

# AS 10 – PROPERTY, PLANT AND EQUIPMENT

## Illustration 1 (MTP Oct'19, Oct 20, Mar 22)

(Capitalising the cost of "Remodelling" a Supermarket)

Entity A, a supermarket chain, is renovating one of its major stores. The store will have more available space for in store promotion outlets after the renovation and will include a restaurant. Management is preparing the budgets for the year after the store reopens, which include the cost of remodelling and the expectation of a 15% increase in sales resulting from the store renovations, which will attract new customers. State whether the remodelling cost will be capitalised or not.

### Solution

The expenditure in remodelling the store will create future economic benefits (in the form of 15% of increase in sales) and the cost of remodelling can be measured reliably, therefore, it should be capitalised.

## Illustration 2 (MTP March 18, Oct '18, May 20, Apr'21, Apr'22, Oct '22)

Entity A has an existing freehold factory property, which it intends to knock down and redevelop. During the redevelopment period the company will move its production facilities to another (temporary) site. The following incremental costs will be incurred:

1. Setup costs of ₹ 5,00,000 to install machinery in the new location.
2. Rent of ₹ 15,00,000
3. Removal costs of ₹ 3,00,000 to transport the machinery from the old location to the temporary location.

Can these costs be capitalised into the cost of the new building?

(5 Marks)

### Solution

Constructing or acquiring a new asset may result in incremental costs that would have been avoided if the asset had not been constructed or acquired. These costs are not to be included in the cost of the asset if they are not 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. The costs to be incurred by the company are in the nature of costs of relocating or reorganising operations of the company and do not meet the requirement of AS 10 (Revised) and therefore, cannot be capitalised.

## Illustration 3 (RTP Nov 20)

Omega Ltd. contracted with a supplier to purchase machinery which is to be installed in its one department in three months' time. Special foundations were required for the machinery which were to be prepared within this supply lead time.

The cost of the site preparation and laying foundations were ₹ 1,40,000. These activities were supervised by a technician during the entire period, who is employed for this purpose of ₹ 45,000 per month. The machine was purchased at ₹ 1,58,00,000 and ₹ 50,000 transportation charges were incurred to bring the machine to the factory site. An Architect was appointed at a fee of ₹ 30,000 to supervise machinery installation at the factory site. You are required to ascertain the amount at which the Machinery should be capitalized.

### Solution

| Particulars                        |                                                           | ₹           |
|------------------------------------|-----------------------------------------------------------|-------------|
| Purchase Price                     | Given                                                     | 1,58,00,000 |
| Add: Site Preparation Cost         | Given                                                     | 1,40,000    |
| Technician's Salary                | Specific/Attributable overheads for 3 months (45,000 x 3) | 1,35,000    |
| Initial Delivery Cost              | Transportation                                            | 50,000      |
| Professional Fees for Installation | Architect's Fees                                          | 30,000      |
| Total Cost of Machinery            |                                                           | 1,61,55,000 |

**Illustration 4 (MTP March '21, Sep '22, Oct '23) (PYP Nov'18)**

Entity A, which operates a major chain of supermarkets, has acquired a new store location. The new location requires significant renovation expenditure.

Management expects that the renovations will last for 3 months during which the supermarket will be closed.

Management has prepared the budget for this period including expenditure related to construction and remodelling costs, salaries of staff who will be preparing the store before its opening and related utilities costs. What will be the treatment of such expenditures? **(5 Marks)**

**Solution**

Management should capitalise the costs of construction and remodelling the supermarket, because they are necessary to bring the store to the condition necessary for it to be capable of operating in the manner intended by management. The supermarket cannot be opened without incurring the remodelling expenditure, and thus the expenditure should be considered part of the asset.

However, if the cost of salaries, utilities and storage of goods are in the nature of operating expenditure that would be incurred if the supermarket was open, then these costs are not necessary to bring the store to the condition necessary for it to be capable of operating in the manner intended by management and should be expensed.

**Illustration 5 (Operating costs incurred in the start-up period)**

An amusement park has a 'soft' opening to the public, to trial run its attractions.

Tickets are sold at a 50% discount during this period and the operating capacity is 80%. The official opening day of the amusement park is three months later.

Management claim that the soft opening is a trial run necessary for the amusement park to be in the condition capable of operating in the intended manner.

Accordingly, the net operating costs incurred should be capitalised. Comment.

