asset for a period beyond the exercise date of the option

**QUESTION 17**

**Re-assessment of exercise of lease extension option**

Retailer M enters into a five-year lease for a building floor, followed by two successive five-year renewal options. On the commencement date, Retailer M is not reasonably certain to exercise the extension option. At the end of third year, Retailer M extended to include another floor from year 4 due to a business acquisition. For this purpose, the lessee concludes a separate seven-year lease for an additional floor in the building already leased. Is Retailer M required to reassess the lease term in the case?

**SOLUTION:**

Ind AS 116 requires a lease to reassess the lease term if there is change in business decision of the company which is directly relevant to exercising or not exercising an option to renew/extent the lease. In the given case, the retailer M at the end of third year has extended to include another floor in the same building on account of acquiring another company. As Retailer M has entered into fresh lease of another floor for a seven-year term, it is reasonably certain to exercise the renewal option of original lease for a further five-year term. Hence Retailer M will have to reassess the lease term at end of third year.

**QUESTION 18**

**Re-assessment of non-cancellable period of lease**

Company N has taken 10 vehicles on lease for an initial period of 5 years with an extension option at the option of the lessee for a further period of 5 years at the same rental amount, the remaining useful life of the vehicles as on the commencement date of the lease is 15 years. Company N has determined at the commencement date that it is reasonably certain to exercise the extension option and hence it has taken a period of 10 years for the lease. At the end of 4th year, there is an announcement by the government that all the cars of this particular model have to be discontinued from the road within 1 year due to the change in the pollution norms in the country. Will the lease term be reassessed in the case?
SOLUTION:

In the given case, as per Ind AS 116, the announcement by the government to discontinue the use of the underlying asset will prohibit the lessee from exercising the extension option that was already included in the non-cancellable period by Company N and hence, Company N will reassess the non-cancellable period to exclude the extension option of 5 years.

Reassessment of lease term and purchase options (for lessors):

Ind AS 116 requires the lessor to revise the lease term to account for the lessee’s exercise of an option to extend or terminate the lease or purchase the underlying asset, when exercise of such options was not already included in the lease term.

D. LEASE PAYMENTS

Lease payments are defined as payments made by a lessee to a lessor relating to the right to use an underlying asset during the lease term, comprising the following:

(a) Fixed payments (including in-substance fixed payments) less any lease incentives
(b) Variable lease payments that depend on an index or a rate
(c) The exercise price of a purchase option if the lessee is reasonably certain to exercise that option
(d) Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease

For the lessee, lease payments also include amounts expected to be payable by the lessee under residual value guarantees.

For the lessors, lease payment instead includes residual value guarantees provided by the lessee, a party related to the lessee or a third party unrelated to the lessor that is financially capable of discharging the obligations under the guarantee.
Exclusion of payments for calculating lease liability:

a. Lease payments do not include payments allocated to non-lease components of a contract, unless the lessee elects to combine non-lease components with a lease component and to account for them a single lease component.

b. Variable lease payments that do not depend on index or rate.

**FIXED LEASE PAYMENTS**

*Fixed payments* are defined as payments made by a *lessee* to a *lessor* for the right to use an *underlying asset* during the *lease term*, excluding *variable lease payments*.

Fixed payments can be a fixed amount paid at various intervals in a lease.

**QUESTION 19**

Determining the fixed payments

Entity M and Lessor A enter into a 10-year lease of an office building for fixed annual lease payments of ₹200,000. Per the terms of the lease agreement, annual fixed lease payments comprise ₹170,000 for rent and ₹30,000 for real estate taxes.

What are the fixed lease payments for purposes of classifying the lease?

**SOLUTION**

The fixed lease payments are ₹2,000,000. Although real estate taxes are explicitly stated in the lease contract, they do not represent a separate non-lease component as they do not provide a separate good or service. The right to use the office building is the only component. The annual lease payment of ₹2,000,000 represent payments related to that single lease component.

**IN-SUBSTANCE FIXED LEASE PAYMENTS**

As mentioned above, lease payments also include any in substance fixed lease payments which are the payments that may, *in form*, contain variability but that, *in substance*, are unavoidable. Examples may include:

(a) If there is more than one set of payments that a lessee could make, but only of those sets of payments is realistic. In such a case, an entity shall consider the realistic set of payments to be lease payments.

(b) If there is more one realistic set of payments that a lessee could make, but it must make at least one of those sets of payments. In such a case, an entity shall consider the set of payments that aggregates to the lowest amount (on a discounted basis) to be lease payments.
**QUESTION 20**

In substance fixed lease payments

Entity Q enters into a seven-year lease for a piece of machinery. The contract sets out the lease payments as follows.

- If Q uses the machinery within a given month, then an amount of 2,000 accrues for that month.
- If Q does use the machinery within a given month, then an amount of 1,000 accrues for that month.

What is considered as lease payment in this case?

**SOLUTION:**

Q considers the contract and notes that although the lease payments contain variability based on usage, and there is a realistic possibility that Q may not use the machinery in some months, a monthly payment of 1,000 unavoidable. Accordingly, this is in -substance fixed payment, and is included in the measurement of the lease liability.

**QUESTION 21**

In substance fixed lease payment

Entity P enters into five-year lease for office space with Entity Q. The initial base rent is ₹ 1Lakh per month, Rents increase by the greater of 1% of Entity P's generated sales or 2% of the previous rental rate on each anniversary of the lease commencement date. What are the lease payments for purposes of measuring lease liability?

**SOLUTION:**

In the given case, the lease payments for purposes of classifying the lease are the fixed monthly payments of ₹ 1 lakh plus minimum annual increases of 2% of the previous rental rate. Entity P is require to pay no less than a 2% increase regardless of the level of sales activity; therefore, this minimum level of increase is in substance fixed lease payment.

**QUESTION 22**

In substance fixed lease payments

Company N leases a production line. The lease payments depends on the number of operating hours of the production line i.e., N has to pay ₹ 1,000 per hour of use. The annual minimum payment is ₹ 10,00,000. The expected usage per year 1,500 hours
SOLUTION:
The lease contains in substance fixed payments of ₹10,00,000 per year, which are included in the initial measurement of lease liability, the additional ₹5,00,000 that Company N expects to pay per year variable payments that do not depend on index or rate but usage.

LEASE INCENTIVES

'Lease incentives' is defined as payments made by a lessor to a lessee associated with a lease, or the reimbursement or assumption by a lessor of costs of a lessee.

A lease agreement with a lessor might include incentives for the lessee to sign the lease, such as an upfront cash payment to the lessee, payment of costs for the lessee (such as moving / transportation expenses) or the assumption by the lessor of the lessee's pre-existing lease with a third party.

VARIABLE LEASE PAYMENTS THAT DEPEND ON AN INDEX OR A RATE:

'Variable lease payments' are defined as the portion of payments made by a lessor for the right to use an underlying asset during the lease that varies because of changes in facts or circumstance occurring after the Commencement date, other than the passage of time.

These may include, for e.g., payments linked to a consumer price index, payments linked to a benchmark interest rate or payments that vary to reflect changes in market rental rates. Such payments are included in the lease payments and are measured using the prevailing index or rate at the measurement date (e.g., lease commencement date for initial measurement).

Lessees subsequently remeasure the lease liability if there is a change in the cash flows (i.e., when the adjustment to the lease payments takes effect) for future payments resulting from a change in index or rate used to determine lease payments.

QUESTION 23

Variable lease payments that depend on an index or rate

An entity enters into a 10-year lease of property, the lease payment for the first year is ₹1,000. The lease payment are linked to the consumer price index (CPI), i.e., not a floating interest rate. The CPI at the beginning of the first year is 100. Lease payments are updated at the end or every second year. At the end of year one, CPI is 105. At the end of year two, the CPI is 108. What should be included in lease payments?
SOLUTION:

At the lease commencement date, the lease payments are ₹ 1,000 per year for 10 years. The entity does not take into consideration the potential future changes in the index. At the end of year one, the payments have not changed and hence, the liability is not updated.

At the end of year two, when the lease payments change, the entity updated the remaining eight lease payments to ₹ 1,080 per year (i.e., 1,000/100 x 108).

VARIABLE LEASE PAYMENTS THAT DO NOT DEPEND ON AN INDEX OR A RATE

Variable lease payments that do not depend on an index or rate and are not, in substance, fixed as discussed above -In-substance fixed lease payments). Examples may include payments such as those based on performance (for e.g., a percentage of sales) or usage of the underlying asset (for e.g., the number of hours flown, the number of units produced), are not included as lease payments. Instead, they are recognized in profit or loss in the period in which the event that triggers the payment occurs (unless they are included in the carrying amount of another asset in accordance with other IndAS).

QUESTION 24

Variable lease payments that do not depend on an index or rate

Entity XYZ is a medical equipment manufacturer and a supplier of the related consumables. Customer ABC operates a medical centre. Under the agreement entered into by both parties, Entity XYZ grants Customer ABC the right to use a medical laboratory machine at no cost and customer ABC purchase consumables for use in the equipment from Entity XYZ at ₹ 100 each.

The consumables can only be used for that equipment and Customer ABC cannot use other consumables as substitutes. There is no minimum purchase amount required in the contract. Based on its historical experience, Customer ABC estimates that it is highly likely to purchase at least 8,000 units of consumables annually. Customer ABC has appropriately assessed that the arrangement contains a lease of medical equipment. There are no residual value guarantees or other forms of consideration included in the contract. Whether these payments affect the calculation of lease liability and ROU Asset? How does Entity XYZ and Customer ABC would allocate these lease payments?

SOLUTION:

There are two components in the arrangement, viz., a lease of equipment and the purchase of consumables.
Even though Customer ABC may believe that it is highly unlikely to purchase lesser than 8,000 units of consumables every year, in this example, there are no lease payment for purposes of initial measurement (for Entity XYZ and Customer ABC) and lease classification (for Entity XYZ).

Entity XYZ and Customer ABC would allocate the payments associate with the future payments to the lease and consumables component of the contract.

**QUESTION 25**

**Variable lease payments**

Entity A enters into a five-year lease of an office building. The lease payments are ₹5,00,000 per year and the contract includes an additional water charge calculated as ₹0.50 per litre consumed. Payments are due at the end of year. Entity A elects to apply the practical expedient to combine lease and non-lease components.

**SOLUTION:**

As stated above, payments are due at the end of the year. Entity A elects to apply the practical expedient not to separate lease and non-lease components.

At the commencement date, Entity A measures the lease liability as the present value of the fixed lease payments (i.e. five annual payments of 5,00,000) Although Entity A has elected to apply the practical expedient to combine non-lease components (i.e. water charges) with the lease component, Entity A excludes the non-lease component form its liability because they are variable payments that depend on usage. That is, the nature of the costs does not become fixed just because Entity A has elected not to separate them from the fixed lease payments. Entity A recognises the payments for water as a variable lease payment in profit or loss when they are incurred.

In contrast, if B does not elect to apply the practical expedient to combine lease and non-lease components, then it recognises the payments for water as an operating expense in profit or loss when they are incurred.

**EXERCISE PRICE OF A PURCHASE OPTION**

In the lessee is reasonably certain to exercise a purchase option, the exercise price is included as a lease payment, i.e. entities consider the exercise price of asset purchase option included in lease contracts consistently with the evaluation of lease renewal and termination options (as discussed earlier).
PENALTIES FOR TERMINATING A LEASE

If it is reasonably certain that the lessee will not terminate the lease, the lease term is determined assuming that the termination option would not be exercised, and any termination penalty is excluded from the lease payments. Otherwise, the lease termination penalty is included as lease payment. The determination of whether to include lease termination penalties as lease payments is similar to the evaluation of lease renewal options (as discussed earlier).

RESIDUAL VALUE GUARANTEES (LESSEES)

‘Residual value guarantee’ is defined as a guarantee made to a lessor by a party unrelated to the lessee that the value (or part of the value) of an underlying asset at the end of a lease will be at least a specified amount.

For a lessee, lease payments include amounts expected to be payable by the lessee under residual value guarantees. A lessee may provide a guarantee to the lessor that the value of the underlying asset it returns to the lessor at the end of the lease will be at least of a specified amount. Such guarantees are enforceable obligations that the lessee has assumed by entering into the lease. A lessee is required to remeasure the lease liability if there is a change in the amounts expected to be payable under a residual value guarantee.

QUESTION 26

Residual value guarantee included in lease payments

An entity (a lessee) enters into a lease and guarantees that the lessor will realise `20,000 from selling the asset to another party at the end of the lease. At lease commencement based on the lessee’s estimate of the residual value of the underlying asset, the lessee determines that it expects that it will owe `8,000 at the end of the lease. Whether the lessee should include the said payment of `8,000 as a lease payment?

SOLUTION

The lessee should include the amount of `8,000 as a lease payment because it is expected that it will owe the same to the lessor under the residual value guarantee.

Residual value guarantees (lessors):

Ind AS 116 requires lessors to include in the lease payments, any residual value guarantees provided to the lessor by the lessee, a party related to the lessee, or a third party unrelated to the lessor that is financially capable of financially the obligations under the guarantee. This amount included in the lease payments is different from that for a lessee which only includes the amount expected to be payable by lessee only (as discussed above).
INITIAL DIRECT COSTS

'Initial direct costs' are defined as the incremental costs of obtaining a lease that would not have been incurred if the lease had not been obtained, except for such costs incurred by a manufacture or lessor in connection with a finance lease.

Examples of costs included and excluded from initial direct costs is provided below.

<table>
<thead>
<tr>
<th>Included</th>
<th>Excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commission (including payments to employees acting as selling agents)</td>
<td>Employee salaries</td>
</tr>
<tr>
<td>Legal fees resulting from execution of the lease</td>
<td>Legal fees for services rendered before the execution of the lease</td>
</tr>
<tr>
<td>Lease document preparation costs incurred after the execution of the lease</td>
<td>Negotiating lease term and conditions</td>
</tr>
<tr>
<td>Certain payments to existing tenants to move out</td>
<td>Advertising</td>
</tr>
<tr>
<td>Consideration paid for a guarantee of a residual asset by an unrelated third party</td>
<td>Depreciation and amortization</td>
</tr>
</tbody>
</table>

Lessees and lessors apply the same definition of initial direct costs. The requirements under Ind AS 116 for initial direct costs are consistent with the concept of incremental costs in Ind AS 115, Revenue from Contracts with Customers.

DISCOUNT RATES

Discount rates are used to determine the present value of the lease payments, which are used to determine Right of use asset and Lease liability in case of a lessee and to measure a lessor net investment in the lease.

For a Lessee

As per Ind AS 116, the Discount Rate to be used should be:

\[
\text{THE INTEREST RATE IMPLICIT IN THE LEASE}, \text{ if that rate can be readily determined.}
\]

\[
\text{Or}
\]

\[
\text{If not, then the lease shall use THE LESEE'S INCREMENTAL BORROWINGS RATE.}
\]

Where,

**Interest rate implicit in the lease** is defined as the rate of interest that causes following:
The present value of lease payments made by the lessee for the right to use the underlying asset + The unguaranteed residual value = The fair value of the underlying asset + The fair value of the underlying asset

Lease payments are discounted using the interest rate implicit in the lease (as above to be calculated from the perspective of lessor) if the rate can be readily determined. But if that rate cannot be readily determined then the lessee used the incremental borrowing rate.

As discussed above, the lessee’s incremental borrowing rate is the rate of interest that
- The lessee would, have to pay to borrow over a similar term,
- and with a similar security,
- the funds necessary to obtain an asset of a similar value to the Right of use Asset
- in a similar economic environment.

CONCEPT 9: ACCOUNTING IN THE BOOKS OF LESSEE

STEP 1: INITIAL RECOGNITION AND MEASUREMENT

A lessee is defined as an entity that obtains the right to use an underlying asset for a period of time in exchange for consideration.

At the commencement date, a lessee shall recognise a ROU Asset and a Lease Liability. Ind AS 116 requires lessees to recognise a liability to make lease payments and an asset representing the right to use the underlying asset (i.e., the ROU Asset) during the lease for ALL leases (except for short-term leases and leases of low-value assets, if they choose to apply such exemptions).

A. MEASURING THE LEASE LIABILITY

At the commencement date, a lessee initially measures the Lease liability at the present value of the remaining lease payments to be made over the lease term, discounted using the rate implicit in the lease (or if that rate cannot be readily determined, the lessee’s incremental borrowing rate).
QUESTION 27

Initial measurement of lease liability

Entity L enters into a lease for 10 years, with a single lease payment payable at the beginning of each year. The initial lease payments ₹ 100,000 Lease payments will increase by the rate or LIBOR each year. At the date of commencement of the lease, LIBOR is 2 per cent. Assume that the interest rate implicit in the lease is 5 per cent. How lease liability is initially measure?

B. MEASURING THE RIGHT-OF USE ASSET

A lessee initially measures the ROU Asset at COST, which consists of ALL of the following:

- Initial Measurement of Lease liability
- Payment make to lessor before commencement date less lease incentives received from lessor
- Initial direct costs incurred by lessee
- Estimate of costs for restoration/ dismantling of underlying asset

On initial measurement, a lessee is required to recognise dismantling, removal and restoration costs as part of the ROU Asset. Costs may be incurred at lease commencement or during a particular period as a consequence of having used an underlying asset. Costs that are incurred during a particular period as a consequence of having used the ROU Asset to produce inventories are accounted for under Ind AS 2 inventories. The liability associated with dismantling, removal and restoration costs is recognized and measured in accordance with Ind AS 37 Provisions, contingent Liabilities and Contingent Assets.

QUESTION 28

Measuring right-of-use asset

Entity Y and Entity Z execute a 12-year lease of a railcar with the following terms on January 1, 2016:

- The lease commencement date is February 1, 2016.
- Entity Y must Entity Z the first monthly rental payment of ₹ 10,000 upon execution of the lease.
- Entity Z will pay entity Y ₹ 50,000 cash incentive to enter into the lease payable upon lease execution.

Entity Y incurred ₹ 1,000 of initial direct costs, which are payable on February 1, 2016. Entity Y calculated the initial lease liability as the present value of the lease payments discounted using its incremental borrowing rate because the rate implicit in the lease could not be readily determined; the initial lease liability is ₹850,000.

How would Lessee Company measure and record this lease?

**QUESTION 29**

Dismantling costs to be included in initial measurement of ROU Asset

Company H leases an aircraft for a period of 5 years. The aircraft must undergo a planned check after every 1,00,000 flight hours. At the end of the lease, company H must have a check performed (or refund the cost to the lessor), irrespective of the actual number of flight hours. What are the lease payments for purposes of calculating ROU asset?

**SOLUTION:**

In the given case, the legal requirement to perform a check after every 1,00,000 flight hours does not directly lead to an obligation as it depends on future circumstances. However, as the check must be carried out at the end of the lease irrespective of the actual number of flight hours gives rise to an obligation.

As a result, company H has to recognize a provision for the costs of the final check (Present value of the expected cost”) at the beginning of the lease term. At the same time, these costs must be included in the cost of the right-of-use (ROU) asset pursuant to para 24 (d) of Ind AS 116.

**STEP 2: SUBSEQUENT MEASUREMENT**

**A. RIGHT – OF USE ASSETS (ROU ASSET)**

After the commencement date, the right- of use asset should be measured using a cost model, unless it applies the revaluation model as specified under Ind AS 16.

**Cost model for right – of – use assets:**

To follow the cost model, an entity measures a right – of use asset at cost:

(a) Less **accumulated depreciation** and accumulated impairment losses (recognized in accordance with Ind As 36, Impairment of Assets); and

(b) Adjusted for **re-measurements of the lease liability** specified in section 3.4.3.
Depreciation for right-of-use assets

ROU Assets measured under the cost model should be depreciated in accordance with the depreciation requirements given in Ind AS 16, subject to the following:

- If the lease transfers ownership of the underlying asset to the lessee by the end of the lease term, or if the cost of the ROU Asset reflects that the lessee will exercise a purchase option, the ROU Asset should be depreciated from the commencement date to the end of the useful life of the underlying asset;
- Otherwise the right of use asset should be depreciated from the commencement date to the earlier of the end of the useful life of the ROU Asset and the end of the lease term.

B. LEASE LIABILITY

A lease Liability should be accounted for in a manner similar to other financial liabilities (i.e., on an amortised cost basis). Consequently, the lease liability is accreted using an amount that produces a constant periodic discount rate on the remaining balance of the liability (i.e., the discount rate determined at commencement, as long as a reassessment requiring a change in the discount rate has not been triggered). Lease payments reduce the lease liability when paid.