**Solution**

The net operating costs should not be capitalised but should be recognised in the Statement of Profit and Loss.

Even though it is running at less than full operating capacity (in this case 80% of operating capacity), there is sufficient evidence that the amusement park is capable of operating in the manner intended by management. Therefore, these costs are specific to the start-up and, therefore, should be expensed as incurred.

**Illustration 6 (Consideration received comprising a combination of non-monetary and monetary assets)**

Entity A exchanges land with a book value of ₹ 10,00,000 for cash of ₹ 20,00,000 and plant and machinery valued at ₹ 25,00,000. What will be the measurement cost of the assets received. (Consider that the transaction has commercial substance)?

**Solution**

In the given case, Plant & Machinery is valued at ₹ 25,00,000, which is assumed to be fair value in absence of information. Further, since fair value of land (asset given up) is not given, the transaction will be recorded at fair value of assets acquired of ₹ 45,00,000 (₹ Cash 20,00,000 + ₹ Plant & Machinery 25,00,000). Since land of book value ₹ 10,00,000 is transferred in exchange of assets worth ₹ 45,00,000, a gain of ₹ 35,00,000 will be recognised in the books of Entity A.

The following journal entry will be passed in the books of Entity A:

|                       |     |           |           |
|-----------------------|-----|-----------|-----------|
| Cash/ Bank A/c        | Dr. | 20,00,000 |           |
| Plant & Machinery A/c | Dr. | 25,00,000 |           |
| To Land               |     |           | 10,00,000 |

To Profit on Sale of Land (balancing figure)

35,00,000

### Illustration 7 (Exchange of assets that lack commercial substance)

Entity A exchanges car X with a book value of ₹ 13,00,000 and a fair value of ₹ 13,25,000 for cash of ₹ 15,000 and car Y which has a fair value of ₹ 13,10,000.

The transaction lacks commercial substance as the company's cash flows are not expected to change as a result of the exchange. It is in the same position as it was before the transaction. What will be the measurement cost of the assets received?

#### Solution

Since the transaction lacks commercial substance, the entity recognises the assets received at the book value of car X. Therefore, it recognises cash of ₹ 15,000 and car Y as PPE with a carrying value of ₹ 12,85,000.

The following journal entry will be passed in the books of Entity A:

|                              |               |                        |
|------------------------------|---------------|------------------------|
| Cash/ Bank A/c               | Dr. 15,000    |                        |
| Car Y A/c (balancing figure) | Dr. 12,85,000 |                        |
|                              |               | To Car X A/c 13,00,000 |

### Illustration 8

What happens if the cost of the previous part/inspection was/ was not identified in the transaction in which the item was acquired or constructed?

#### Solution

De-recognition of the carrying amount occurs regardless of whether the cost of the previous part/inspection was identified in the transaction in which the item was acquired or constructed.

### Illustration 9

What will be your answer in the above question, if it is not practicable for an enterprise to determine the carrying amount of the replaced part/inspection?

#### Solution

It may use the cost of the replacement or the estimated cost of a future similar inspection as an indication of what the cost of the replaced part/existing inspection component was when the item was acquired or constructed.

### Illustration 10 (Revaluation on a class by class basis)

Entity A is a large manufacturing group. It owns a 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. Entity A's management want to apply the revaluation model as per AS 10 (Revised) to the subsequent measurement of the office buildings but continue to apply the historical cost model to the industrial buildings.

State whether this is acceptable under AS 10 (Revised) or not with reasons?

#### Solution

Entity A's management can apply the revaluation model only to the office buildings. The office buildings can be clearly distinguished from the industrial buildings in terms of their function, their nature and their general location. AS 10 (Revised) permits assets to be revalued on a class by class basis.

The different characteristics of the buildings enable them to be classified as different PPE classes. The different measurement models can, therefore, be applied to these classes for subsequent measurement.

However, all properties within the class of office buildings must be carried at revalued amount.

**Illustration 11**

Entity A has a policy of not providing for depreciation on PPE capitalised in the year until the following year, but provides for a full year's depreciation in the year of disposal of an asset. Is this acceptable?

**Solution**

The depreciable amount of a tangible fixed asset should be allocated on a systematic basis over its useful life. The depreciation method should reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity.

Useful life means the period over which the asset is expected to be available for use by the entity. Depreciation should commence as soon as the asset is acquired and is available for use. Thus, the policy of Entity A is not acceptable.