Thus, after the commencement date, a lessee shall measure the lease liability by:

a. increasing the carrying amount to reflect interest on the lease liability;
b. reducing the carrying amount to reflect the lease payments made; and
c. remeasuring the carrying amount to reflect any reassessment or lease modification or to reflect revised inn-substance fixed lease payments.

C. EXPENSE RECOGNITION

Lessees recognize the following items in expense for lease:

♦ Depreciation of the ROU Asset
♦ Interest expense on the Lease Liability
♦ Variable lease payment that are not included in the lease liability (for e.g., variable lease payments that do not depend on an index or rate)
♦ Impairment of the ROU Asset

QUESTION 30

Lessee Accounting

Entity ABC (lessee) enters into a three-year lease of equipment, Entity ABC agrees to make the following annual payments at the end of each year:
₹ 20,000 in year one
₹ 30,000 in year two
₹ 50,000 in year three

For simplicity purposes, there are no other elements to the lease payments (like purchase options, lease incentives from the lessor or initial direct costs). Assumed a discount rate or 12% (which is Entity ABC's incremental borrowing rate because the interest rate implicit in the lease cannot be readily determined). Entity ABC depreciated the ROU Asset on a straight-line basis over the lease term.

How would Entity ABC would account for the said lease under Ind AS 116?

QUESTION 31

Subsequent Measurement using cost model

Company EFG enter into a property lease with Entity H. The initial term of the lease is 10 years with a 5 - year renewal option. The economic life of the property is 40 years and the fair value of the leased property is ₹ 50 Lacs. Company EFG has an option to purchase the property at the end of the lease term for ₹ 30 lacs. The first annual payment is ₹ 5 lacs in the beginning of year with an increase of 3% every year in the beginning thereafter. The implicit rate of interest is 9.04% Entity H gives Company EFG an incentive of ₹ 2 lacs (payable at the beginning of year 2) which is to be used for normal tenant improvement.

Company EFG is reasonably certain to exercise that purchase option. How would EFG measure the right-of-use asset and lease liability over the lease term.

LEASES DENOMINATED IN A FOREIGN CURRENCY

Lessees apply Ind AS 21 the Effects of Changes in Foreign Exchange Rates, to leases denominated in a foreign currency. Lessees remeasure the foreign currency- denominated lease liability using the exchange rate at each reporting date, like they do for other monetary liabilities. Any changes to the lease liability due to exchange rate changes are recognised in profit or loss. Because the ROU Asset is a non-monetary asset measured at historical cost, it is not affected by changes in the exchange rate.

This approach could result in volatility in profit or loss from the recognition of foreign currency exchange gains or losses, but it will be clear to the users of financial statement that the gains or losses result solely from changes in exchange rates.

STEP III: REMEASUREMENT

Ind AS 116 requires lessees to Remeasure Lease Liabilities upon a change in lease payments on account of ANY of the following:
The reassessment of lease term on account of reasonable certainty to exercise/not exercise of extension and/or termination option

The reassessment of whether the lessee is reasonably certain to exercise an option to purchase the underlying asset

In– substance fixed lease payments

The amounts expected to be payable under residual value guarantees

Future lease payments resulting from a change in an index or rate

When to use the ‘original and a revised’ discount rate?

<table>
<thead>
<tr>
<th>Revised Discount Rate</th>
<th>Original Discount Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lessees use a revised discount rate when lease payments are updated for -reassessment of the lease term OR -a reassessment of a purchase option.</td>
<td>Lessees use the original discount rate when lease payments are updated for -a change in expected amount for residual value guarantees AND - Payment dependent on an index or rate, unless the rate is a floating interest rate. - The variability of payments is resolved so that they become in–substance fixed payments.</td>
</tr>
</tbody>
</table>

The revised discount rate is based on the interest rate implicit in the lease for the lease for the remainder of the lease term. If that rate cannot be readily determined, the lessee uses its incremental borrowing rate.

**QUESTION 32**

Remeasurement of a lease with variable lease payments

Entity W entered into a contract for lease of retail store with Entity J on January 01/01/2017. The initial term of the lease is 5 years with a renewal option of further 3 years. The annual payments for initial terms and renewal term is ₹100,000 and ₹110,000 respectively. The annual lease payment will increase based on the annual increase in the CPI at the end of the preceding year. For example, the payment due on 01/01/18 will be based on the CPI available at 31/12/17

Entity W’s incremental borrowing rate at the lease inception date and as at 01/01/2020 is
5% and 6% respectively and the CPI at lease commencement date and as at 01/01/2020 is 120 and 125 respectively.

At the lease commencement date, Entity W did not have a significant economic incentive to exercise the renewal option. In the first quarter of 2020, Entity W installed unique lease improvements into the retail store with an estimated five-year economic life. Entity W determined that it would only recover the cost of the improvements if it exercises the renewal option, creating a significant economic incentive to extend.

Is Entity W required to remeasure the lease in the first quarter of 2020?

**STEP IV: LEASE MODIFICATIONS**

A lease modification is a change in the scope of a lease, or the consideration for a lease, that was not part of the original terms and conditions of the lease (e.g., adding or terminating the right to use one or more underlying assets, or extending or shortening the contractual lease term).

The following are examples of lease modifications that may be negotiated after the lease commencement date:

- A lease extension
- Early termination of the lease
- A change in the timing of lease payments
- Leasing additional space in the same building
- Surrendering a part of the underlying asset.

If a lease is modified (as stated above), the modified contract is evaluated to determine whether it is or contains a lease. If a lease continues to exist, lease modification can result in:

- A separate lease OR
- A change in the accounting for the existing lease (i.e., not a separate lease).

The exercise of an existing purchase or renewal option or a change in the assessment of whether such options are reasonably certain to be exercised are **not lease modifications but can result in the remeasurement** of Lease Liabilities and ROU Assets (Remeasurement – as discussed above).

**MODIFICATION – SEPARATE LEASE**

A lease modification is accounted for as a separate lease if both:

a. The modification increases the scope of the lease by adding the right to use one or more underlying assets; **and**

b. The consideration for the lease increases by an amount commensurate with the standalone price for the increase in scope.
QUESTION 33

Modification that is a separate lease

Lessee enters into a 10-year lease for 2,000 square metres of office space. At the beginning of Year 6, Lessee and Lessor agree to amend the original lease for the remaining five years to include an additional 3,000 square metres of office space in the same building. The additional space is made available for use by Lessee at the end of the second quarter of Year 6. The increase in total consideration for the lease is commensurate with the current market rate for the new 3,000 square metres of office space, adjusted for the discount that Lessee receives reflecting that Lessor does not incur costs that it would otherwise have incurred if leasing the same space to a new tenant (for example, marketing costs).

How should the said modification be accounted for?

SOLUTION:

Lessee accounts for the modification as a separate lease, separate from the original 10-year lease because the modification grants Lessee an additional right to use an underlying asset, and the increase in consideration for the lease is commensurate with the standalone price of the additional right-of-use adjusted to reflect the circumstances of the contract. In this example, the additional underlying asset is the new 3,000 square metres of office space. Accordingly, at the commencement date of the new lease (at the end of the second quarter of Year 6), Lessee recognises a ROU Asset and a lease liability relating to the lease of the additional 3,000 square metres of office space. Lessee does not make any adjustments to the accounting for the original lease of 2,000 square meters of office space as a result of this modification.

Modification – Not Separate Lease:

If a lease modification fails the test above (e.g. additional right of use granted, but not at a standalone price). Or the modification is of any other type (e.g. a decrease in scope from the original contract), the lessee must modify the initially recognised components of the lease contract.

The accounting treatment required for lease modifications that are not accounted for as separate leases is summarised below:

| Decrease in scope | • Remeasure lease liability using revised discount rate (i) |
| • Decrease right-of-use asset by its relative scope compared to the original lease (2) |
| • Difference between (1) and (2) recognised in P&L |
All other lease modification

- Remeasure lease liability using revised discount rate
- Remeasure right of use asset by same amount

The implicit rate in the lease is to be used. If it cannot be readily determined, the incremental rate of borrowing is to be used.

The re-measurement above occur as of the effective date of the lease modification on prospective basis.

In some cases, the lessee and lessor may agree to a modification to the lease contract that starts at a later date (i.e., the terms of the modification take effect at a date than the date when both parties agreed to the modification). This can be understood with help of a following example:

<table>
<thead>
<tr>
<th>Lease Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in Consideration</td>
</tr>
<tr>
<td>Change in lease term</td>
</tr>
<tr>
<td>Change in scope</td>
</tr>
</tbody>
</table>

### Change in Consideration

- Increase
  - Remeasure the lease liability at modification date
  - Make corresponding adjustment to ROU Asset

- Decrease
  - Derecognise the lease liability and ROU Asset to reflect the partial or full termination of the lease
  - Recognise in P&L the gain or loss on termination of the lease

### Change in Lease Term

- Decrease
  - Consideration not commensurate to stand-alone selling price
  - Remeasure the lease liability at modification date
  - Make corresponding adjustment to ROU Asset

- Increase
  - Consideration commensurate to stand-alone selling price
  - Increase in scope of the lease of Underlying asset to be accounted as a new
QUESTION 34

Modification that increases the scope of the lease by extending the contractual lease term

Lessee enters into a 10-year lease for 5,000 square metres of office space. The annual lease payments are ₹1,00,000 payable at the end of each year. The interest rate implicit in the lease cannot be readily determined. Lessee’s incremental borrowing rate at the commencement date is 6% p.a. At the beginning of year 7, lessee and lessor agree to amend the original lease by extending the contractual lease term by four years. The annual lease payments are unchanged (i.e., ₹1,00,000 payable at the end of each year from Year 7 to Year 14). Lessee’s incremental borrowing rate at the beginning of Year 7 is 7% p.a.

How should the said modification be accounted for?

QUESTION 35

Modification that decreases the scope of the lease

Lessee enters into a 10-year lease for 5,000 square metres of office space. The annual lease payments are ₹50,000 payable at the end of each year. The interest rate implicit in the lease cannot be readily determined. Lessee’s incremental borrowing rate at the commencement date is 6% p.a. At the beginning of Year 6, Lessee and Lessor agree to amend the original lease to reduce the space to only 2,500 square meters of the original space staring from the end of the first quarter of Year 6. The annual fixed lease payments (from Year 6 to Year 10) are ₹30,000. Lessee’s incremental borrowing rate at the beginning of Year 6 is 5% p.a.

How should the said modification be accounted for?

QUESTION 36

Modification that is a change in consideration only

Lessee enters into a 10-year lease for 5,000 square metres of office space. At the beginning of Year 6, Lessee and Lessor agree to amend the original lease for the remaining five years to reduce the lease payments from ₹1,00,000 per year to ₹95,000 per year. The interest rate implicit in the lease cannot be readily determined. Lessee’s incremental borrowing rate the commencement date is 6% p.a. Lessee’s incremental borrowing rate at the commencement date is 6% p.a. Lessee’s incremental borrowing rate at the beginning of year 6 is 7% p.a. The annual lease payments are payable at the end of each year.

How should the said modification be accounted for?
**QUESTION 37**

Modification that both increases and decreases the scope of the lease

Lessee enters into a 10-year lease for 2,000 square metres of office space. The annual lease payments are ₹1,00,000 payable at the end of each year. The interest rate implicit in the lease cannot be readily determined. Lessee’s incremental borrowing rate at the commencement date is 6%p.a.

At the beginning of Year 6, Lessee and Lessor agree to amend the original lease to:

a) include an additional 1,500 square metres of space in the same building starting from the beginning of Year 6 and

b) reduce the lease term from 10 years to eight years. The annual fixed payment for the 3,500 square meters is ₹1,50,000 payable at the end of each year (from Year 6 to Year 8). Lessee’s incremental borrowing rate at the beginning of Year 6 is 7%p.a.

The consideration for the increase in scope of 1,500 square metres of space is not commensurate with the stand-alone price for that increase adjusted to reflect the circumstances of the contract. Consequently, Lessee does not account for the increase in scope that adds the right to use an additional 1,500 square metres of space as a separate lease.

How should the said modification be accounted for?

**STEP V: PRESENTATION**

ROU Asset and lease liabilities are subject to the same considerations as other assets and liabilities in classifying them as current and non-current in the balance sheet. The following table depicts how lease-related amounts and activities are presented in lessees financial statements:

<table>
<thead>
<tr>
<th>Balance Sheet</th>
<th>Statement of profit or loss</th>
<th>Statement of cash flows</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROU Assets:</strong>&lt;br&gt;They are presented either:&lt;br&gt;- Separately from other assets (e.g., owned assets) OR</td>
<td><strong>Depreciation and interest:</strong>&lt;br&gt;Depreciation on Right of use asset and interest expense accreted on lease liabilities are presented separately (i.e. they CANNOT be combined).</td>
<td><strong>Principal portion of the lease liability:</strong>&lt;br&gt;- These cash payments are presented within financing activities&lt;br&gt;Interest portion of the lease liability&lt;br&gt;- These cash payments are presented within financing activities</td>
</tr>
</tbody>
</table>
- Together with other assets as if they were owned, with disclosures of the balance sheet line items that include ROU Assets and their amounts

ROU Assets that meet the definition of investment property are presented as investment property

**Lease Liabilities:**

The are presented either:
- Separately from other liabilities OR
- Together with other liabilities with disclosure of the balance sheet line items that includes lease liabilities and their amounts

This is because interest expense on the lease liability is a component of **finance costs.** Which paragraph 82(b) of Ind AS 1 Presentation of Financial Statements requires to be presented separately in the statement of profit or loss.

Short -term leases and leases of low -value assets:
- Lease payments pertaining to them (i.e., not recognised on the balance sheet as per Ind AS 116) are presented within **operating activities**

Variable lease payments not included in the lease liability:
- These are also presented within **operating activities**

**Non- cash activity:**

Such activity is disclosed as supplemental non-cash item (e.g., the initial recognition of the lease at commencement)

---

**STEP VI: DISCLOSURE**

**Disclosure objective:**

The objective of the disclosures is for lessees to disclose information in the notes that, together with the information provided in the balance sheet, statement of profit and loss and statement of cash flows, gives a basis for users of financial statements to assess the effect that leases have on the financial position, financial performance and cash flows of the lessee.

Ind AS 116 requires lessess to present All disclosures in:
- A single note OR
- Separate section in the financial statements.
Quantitative Disclosure Requirement

<table>
<thead>
<tr>
<th>Balance Sheet</th>
<th>Statement of profit and Loss</th>
<th>Statement of Cash Flows</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Additions to right-of-use assets.</td>
<td>- Depreciation for assets by class.</td>
<td>- Total cash outflow for leases.</td>
</tr>
<tr>
<td>- Carrying value of right-of-use assets at the end of the reporting period by class.</td>
<td>- Interest expense on lease liabilities</td>
<td></td>
</tr>
<tr>
<td>- Maturity analysis of lease liabilities separately from other liabilities based on Ind AS 107 requirements.</td>
<td>- Short-term leases expensed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Low-value leases expenses.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Income from subleasing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gains or losses arising from sale and leaseback transactions.</td>
<td></td>
</tr>
</tbody>
</table>

*These disclosures need not include leases with lease terms of one month or less.

All of the above disclosures are requires to be presented in tabular format, unless another format is more appropriate. The amounts disclosed include costs that a lessee has included in the carrying amount of another asset during the reporting period.

Other disclosure requirements also include:

♦ Commitments for short-terms leases if the current period expense is dissimilar to future commitments.

♦ For right-of use assets that meet the definition of investment property, the disclosure requirements of Ind AS 40, Investment property, with a few exclusions.

♦ For right-of use assets where the revaluation model has been applied, the disclosure requirement of Ind AS 16, Property, plant and equipment.

♦ Entities applying the short-term and/or low value lease exemption are required to disclose the fact.

Qualitative Disclosuer Requirements

- A summary of the nature of the entity’s leasing activates;
- Potential cash outflows the entity is exposed to the are not included in the measured lease liability, including
- Variable lease payments;
- Extension options and termination options;
- Residual value guarantee, and
- Leases not yet commenced to which the lessee is committed.
- Restrictions or covenants imposed by leases; and
- Sale and lease back transaction information.

CONCEPT 10: LESSOR ACCOUNTING

A lessor is defined as an entity that provides the right to use an underlying asset for a period of time in exchange for consideration.

At inception, lessors classify all leases as FINANCE LEASE or OPERATING LEASE. Lease classification is very important because it determined how and when a lessor recognizes lease income and what assets are recorded. Classification is based on the extent to which the risk and rewards incidental to ownership of the underlying asset lie with the lessor or the lessee. it depends on the substance of the transaction rather than the form of the contract.

Where, a finance lease’ is defined as a lease that transfers substantially all the risks and rewards incidental to ownership of an underlying asset.

Where, an operating lease’ is defined as a lease that does not transfer substantially all the risks and rewards incidental to ownership of an underlying asset.

Ind AS 116 lists a number of examples that individually, or in combination, would normally lead to a lease being classified FINACE LEASE:

<table>
<thead>
<tr>
<th>Ownership</th>
<th>the lease transfers ownership of the asset to the lessee by the end of the lease term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase option</td>
<td>The lessee has the option to purchase the asset at a price that is expected to be sufficiently lower than the fair value at the date the option become exercisable for it to be reasonably certain, at the inception date, that the option will be exercised</td>
</tr>
<tr>
<td>Lease term</td>
<td>The lease term is for the major part of the economic life of the asset even if title is not transferred</td>
</tr>
<tr>
<td>PV of Minimum Lese Payments</td>
<td>At the inception date, the present value of the lease payment amounts to at least substantially all of the fair value of the asset</td>
</tr>
</tbody>
</table>
**Specialised Nature**

- The asset is of such a specialised nature that only the lessee can use it without major modifications

Additionally, Ind AS 116 lists the following indicators of situations that, individually or in combination, could also lead to a lease being classified as a **Finance Lease**:

<table>
<thead>
<tr>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Loss on cancellation</strong></td>
</tr>
<tr>
<td>- If the lessee can cancel the lease, the lessor's losses associated with the cancellation are borne by the lessee</td>
</tr>
<tr>
<td><strong>Risk of fair value of the residual asset</strong></td>
</tr>
<tr>
<td>- Gains or losses from the fluctuation in the fair value of the residual accrue to the lessee (e.g., in the form of a rent rebate that is equal to most of the sale proceeds at the end of the lease)</td>
</tr>
<tr>
<td><strong>Option to extend lease</strong></td>
</tr>
<tr>
<td>- The lessee has the ability to continue the lease for a secondary period at a rent that is substantially lower than market rent</td>
</tr>
</tbody>
</table>

**Other considerations** that could be made in determining the economic substance of the lease arrangement include the following:

- Are the lease rentals based on a market rate for use of the asset (which would indicate an operating lease) or a financing rate of use of the funds, which be indicative of a finance lease?

- Is the existence of put and call options a feature of the lease? If so, are they exercisable at a predetermined price or formula (indicating a finance lease) or are they exercisable at the market price at the time the option is exercised (indicating an operating lease)?

**Lease classification test for land and buildings:**

For a lease that includes both land and buildings elements, the lessor **separately assesses** the classification of each element as a finance lease or an operating lease, **having fact that land normally has an indefinite economic life.**

The lessor allocated lease payments between the land and the buildings elements in proportion to the relative fair values of the leasehold interest in the land element and buildings element of the lease at the inception date, if the lease payments cannot be allocated reliably between these two elements, the entire lease is classified as a finance lease, unless it is clear that both elements are operating leases, in which case, the entire lease is classified as an operating lease.
For a lease of land and building in which the amount for the land element is *immaterial* to the lease, the lessor may treat the land and buildings as *single unit* for the purpose of lease classification and classify it as a fiancé lease or an operating lease. In such a case, the lessor regards the economic life of the buildings as the economic life of the *entire* underlying asset.

**Residual value guarantees included in the lease classification test:**

In evaluating Ind AS 116’s lease classification criteria, lessors are required to include in the substantially all test *any* (i.e., the maximum obligation) residual value guarantees provided by both lessees and any other third party unrelated to the lessor.