**Illustration 12 (MTP April '19)**

Entity A purchased an asset on 1st January 20X1 for ₹ 1,00,000 and the asset had an estimated useful life of 10 years and a residual value of nil.

On 1st January 20X5, the directors review the estimated life and decide that the asset will probably be useful for a further 4 years.

Calculate the amount of depreciation for each year, if company charges depreciation on Straight Line basis.

**Solution**

The entity has charged depreciation using the straight-line method at ₹ 10,000 per annum i.e. (1,00,000/10 years).

On 1st January 20X5, the asset's net book value is [1,00,000 – (10,000 x 4)] ₹ 60,000.

The remaining useful life is 4 years.

The company should amend the annual provision for depreciation to charge the unamortised cost over the revised remaining life of four years.

Consequently, it should charge depreciation for the next 4 years at ₹ 15,000 per annum i.e. (60,000 / 4 years).

Note: Depreciation is recognised even if the Fair value of the Asset exceeds its Carrying Amount. Repair and maintenance of an asset do not negate the need to depreciate it.

**Illustration 13**

Entity B constructs a machine for its own use. Construction is completed on 1<sup>st</sup> November 20X1 but the company does not begin using the machine until 1st March 20X2. Comment.

**Solution**

The entity should begin charging depreciation from the date the machine is ready for use – that is, 1st November 20X1. The fact that the machine was not used for a period after it was ready to be used is not relevant in considering when to begin charging depreciation.

**Illustration 14 (RTP Nov 21)**

A property costing ₹ 10,00,000 is bought in 20X1. Its estimated total physical life is 50 years. However, the company considers it likely that it will sell the property after 20 years.

The estimated residual value in 20 years' time, based on 20X1 prices, is:

Case (a) ₹ 10,00,000

Case (b) ₹ 9,00,000.

Calculate the amount of depreciation.

**Solution**

Case (a)

The company considers that the residual value, based on prices prevailing at the balance sheet date, will equal the cost.

There is, therefore, no depreciable amount and depreciation is correctly zero.

Case (b)

The company considers that the residual value, based on prices prevailing at the balance sheet date, will be ₹ 9,00,000 and the depreciable amount is, therefore, ₹ 1,00,000.

Annual depreciation (on a straight-line basis) will be ₹ 5,000  $[(10,00,000 - 9,00,000) \div 20]$ .

#### **Illustration 15** (Determination of appropriate Depreciation Method)

Entity B manufactures industrial chemicals and uses blending machines in the production process. The output of the blending machines is consistent from year to year and they can be used for different products.

However, maintenance costs increase from year to year and a new generation of machines with significant improvements over existing machines is available every 5 years. Suggest the depreciation method to the management.

#### **Solution**

The straight-line depreciation method should be adopted, because the production output is consistent from year to year.

Factors such as maintenance costs or technical obsolescence should be considered in determining the blending machines' useful life.

#### **Illustration 16** (MTP Oct 20, Mar 22)

Entity A carried plant and machinery in its books at ₹ 2,00,000. These were destroyed in a fire. The assets were insured 'New for old' and were replaced by the insurance company with new machines that cost ₹ 20,00,000. The machines were acquired by the insurance company and the company did not receive ₹ 20,00,000 as cash compensation. State, how Entity A should account for the same?

#### **Solution**

Entity A should account for a loss in the Statement of Profit and Loss on derecognition of the carrying value of plant and machinery in accordance with AS 10 (Revised).

Entity A should separately recognise a receivable and a gain in the income statement resulting from the insurance proceeds under AS 29 (Revised)\* once receipt is virtually certain. The receivable should be measured at the fair value of assets that will be provided by the insurer.

#### **Illustration 17**

A company changed its method of depreciation from SLM to WDV. How should the change be recognised?

#### **Solution:**

As per AS 10, Property, Plant and Equipment, the depreciation method applied to an asset should be 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 should be accounted for as a change in an accounting estimate in accordance with AS 5.

Accordingly, the change in method of depreciation should be accounting for as a change in accounting estimate, prospectively.

#### **Illustration 18**

A company has debited the Building Account with the Cost of the Land on which the building stands and has provided depreciation on such total cost. Comment on the accounting treatment.

#### **Solution:**

As per AS 10, Property, Plant and Equipment, 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. Further,

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.

In the given case, land should not be depreciated unless it has a limited useful life. Accordingly, it is incorrect to debit the cost of land to the Building Account and provide depreciation on the aggregate cost.