**Reassessment of lease classification:**

Lessors are required to **reassess** the lease classification only if there is a lease modification (i.e., a change in the scope of a lease, or the consideration for a lease, that was not part of the original terms and conditions of the lease). Lessors reassess lease classification as at the *effective date of the modification* using the modified conditions at that date if a lease modification results in a separate new lease, that new lease would be classified in the *same manner* as any new lease.

**Key concepts applied by the lessor:**

- **Gross investment in the lease** in the *SUM* of:
  
  (a) the lease payments receivable by a lessee under a finance lease; **AND**
  
  (b) Any unguaranteed residual value accruing to the lessor.

  ‘Net investment in the lease’ is the gross investment in the lease discounted at the interest rate implicit in the lease.

- **Unguaranteed residual value** is that portion of the residual value of the underlying asset, the of which by a lessor is not assured or is guaranteed solely by a party related to the lessor.
UNIT 1: FINANCE LEASES

RECOGNITION

At the commencement date, a lessor shall recognize assets held under a finance lease in its balance sheet and present them as a receivable at an amount equal to the net investment in the lease.

INITIAL MEASUREMENT

At lease commencement, a lessor accounts for a finance lease, as follows:

| Derogonises the carrying amount of the underlying asset |
| Recognises the net investment in the lease |
| Recognises, in profit or loss, any selling profit or selling loss |

For finance leases other than those involving manufacturer and dealer lessors, initial direct costs are included in the initial measurement of the finance lease receivable. Initial direct costs are included in the lease, and are not added separately to the net investment in lease.

The present value of lease payments + the present value of the unguaranteed residual value

Any selling profit or loss is measured as the difference between the fair value of the underlying asset or the lease receivable, if lower, and the carrying amount of the underlying asset, net of any unguaranteed residual asset.

INITIAL MEASUREMENT MANUFACTURER OR DEALER LESSORS

At the commencement date, a manufacturer or dealer lessor recognizes selling profit or loss in accordance with its policy for outright sales to which Ind AS 115 applies.

Therefore, at lease commencement, a manufacturer or dealer lessor recognizes the following:

The fair value of the underlying asset as revenue OR the present value of the lease payments disclosed using a market rate of interest, whichever is lower.

The cost (or carrying amount) of the asset (less) the present value of the unguaranteed residual value, as cost of sale.

The selling profit or loss in accordance with the policy for outright sales.
AT the commencement date, a manufacturer or dealer lessor recognizes selling profit or loss on a finance lease, regardless of whether the lessor transfers the underlying asset as described under Ind AS 115. Costs incurred by a manufacturer or dealer lessor in connection with obtaining a finance lease are recognised as an expense at the commencement date and are excluded from the net investment in the lease because they are mainly related to earning the manufacturer or dealer’s selling profit.

Accounting for initial direct costs shall be done in the following manner:

<table>
<thead>
<tr>
<th>By Lessor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance Lease:</strong></td>
</tr>
<tr>
<td>Ind AS 116 requires lessors (other than manufacturer or dealer lessors) to include initial direct costs in the initial measurement of their net investments in finance leases and reduce the amount of income recognised over the lease term.</td>
</tr>
<tr>
<td>The interest rate implicit in the lease is defined in such a way that the initial direct costs are included automatically in the net investment in the lease and they are not added separately. (Initial direct costs related to finance leases incurred by manufacturer or dealer lessors are expenses at lease commencement).</td>
</tr>
<tr>
<td><strong>Operating Lease:</strong></td>
</tr>
<tr>
<td>Ind AS 116 requires lessors to include initial direct costs in the carrying amount of the underlying asset in an operating lease. These initial direct costs are recognised as an expense over the lease term on the same basis as lease income.</td>
</tr>
</tbody>
</table>

**SUBSEQUENT MEASUREMENT**

After lease commencement, a lessor accounts for a finance lease, as follows:

- Recognises **finance income** in profit or loss) over the lease term in amount that produces a constant periodic rate of return on the remaining balance of the net investment in the lease (i.e., using the interest rate implicit in the lease).
  - Income is recognised on the components of the net investment in the lease, which is interest on the lease receivables.
- Reduces the net investment in the lease for lease payments received (net of finance income calculated above)
- Separately recognises income from variable lease payments that are not included in the investment in the lease (e.g., performance - or usage - based variable payments) in the period in which that income is earned
- Recognises any impairment of the net investment in the lease
REMEAUREMENT OF THE NET INVESTMENT IN THE LEASE

After lease commencement, the investment in a lease in **NOT REMEASURED UNLESS** in either of the following situations:

♦ The lease in modified (i.e., a change in the scope of the lease, or the consideration for that lease, that was not part of the original terms and conditions of the lease) and modified lease is not accounted for as a separate contract
  OR

♦ The lease term is revised when is a change in the non-concillable period of the lease.
  (Refer section 3.5.4 Modification of lease)

**QUESTION 38**

Lessor accounting for a finance lease - dealer-lessee case

A Lessor enters into a 10-year lease of equipment with Lessee. The equipment is not specialized in nature and is expected to have alternative use to Lessor at the end of the 10-year lease term. Under the lease:

- Lessor receives annual easy payments of `15,000, payable at the end of the year
- Lessor expects the residual value of the equipment to be `50,000 at the end of the 10-year lease term
- Lessee provides a residual value guarantee that protects Lessor from the first `30,000
- The equipment has an estimated remaining economic life of 15 years, a carrying amount of `1,00,000 and a fair value of `1,11,000
- The lease does not transfer ownership of the underlying asset to Lessee at the end of lease term or contain an option to purchase the underlying asset
- The interest rate implicit in the lease is 10.078%.

How should the Lessor account for the same in its books of accounts?

**IMPAIRMENT OF THE NET INVESTMENT IN THE LEASE**

A lessor shall apply the derecognition and impairment requirement in Ind AS 109 to the net investment in the lease. A lessor shall review regularly estimated unguaranteed residual values used in computing the gross investment in the lease. If there has been a reduction in the estimated unguaranteed residual value the lessor shall revise the income allocation over the lease term and recognise immediately any reduction in respect of amounts accrued.
UNIT II: OPERATING LEASES

RECOGNITION AND MEASUREMENT

A lessor shall recognise lease payments from operating leases as income on either a straight-line basis OR another systematic basis. The lessor shall apply another systematic if that basis is more representative of the pattern in which benefit derived from the use of the underlying asset is diminished.

Lessors subsequently recognize lease payments over the lease term on either a straight-line basis or another systematic and rational basis if that basis better represents the pattern in which benefit is expected to be derived from the use of the underlying asset. After lease commencement, lessors recognise variable lease payments that do not depend on an index or rate (e.g., performance - or usage-based payments) as they are earned.

In AS 116 also requires lessors of operating leases to defer initial direct costs at lease commencement and recognize them over the lease term on the some basis as lease income.

UNIT III: LEASE MODIFICATIONS

A lease modification is a change in the scope of a lease, or the consideration for a lease, that was not part of the original terms and conditions of the lease (for e.g., adding or terminating the right to use one or more underlying assets or extending or shortening the contractual lease term).

FINANCE LEASE MODIFICATION

A lease modification is accounted for as a separate lease if both:

(a) The modification increases the scope of the adding the right to use or more underlying assets’ and

(b) The consideration for the lease increases by an amount commensurate with the standalone price for the increase in scope.

If both criteria are met, a lessor would follow the exiting lessor guidance on initial recognition and measurement.

- Account for the lease modification as a new lease from the effective date of the modification; and
- Measure the carrying amount of the underlying asset as the net investment in the lease immediately before the effective date of the lease modification.

The lease would have been classified as operating with the modifications at the inception date.
MODIFICATION – NOT SEPARATE LEASE:

If a lease modification fails the test to be considered as separate lease as mentioned above, the lessor follows the following guidance:

- Apply the requirements of Ind AS 109 Financial Instrument

The re-measurements above occur as of the effective date of the lease modification on a prospective basis.

OPERATING LEASE MODIFICATION

A lessor shall account for a modification to an operating lease as a new lease from the effective date of the modification, considering any prepaid or accrued lease payments relating to the original lease as part of the lease payments for the new lease.

UNIT IV: PRESENTATION

Lessors have the following presentation requirements under Ind AS 116, depending on the classification of leases:

<table>
<thead>
<tr>
<th>Finance Leases</th>
<th>Operating Leases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lessors recognize assets held under a finance lease in the balance sheet and present them as a receivable at an amount equal to the net investment in the lease under Ind AS 116. In addition, the net investment in the lease is subject to the same considerations as other assets in classification as current or non-current assets in a classified balance sheet.</td>
<td>Lessors are required to present underlying assets subject to operating leases according to the nature of that asset in the balance sheet under Ind AS 116.</td>
</tr>
</tbody>
</table>

DISCLOSURE

The objective of the disclosure requirements for lessors to disclose information in the notes that together with information provided in the balance sheet, statement of profit or loss and statement of cash flows, gives a basis for users of financial statement to assess the effect that leases have on the financial position, financial performance and cash flows of the lessor.
The lessor disclosure requirements in Ind AS 116 are more extensive to enable users of financial statements to better evaluate the amount, timing and uncertainty of cash flows arising from a lessor’s activities.

<table>
<thead>
<tr>
<th>Quantitative Disclosure Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance leases</strong></td>
</tr>
<tr>
<td>- Selling profit or loss.</td>
</tr>
<tr>
<td>- Finance income on the net investment;</td>
</tr>
<tr>
<td>- Income from variable lease payments;</td>
</tr>
<tr>
<td>- Qualitative and quantitative explanation of changes in the net investment; and</td>
</tr>
<tr>
<td>- Maturity analysis of lease payments receivable</td>
</tr>
<tr>
<td><strong>Operating leases</strong></td>
</tr>
<tr>
<td>- Lease income, separately disclosing variable lease payments;</td>
</tr>
<tr>
<td>- Disclosure requirements of Ind AS 16 for leased asset, separating leased assets from non-leased assets;</td>
</tr>
<tr>
<td>- Other applicable disclosure requirements based on the nature of the underlying asset (e.g. Ind AS 36, Ind AS 38, AS 40 and Ind AS 41); and</td>
</tr>
<tr>
<td>- Maturity analysis of lease payments</td>
</tr>
</tbody>
</table>
CONCEPT 11: SUB-LEASES

Recognition and Measurement

A Sub-lease is defined as a transaction for which an underlying asset is re-leased by a lessee (intermediate lessor) to a third party, and the lease ('head lease') between the head lessor and lessee remains in effect.

Lessees often enter into arrangements to sublease a leased asset to a third party while the original lease contract is in effect, where, one party acts as both the lessee and lessor of the same underlying asset. The original lease is often referred to as a head lease' the original lessee is often referred to as an intermediate lessor or sub-lessor and the ultimate lessee is often referred to as the sub lessee.

It can be demonstrate with help of a following simple diagram:

```
Sub Lease          Lessor          Head lease
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Lessee/intermediate lessor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lessee/Sub-lessee</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

In some cases, the sublease is a separate lease agreement while, in other cases, a third party assumes the original lease but, the original lessee remains the primary under the original lease.

Intermediate Lessor Accounting:

Where an underlying asset is re-leased by a lessee to a third party and the original lessee retain the primary obligation under the original lease, the transaction is a sublease, i.e., the original lessee generally continues to account for the original lease (the head lease) as a lessee and accounts for the sublease as the lessor (intermediate lessor).

When the head lease is a short-term lease, the sublease is classified as an operating lease. Otherwise, the sublease is classified using the classification criteria (as discussed earlier) BUT, it should be by reference to the ROU Asset in the head lease (and NOT the underlying asset of the head lease). This can be understood better with help of a following illustration:

**QUESTION 9**

Classification of a sublease in case of an Intermediate Lessor

Entity ABC (original lessee/intermediate lessor) leases a building for five years. The building has an economic life of 40 years. Entity ABC subleases the building for four years.

How should the said sublease be classified by Entity ABC?
The sublease is classified with reference to the 'ROU Asset' in the head lease (and NOT the 'underlying building' of the head lease). Hence, when assessing the useful life criterion, the sublease term of four years is compared with five-year ROU Asset in the head lease (NOT compared with 40-year economic life of the building) and accordingly may result in the sublease being classified as a finance lease.

The intermediate lessor accounts for the sublease as follows:

<table>
<thead>
<tr>
<th>IF THE SUBLEASE IS CLASSIFIED AS FINANCE LEASE</th>
<th>IF THE SUBLEASE IS CLASSIFIED AS AN OPERATING LEASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The original lessee derecognizes the ROU Asset on the head lease at the sublease commencement date and continues to account for the original lease liability in accordance with the lessee accounting model. The original lessee (as the intermediate lessor) recognizes a net investment in the sublease and evaluates it for impairment.</td>
<td>The original lessee continues to accounts for the lease liability and ROU asset on the head lease like any other lease. If the total remaining carrying amount of the Rou asset on the head lease exceeds the anticipated sublease income, this may indicate that the ROU asset associated with the head lease is impaired (which is assessed for impairment under Ind AS 36).</td>
</tr>
</tbody>
</table>

**QUESTION 40**

Intermediate Lessor - Where the sublease is classified as a 'Finance Lease'

**Head lease:**
An intermediate lessor enters into a five-year lease for 10,000 square metres of office space (the head lease) with Entity XYZ (the head lessor).

**Sublease:**
At the beginning of Year 3, the intermediate lessor subleases the 10,000 square metres of office space for the remaining lease term i.e., three years of the head lease to a sub-lessee.

How should the said sublease be classified and accounted for by the Intermediate Lessor?

**SOLUTION:**
The intermediate lessor classifies the sublease by reference to the ROU Asset arising from the head lease (i.e., in this case, comparing the three-year sublease with the five-year ROU Asset in the head lease). The intermediate lessor classifies the sublease as a finance lease, having considered the requirements of Ind AS 116 (i.e., one of the criteria of 'useful life' for a lease to be classified as a finance lease).
When the intermediate lessor enters into a sublease, the intermediate lessor:

(i) Derecognizes the ROU asset relating to the head lease that it transfers to the sublessee and recognises the net investment in the sublease;
(ii) Recognises difference between the ROU asset and the net investment in the sublease in profit or loss, AND
(iii) Retains the lease liability relating to the head lease in its balance sheet, which represents the lease payments owed to the head lessor.

During the term of the sublease, the intermediate lessor recognises both

- finance income on the sublease AND
- Interest expense on the head lease.

QUESTION 41

Intermediate Lessor – Where the sublease is classified as a ‘Operating Lease’

Head lease:
An intermediate lessor enters into a five-year lease for 10,000 square metres of office space (the head lease) with Entity XYZ (the head lessor).

Sublease:
At the commencement of the head lease, the intermediate lessor subleases the 10,000 square metres of office space for two years to a sub-lessee.

How should the said sublease be classified and accounted for by the Intermediate Lessor?

SOLUTION:

The intermediate lessor classifies the sublease by reference to the ROU Asset arising from the head lease (i.e., in this case, comparing the two-year sublease with the five-year ROU Asset in the head lease). The intermediate lessor classifies the sublease as an operating lease, having considered the requirements of IndAS 116 (i.e., one of the criteria of ‘useful life’ for a lease to be classified as a finance lease and since, it is not satisfied, classified the same as an operating lease).

When the intermediate lessor enters into the sublease, the intermediate lessor retains:

- the lease liability AND
- the ROU Asset
both relating to the head lease in its balance sheet.
During the term of the sublease, the intermediate lessor:

- (a) recognises a depreciation charge for the ROU asset and interest on the lease liability; **AND**
- (b) recognises lease income from the sublease.

**CONCEPT 11: SALE AND LEASEBACK TRANSACTIONS**

A sale and leaseback transaction involves the transfer of an asset by an entity (the seller-lessee) to another entity (the buyer-lessor) and the leaseback of the same asset by the seller-lessee.

Sale and leaseback transactions would no longer provide lessees with a source of off-balance sheet financing because under Ind AS 116, lessees are required to recognise most leases on the balance sheet (i.e., all leases except for leases of low-value assets and short-term leases depending on the lessee’s accounting policy lection).

Further, both the seller-lessee and the buyer-lessor are required to apply Ind AS 115 to determine whether to account for a sale and leaseback transaction as a sale and purchase of an asset.

**Transactions in which the transfer of an asset is a SALE**

If the transfer of an asset by the seller-lessee satisfied the requirements of Ind AS 115 to be accounted for as a sale of the asset:

<table>
<thead>
<tr>
<th>Seller-lessee</th>
<th>Buyer-lessee</th>
</tr>
</thead>
<tbody>
<tr>
<td>The seller-lessee shall measure the ROU asset arising from the leaseback at the proportion of the previous carrying amount of the asset that related to the right of use retained by the seller-lessee. Accordingly, the seller-lessee shall recognise only the amount of any gain or loss that relates to the rights transferred to the buyer-lessor. Thus, the seller-lessee will:</td>
<td>The buyer-lessee shall account for the purchase of the asset, applying applicable Ind AS and for the lease, applying the lessor accounting requirements under Ind AS 116. Thus, a buyer-lessee accounts for the purchase of the asset in accordance with other Ind Ass based on the nature of the asset (for e.g., Ind AS 16 for property, plant and equipment).</td>
</tr>
<tr>
<td>- Derecognise the underlying asset</td>
<td>- Recognise the gain or loss, if any, that relates to the rights transferred to the buyer-lessee (adjusted for off-market terms)</td>
</tr>
</tbody>
</table>
When a sale occurs, both the seller-lessee and the buyer-lessee account for the leaseback in the same as any other lease (with adjustment for any off-market terms). Specifically, a seller-lessee recognises a lease liability and ROU asset for the leaseback subject to the optional exemptions for short-term leases and leases of low-value assets).

An entity shall make the following adjustments to measure the sale proceeds at fair value if:

- The fair value of the consideration for the sale of an asset not equal the fair value of the asset OR
- The payments for the lease are not at market rates:
  (a) Any below-market terms shall be accounted for as prepayments of lease payments; AND
  (b) any above-market terms shall be accounted for as an additional financing provided by the buyer-lessee to the seller-lessee.

The entity shall measure any potential adjustment ('a' or 'b' as described above) on the basis of the following (whichever is more readily determinable):

(a) The difference between the fair value of the consideration for the sale and the fair value of the asset OR
(b) The difference between the present value of the contractual payments for the lease and the present value of payments for the lease at market rates.

The sale transaction and the resulting lease are generally interdependent and negotiated as a package. Consequently, some transactions could be structured with a negotiated sales price that is above or below the asset's fair value and with lease payments for the resulting lease that are above or below the market rates. These off-market terms could mislead/falsify the gain or loss on the sale and the recognition of lease expense and lease income for the lease. Thus, to ensure that the gain or loss on the sale and the lease-related assets and liabilities associated with such transactions are neither understated nor overstated, Ind AS 116 requires adjustments for any off-market terms of sale and leaseback transactions, on the more readily determinable basis (as discussed above). Thus the two possibilities of the sale price OR the present value of the lease payments being less or greater than the fair value of the asset OR present Value of the market lease payments, respectively is disclosed in detail:
<table>
<thead>
<tr>
<th>When sale price or Present Value is</th>
<th>When sale price or present Value is</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LESS</strong></td>
<td><strong>GREATER</strong></td>
</tr>
<tr>
<td>Using the more readily determinable basis:</td>
<td>Using the more readily determinable basis:</td>
</tr>
<tr>
<td>When the sale price is <strong>LESS</strong> than the underlying asset's fair value OR</td>
<td>When the sale price is <strong>GREATER</strong> than the underlying asset's fair Value or</td>
</tr>
<tr>
<td>The present value of the lease payments is <strong>LESS</strong> than present value of the market lease payments,</td>
<td>The present value of the lease payments is <strong>GREATER</strong> than the present value of the market lease payments,</td>
</tr>
<tr>
<td>A seller-lessee recognizes the difference as an <strong>increase</strong> to the sales price and the initial measurement of the ROU asset as a 'lease prepayment'.</td>
<td>A seller-lessee recognizes the difference as <strong>reduction</strong> in the sales price and an <strong>additional financing received</strong> from the buyer-lessor.</td>
</tr>
</tbody>
</table>

Buyer-lessors are also required to **adjust the purchase price** of the underlying asset for any off-market terms. Such adjustments are recognised as:
- 'lease prepayments' made by the seller-lessee OR
- 'additional financing provided' to the seller-lessee.

Let us consider an illustration to understand the accounting for a sale and leaseback transaction:

**QUESTION 42**

**Sale and leaseback transaction**

An entity (Seller-lessee) sells a building to another entity (Buyer-lessor) for cash of ₹30,00,000. Immediately before the transaction, the building is carried at a cost of ₹15,00,000. At the same time, Seller-lessee enters into a contract with Buyer-lessor for the right to use the building for 20 years, with annual payments of ₹2,00,000 payable at the end of each year.