### Illustration 19

An entity is setting up a manufacturing plant. Construction of the plant is completed in August and the plant is ready for commercial production in November. However, the entity commences production in March. When should the company start charging depreciation.

#### Solution:

As per AS 10, Property, Plant and Equipment, 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.

In the given case, since the plant is ready for commercial production in November, depreciation shall commence from November. The date of commencement of commercial production is irrelevant for charging depreciation.

### Illustration 20

Which factors should be considered by a company while determining useful life?

#### Solution:

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 expected capacity or physical output of the asset.
- (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.
- (d) legal or similar limits on the use of the asset, such as the expiry dates of related leases.

### Illustration 21

An entity gave the following Note in its Financial Statements:

The company chooses not to charge depreciation on Property, Plant and Equipment on account of:

- a. Annual Maintenance Contracts being expensed thereby ensuring timely repairs of Plant and Machinery.
- b. Depreciation being a non-cash expense has no impact on cash flows. Accordingly, it is not necessary to depreciate an asset when repairs and maintenance charges are expensed in the Statement of Profit and Loss.
- c. The values of certain assets like Property increase with passage of time, and hence charging depreciation does not make sense.
- d. At the end of the useful life, the asset is ultimately sold, and since the asset is at cost due to no depreciation, exact profit or loss on sale of the asset is stated.'

You are required to state the appropriateness of the above accounting policy in line with the relevant Accounting Standards.

#### Solution:

Depreciation refers to writing off the value of the asset over its useful life.

Such write-off is necessitated on account of normal wear-and-tear, usage, or obsolescence. Since items of Property, Plant and Equipment are generally used in generating revenue, the pro-rated write-off in value of such item should be recorded in the books against the income earned by such an asset.

Providing depreciation is mandatory, inspite of the fact that repairs are expensed in the Statement of Profit and Loss, or the value of the Property is appreciating. Depreciation is a systematic allocation of cost of the asset against the income generated from the continued use of the asset. Further, the Companies Act, 2013 mandates depreciation to be charged in order to determine the correct profits. Thus, not charging depreciation would result in non-compliance with the Companies Act provisions as well.

The argument laid down by the company and the reasons for the same being invalid are discussed below.

(a) Annual Maintenance Contracts being expensed thereby ensuring timely repairs of Plant and Machinery:

The fact that the company enters into Annual Maintenance Contracts for timely repairs can be regarded as a running cost. Such expense is incurred in order to ensure that the machine continues to run as intended. Thus, it implies that because the machine is being utilized, it will need regular repairs. In other words, continuous use is resulting in normal wear-and-tear which is the reason why depreciation should be charged by the company. By stating that the company incurs Annual Maintenance Expenses, the company is recording only the 'maintenance expenses', but not the wear-and-tear requiring the maintenance in the first place. Hence, this argument put forth by the company is not valid.

(b) Depreciation being a non-cash expense has no impact on cash flows.

Accordingly, it is not necessary to depreciate an asset when repairs and maintenance charges are expensed in the Statement of Profit and Loss.

When viewed from the prism of depreciation alone, it appears that the fact that depreciation is a non-cash item is correct. However, it must be noted that at the time of procurement of the asset, the company would have paid cash. Depreciation is after all writing off this amount over the life of the asset. Hence the argument that depreciation is a non-cash item is not valid. Depreciation is writing off the cost of the asset (which was already paid for) over the useful life of the asset, and hence is mandatory.

(c) The values of certain assets like Property increase with passage of time, and hence charging depreciation does not make sense.

Certain assets like immovable property do increase in value with the passage of time. However, such assets are 'used for the purposes of business' and are not 'held for sale' or held as investment property.

Accordingly, since the asset is being used for carrying on business, providing depreciation will give a true and fair view of the results of the company, and hence the argument that the value of the property appreciates is not valid.

If the company wants to show the fair market value of the PPE, then it has the option to apply Revaluation model. However, depreciation is mandatory to be charged in Revaluation model also.

(d) At the end of the useful life, the asset is ultimately sold, and since the asset is at cost due to no depreciation, exact profit or loss on sale of the asset is stated.'

The value of any asset, after usage, will reduce. Accordingly, the argument that the 'exact profit or loss on sale of the asset' will be obtained is incorrect. Due to usage of the asset, the value of the asset would be lower than the cost. Charging depreciation would seek to bring the book value approximating to such reduced value. Thereafter, on sale of the asset, the true profit or loss would be available.