The terms and conditions of the transaction are such that the transfer of the building by Seller-lessee satisfies the requirements for determining when a performance obligation is satisfied in Ind AS 115 Revenue from Contracts with Customers.

The fair value of the building at the date of sale is ₹27,00,000. Initial direct costs, if any, are to be ignored. The interest rate implicit in the lease is 12% p.a., which is readily determinable by Seller-lessee.
Buyer-lessor classifies the lease of the building as an operating lease. How should the said transaction be accounted by the Seller-lessee and the Buyer-lessor?

**CONCEPT 12: TRANSITION APPROACH**

An entity shall apply Ind AS 116 annual reporting periods beginning on or after **01 April 2019**.

For the purpose of the requirements of this Transition’ section, the **Date of initial application** is the **beginning of the annual reporting** period in which an entity first applies Ind AS 116.

Thus, Ind AS 116’s Transition provisions are applied at the beginning of the annual reporting period in which the entity first applies Ind AS 116. For e.g., an entity with a reporting date of 31 March 2020, applies the transitions provisions on 10 April 2019.

**TRANSITION OPTIONS FOR LESSEES**

A lessee is required to apply Ind AS 116 its leases in either of the following ways:

<table>
<thead>
<tr>
<th><strong>Full Retrospective Approach</strong></th>
<th><strong>Modified Retrospective Approach</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Retrospectively to each prior reporting period presented, applying Ind AS 8, i.e., an entity applies Ind AS 116 as if it had been applied since the inception of all lease contracts that are presented in the financial statements.</td>
<td>Retrospectively with cumulative effect of initially applying Ind AS 116 recognise as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the ate of the initial application, therefore, restatement of comparatives is not required an only Balance sheets for reporting date and comparative date is required to be presented.</td>
</tr>
</tbody>
</table>

If Ind AS 116 is applied at 01 April 2019, this means that, in the 31 March 2020 financial statements, the comparative period to 31 March 2019 must be restated (assuming that this is the only comparative period presented. A restated opening balance sheet at 01 April 2018 will also need to be discloses a required by Ind AS 1. Hence the balance sheet for 3 period will be presented: As at 31 March 2020, 31 March 2019 & 1 April 2018.

A lessee shall apply the elected transition approach consistently to ALL lessees in which it is lessee.
**MODIFIED RETROSPECTIVE APPROACH**

**LEASES PREVIOUSLY CLASSIFIED AS OPERATING LEASES**

When *applying the modified retrospective approach* a lessee does not restante comparative figures rather, a lessee recognises the cumulative effect of initially applying Ind AS 116 as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the date of initial application.

For lessee previously classified as operating leases under Ind AS 17 a lessee recognises a lease liability measured at the present value of the remaining lease payments, discounted using the lessee’s incremental borrowing rate at the date of initial application. A lessee measured the ROU asset on a **lease-by lease basis**, u at either

- Its carrying amount as if In AS 116 had allows been applied since the commencement date, but using a discount rate based on the lessee’s incremental borrowing rate at the date of initial application (Alternative 1)

- An amount equal to the lease liability, adjusted for previously recognises prepaid or accrued lease payments (Alternative 2)

A lessee applies Ind AS 36 to ROU asset at the date of initial application unless the lessee apples the practical expedient for onerous leases (as discussed below).

A lessee is not required to make adjustments on transition for leases of low-value assets (which is one of the recognition exemptions under Ind AS 116-as discussed earlier).

**LEASES PREVIOUSLY CLASSIFIED AS FINANCE LEASES**

When applying modified retrospective approach, for leases that were classified as finance leases applying Ind AS 17. the carrying amount of the ROU asset and the lease liability at the date of initial application shall be the carrying amount of the lease asset and lease liability immediately before that date measured applying Ind AS 17. For such leases, a lessee shall account for the ROU asset and the lease liability applying Ind AS 116 from the date of initial application. Thus a lessee will not change its initial carrying amounts for assets and liabilities under finance leases existing at the date of initial application of Ind AS 116.

<table>
<thead>
<tr>
<th>Operating Lease</th>
<th>Lease liability</th>
<th>Measure at the present value of the remaining lease payments, Discounted using lessee’s Incremental borrowing rate at the date of initial application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right – of – use asset</td>
<td>Retrospective calculation, using a discount rate based on lessee’s incremental borrowing rate at the date of initial application. Or</td>
<td></td>
</tr>
</tbody>
</table>
### Question 43

**Transition Approaches**

A retailer (lessee) entered into a 3-year lease of retail space beginning at 1 April 2017 with three annual lease payments of ₹2,00,000 due on 31 March 2018, 2019, and 2020, respectively. The lease is classified as an operating lease under Ind AS 17. The retailer initially applies Ind AS 116 for the first time in the annual period beginning at 1 April 2019. The incremental borrowing rate at the date of the initial application (i.e., 1 April 2019) is 10% p.a. and at the commencement of the lease (i.e., 1 April 2017) was 12% p.a. The ROU asset is subject to straight-line depreciation over the lease term. Assume that no practical expedients are elected, the lessee did not incur initial direct costs, there were no lease incentives and there were no requirements for the lessee to dismantle and remove the underlying asset, restore the site on which it is located or restore the underlying asset to the condition under the terms and conditions of the lease.

What would be the impact for the lessee using all the following transition approaches: Full Retrospective Approach

- Alternative 1
- Alternative 2

<table>
<thead>
<tr>
<th>Finance Lease</th>
<th>Lease liability</th>
<th>Carrying amount of the lease liability immediately before the date of initial application.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right - of - use asset</td>
<td>Carrying amount of the lease asset immediately before the date of initial application.</td>
<td></td>
</tr>
<tr>
<td>Application Ind AS 116</td>
<td>Apply the provisions of this standard to Right of use asset and lease liability from date of initial application.</td>
<td></td>
</tr>
</tbody>
</table>
Disclosure requirements vary in accordance with the Transition Approach opted. The lessee shall disclose the following as required by Ind AS 8 (except that it is impracticable to determine the amount of the adjustment):

<table>
<thead>
<tr>
<th>Full Retrospective Approach</th>
<th>Modified Retrospective Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(a)</em> The title of the Ind AS:</td>
<td><em>(a)</em> The title of the Ind AS:</td>
</tr>
<tr>
<td><em>(b)</em> When applicable that the change in accounting policy is made in accordance with its transitional provisions:</td>
<td><em>(b)</em> When applicable, that the change in accounting policy is made in accordance with its transitional provisions:</td>
</tr>
<tr>
<td><em>(c)</em> The nature of the change in accounting policy;</td>
<td><em>(c)</em> The nature of the change in accounting policy;</td>
</tr>
<tr>
<td><em>(d)</em> When applicable, a description of the transitional provisions;</td>
<td><em>(d)</em> When applicable, a description of the transitional provisions;</td>
</tr>
<tr>
<td><em>(e)</em> When applicable the transitional provisions that might have an effect on future periods;</td>
<td><em>(e)</em> When applicable, the transitional provisions that might have an effect on future periods;</td>
</tr>
<tr>
<td><em>(f)</em> For the current period and each prior period presented, to the extent practicable, the amount of the adjustment:</td>
<td><em>(f)</em> The weighted average lessee’s incremental borrowing rate applied to lease liabilities recognises in the balance sheet at the date of initial application; and an explanation of any difference between:</td>
</tr>
<tr>
<td>(i) For each financial statement line item affected; and</td>
<td>(i) Operating lease commitments disclosed applying Ind AS 17 at the end of the annual reporting period immediately preceding the date of initial application, discounted using the incremental borrowing rate at the date of initial application; and</td>
</tr>
<tr>
<td>(ii) If Ind AS 33 Earnings per Share applies to the entity, for and diluted earnings per share;</td>
<td>(ii) lease liabilities recognises in the balance sheet at the date of initial application.</td>
</tr>
<tr>
<td><em>(g)</em> The amount of the adjustment relating to periods before those presented, to the extent practicable; and</td>
<td><em>(g)</em> The amount of the adjustment relating to periods before those presented, to the extent practicable; and</td>
</tr>
<tr>
<td><em>(h)</em> If retrospective application required by Ind AS 8 is impracticable for a particular prior period, or for periods before those presented, the circumstances that led to the existence of that condition and a description of how and from when the change in accounting policy has been applied.</td>
<td></td>
</tr>
</tbody>
</table>
(h) If retrospective application required by Ind AS 8 is impracticable for a particular prior period, or for period before those presented, the circumstances that led to the existence of that condition and a description of how and fro when the change in accounting policy has been applied.

Further, if a lessee uses one or more of the practical expedients (already discussed above), it shall disclose that fact.

LESSORS

A lessor is not required to make any adjustments on transition for leases in which it is lessor and shall account for those leases applying Ind AS 116 from the date of initial application.

KEY DIFFERENCES BETWEEN IND AS 116 AND AS 19

The significant differences between Ind AS 116 and 19 are given below:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Particulars</th>
<th>Ind AS 116</th>
<th>AS 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lease definition</td>
<td>Under Ind AS 116, the definition of lease is similar to that in AS19. But, in Ind AS 116, there is substantial change in the guidance of how to apply this definition. The changes primarily relate to the concept of 'control' used in identifying whether a contract contains a lease or not.</td>
<td>Under Ind AS 116, the definition of lease is similar to that in AS 19. However, guidance part given therein is different.</td>
</tr>
<tr>
<td></td>
<td>Modifications:</td>
<td>Ind AS 116 brings in comprehensive prescription on accounting of modifications in lease contracts.</td>
<td>No such comprehensive coverage is there</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>3</td>
<td>Scope</td>
<td>Ind AS 116 has no such scope exclusion. Ind AS 116 makes a distinction between 'inception of lease' and 'commencement of lease'</td>
<td>AS 19 excludes leases of land from its scope. No such distinction has been made in AS 19</td>
</tr>
<tr>
<td>4</td>
<td>Classification</td>
<td>Ind AS 116 eliminates the requirement of classification of leases as either operating leases or finance leases for a lessee and instead, introduces a single lessee accounting model which requires lessee to recognise assets and liabilities for all leases unless it applies the recognition exemption applies.</td>
<td>AS 19 requires a lessee to classify leases as either finance leases or operating leases</td>
</tr>
<tr>
<td>5</td>
<td>Sale &amp; Leaseback transactions</td>
<td>In Ind AS 116. The approach for computation of gain/loss for a complete sale is different. The amount of gain/loss should reflect the amount that relates to the right transferred to the buyer-lessee.</td>
<td>As per AS 19, if a sale and leaseback transaction results in finance lease, excess, if any of the sale proceeds over the carrying amount sale be deferred and amortised by the seller-term in proportion to depreciation of the leased asset.</td>
</tr>
<tr>
<td></td>
<td>Treatment of initial direct costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finance lease lessor accounting</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-manufacturer/Non-dealer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Either recognised as expense immediately or allocated against the finance income over the lease term.</td>
<td>Interest rate implicit in the lease is defined in such a way that the initial direct costs included automatically in the finance lease receivable.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacturer/dealer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognised as expenses immediately.</td>
<td>Same as per AS 19.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operating lease-Lessor accounting</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Either deferred and allocated to income over the lease term in proportion to the recognition of rent income, or recognized as expense in the period in which incurred</td>
<td>Added to the carrying amount of the leased asset and recognised as expense over the lease term on the same basis as lease income.</td>
<td></td>
</tr>
</tbody>
</table>

**7** Initial direct costs

Ind AS 116 contains clearer definition of 'initial direct costs'.

Further, definition of the term 'interest rate implicit in the lease' has been modified in Ind AS 116.

**8** Presentation

As a consequence of introduction of single lease model for lessees, there are many changes in the presentation in the three components of financial statements viz. Balance sheet, Statement of P&L, Statement of Cash flows.
Disclosure

There are a number of changes in the disclosure relating to qualitative aspects of leasing transactions. For eg. Entities are required to disclose the nature and risks arising from leasing transactions. Also, in case of lessor, there are changes in the disclosure of maturity analysis of leases payments receivable.

| 9 | Disclosure | There are a number of changes in the disclosure relating to qualitative aspects of leasing transactions. For eg. Entities are required to disclose the nature and risks arising from leasing transactions. Also, in case of lessor, there are changes in the disclosure of maturity analysis of leases payments receivable. |

**MAJOR CHANGES UNDER IND AS 116 FROM IFRS 16**

Ind AS 116, like other Ind ASs, has been converged from the global standards, i.e., IFRSs, which has been made applicable to the Indian entities (based on the net worth criteria) in a phased manner via Ministry of Corporate Affairs Roadmap. While converging from IFRS 16 (which is applicable globally from the reporting periods beginning on or after 01 January 2019), following are the carve outs given under Appendix 1 to Ind AS 116, keeping in mind, the requirements of other converged Ind ASs and the economic environment in India:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Particulars</th>
<th>IFRS 16</th>
<th>Ind AS 116</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Subsequent measurement of investment property</td>
<td>Paragraph 34 of IFRS 16 provides that if lessee applies fair value model in IAS 40 to its investment property, it shall apply that fair value model to the ROU assets that meet the definition of investment property.</td>
<td>Paragraph 34 has been deleted under Ind AS 116 since Ind AS 40 Investment Property does NOT the use of fair value model. Consequently, reference of the same appearing anywhere under Ind AS 116 has also been deleted.</td>
</tr>
<tr>
<td>2</td>
<td>Interest portion of lease liability - classification in cash flow statement</td>
<td>Paragraph 50(b) of IFRS 16 requires to classify cash payments for interest portion of lease liability applying requirements of IAS 7 Statement of Cash Flows. IAS 7 provides option of treating interest paid as operating or financing activity.</td>
<td>Ind AS 7 requires interest paid to be treated as <strong>financing activity only</strong>. Accordingly, paragraph 50(b) has been <strong>modified</strong> under Ind AS 116 to specify that cash payments for interest portion of lease liability will be classified as financing activities applying Ind AS7.</td>
</tr>
</tbody>
</table>
(TEST YOUR KNOWLEDGE)

QUESTIONS

1. A lessee enters into a ten-year contract with a lessor (freight carrier) to transport a specified quantity of goods. Lessor uses rail wagons of a particular specification, and has a large pool of similar rail wagons that can be used to fulfill the requirements of the contract. The rail wagons and engines are stored at lessor’s premises when they are not being used to transport goods. Costs associated with substituting the rail wagons are minimal for lessor. Whether the lessor has substantive substitutions rights and whether the arrangement contains a lease?

2. Customer M enters into a 20-year contract with Energy Supplier S to install, operate and maintain a solar plant for M’s energy supply. M designed the solar plant before it was constructed - M hired experts in solar energy to assist in determining the location of the plant and the engineering of the equipment to be used. M has the exclusive right to receive and the obligation to take any energy produced. Whether it can be established that M is having the right to control the use of identified asset?

3. A Customer enters into a ten-year contract with a Company (a ship owner) for the use of an identified ship. Customer decides whether and what cargo will be transported, and when and to which ports the ship will sail throughout the period of use, subject to restrictions specified in the contract. These restrictions prevent the company from sailing the ship into waters at a high risk of piracy or carrying explosive materials. The company operates and maintains the ship, and is responsible for safe passage.

Does the customer has the right to direct how and for what purpose the ship is to be used throughout the period of use and whether the arrangement contains a lease?

4. A Lessee enters into a ten-year lease contract with a Lessor to use an equipment. The contract includes maintenance services (as provided by lessor). The Lessor obtains its own insurance for the equipment. Annual payments are ₹10,000 (₹1,000 relate to maintenance services and ₹500 to insurance costs).

The Lessee is able to determine that similar maintenance services and insurance costs are offered by third parties for ₹2,000 and ₹500 a year, respectively. The Lessee is unable to find an observable stand-alone rental amount for a similar equipment because none is leased without related maintenance services provided by the lessor.

How would the Lessee allocate the consideration to the lease component?

5. A Lessee enters into a non-cancellable lease contract with a Lessor to lease a building. Initially, the lease is for five years, and the lessee has the option to extend the lease by another five years at the same rental.

To determine the lease term, the lessee considers the following factors:

♦ Market rentals for a comparable building in the same area are expected to increase by 10% over the ten-year period covered by the lease. At inception of
the lease, lease rentals are in accordance with current market rents.

♦ The lessee intends to stay in business in the same area for at least 20 years.
♦ The location of the building is ideal for relationships with suppliers and customers.

What should be the lease term for lease accounting under Ind AS 116?

6. A lessee enters into a lease of a five-year-old machine. The non-cancellable lease term is 15 years. The lessee has the option to extend the lease after the initial 15-year period for optional periods of 12 months each at market rents.

To determine the lease term, the lessee considers the following factors:

♦ The machine is to be used in manufacturing parts for a type of plane that the lessee expects will remain popular with customers until development and testing of an improved model are completed in approximately 15 years.
♦ The cost to install the machine in the lessee’s manufacturing facility is significant.
♦ The non-cancellable term of the lessee’s manufacturing facility lease ends in 19 years, and the lessee has an option to renew that lease for another twelve years.
♦ Lessee does not expect to be able to use the machine in its manufacturing process for other types of planes without significant modifications.
♦ The total remaining life of the machine is 30 years.

What should be the lease term for lease accounting under Ind AS 116?

7. A company leases a manufacturing facility. The lease payments depend on the number of operating hours of the manufacturing facility, i.e., the lessee has to pay ₹ 2,000 per hour of use. The annual minimum payment is ₹ 2,00,00,000. The expected usage per year is 20,000 hours.

Whether the said payments be included in the calculation of lease liability under Ind AS 116?

ANSWERS

1. In this case, the rail wagons are stored at lessor’s premises and it has a large pool of similar rail wagons and substitution costs to be incurred are minimal. Thus, the lessor has the practical ability to substitute the asset. If at any point, the same become economically beneficial for the lessor to substitute the wagons, he can do so and hence, the lessor’s substitution rights are substantive and the arrangement does not contain a lease.

2. In this case, the nature of the solar plant is such that all of the decisions about how and for what purpose the asset is used are predetermined because:
   - the type of output (i.e. energy) and the production location are predetermined in the agreement; and
   - when, whether and how much energy is produced is influenced by the sunlight and the design of the solar plant.

Because M designed the solar plant and thereby predetermined any decisions about how and for what purpose it is used, M is considered to have the right to direct the
use. Although regular maintenance of the solar plant may increase the efficiency of the solar panels, it does not give the supplier the right to direct how and for what purpose the solar plant is used. Hence, M is having a right to control the use of asset.

3. The customer has the right to direct the use of the ship because the contractual restrictions are merely protective rights that protect the company’s investment in the ship and its personnel. In the scope of its right of use, the customer determines how and for what purpose the ship is used throughout the ten-year period because it decides whether, where and when the ship sails, as well as the cargo that it will transport.

The customer has the right to change these decisions throughout the period of use and hence, the contract contains a lease.

4. The observable stand-alone price for maintenance services is ₹2,000. There is no observable stand-alone price for the lease. Further, the insurance cost does not transfer a good or service to the lessee and therefore, it is not a separate lease component.

Thus, the Lessee allocates ₹ 8,000 (₹ 10,000 - ₹ 2,000) to the lease component.

5. After considering all the stated factors, the lessee concludes that it has a significant economic incentive to extend the lease.

Thus, for the purpose of lease accounting under Ind AS 116, the lessee uses a lease term of ten years.

6. The lessee notes that the terms for the optional renewal provide no economic incentive and the cost to install is significant. The lessee has no incentive to make significant modifications to the machine after the initial 15-year period. Therefore, the lessee does not expect to have a business purpose for using the machine after the non-cancellable lease term of 15 years.

Thus, the lessee concludes that the lease term consists of the 15-year non-cancellable period only.

7. The said lease contains in-substance fixed payments of ₹2,00,00,000 per year, which are included in the initial measurement of the lease liability under IndAS116. However, the additional ₹2,00,00,000 that the company expects to pay per year are variable payments that do not depend on an index or rate and, thus, are not included in the initial measurement of the lease liability but, are expensed when the over-use occurs.