Accordingly, this argument is also invalid.

It may be pertinent to note that Accounting Standard 1, Disclosure of Accounting Policies states that Disclosure of accounting policies or of changes therein cannot remedy a wrong or inappropriate treatment of the item in the accounts. In other words, the company cannot be absolved of the fact that it has not complied with the relevant accounting standards merely by giving a disclosure of incorrect policies or practices being followed.

Thus, the company's stand of disclosing the incorrect policy as a remedy is not correct. The company is suggested to charge depreciation on a systematic basis over the useful life of the asset thereby complying with the Accounting Standards.

## Illustration 22

With reference to AS-10 Revised, classify the items under the following heads:

**HEADS**

- (i) Purchase Price of Property, plant and Equipment (PPE)
- (ii) Directly attributable cost of PPE or
- (iii) Cost not included in determining the carrying amount of an item of PPE.

**ITEMS**

1. Import duties and non-refundable purchase taxes.
2. Initial delivery and handling costs.
3. Initial operating losses, such as those incurred while demand for the output of an item builds up.
4. 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.
5. Trade discounts and rebates.
6. Costs of relocating or reorganizing part or all of the operations of an enterprise.
7. Installation and assembly costs.
8. Administration and other general overhead costs.

**Solution:****Heads**

- (i) Purchase price of PPE
- (iii) Directly attributable cost of PPE
- (iii) Cost not included in determining the carrying amount of an item of PPE

| Items                                                                                                                                                              | Classified under Head |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1 Import duties and non-refundable purchase taxes                                                                                                                  | (i)                   |
| 2 Initial delivery and handling costs                                                                                                                              | (ii)                  |
| 3 Initial operating losses, such as those incurred while demand for the output of an item builds up                                                                | (iii)                 |
| 4 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. | (iii)                 |
| 5 Trade discounts and rebates (deducted for computing purchase price)                                                                                              | (i)                   |
| 6 Costs of relocating or reorganizing part or all of the operations of an enterprise.                                                                              | (iii)                 |
| 7 Installation and assembly costs                                                                                                                                  | (ii)                  |
| 8 Administration and other general overhead costs                                                                                                                  | (iii)                 |

**Illustration 23 (MTP Aug'18, Nov'21, Mar'23, RTP Nov'18, May'19, Nov'23)**

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

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

Please advise ABC Ltd. on the costs that can be capitalised in accordance with AS 10.

**(5 Marks)**

**Solution:**

According to AS 10 (Revised), these costs can be capitalised:

|                                                                              |                    |
|------------------------------------------------------------------------------|--------------------|
| 1. Cost of the plant                                                         | ₹ 25,00,000        |
| 2. Initial delivery and handling costs                                       | ₹ 2,00,000         |
| 3. Cost of site preparation                                                  | ₹ 6,00,000         |
| 4. Consultants' fees                                                         | ₹ 7,00,000         |
| 5. Present Value of Estimated dismantling costs to be incurred after 7 years | ₹ 3,00,000         |
|                                                                              | <b>₹ 43,00,000</b> |

**Note:** Interest charges paid on "Deferred credit terms" to the supplier of the plant (not a qualifying asset) of ₹ 2,00,000 and operating losses before commercial production amounting to ₹ 4,00,000 are not regarded as directly attributable costs and thus cannot be capitalised. They should be written off to the Statement of Profit and Loss in the period they are incurred.

**Illustration 24**

Arka Ltd. purchased machinery for ₹ 3,000 lakhs. Depreciation was charged at 10% on SLM basis for a useful life of 10 years. At the end of Year 4, the machinery was revalued to ₹ 2,700 lakhs and the same was adopted. What will be the carrying amount of the asset at the end of Year 5 and Year 6? Assume no change in the useful life.

**Solution:**

| Particulars                                                    | ₹ in lakhs |
|----------------------------------------------------------------|------------|
| Original Cost of the Asset                                     | 3,000.00   |
| Less: Depreciation for 4 years (₹ 3,000 lakhs x 10% x 4 years) | (1,200.00) |
| Book Value at the end of Year 4                                | 1,800.00   |
| Add: Revaluation Surplus (balancing figure)                    | 900.00     |
| Revalued Amount as given (= revised depreciable value)         | 2,700.00   |
| Less: Depreciation for Year 5 (₹ 2,700 lakhs ÷ 6 years)        | 450.00     |
| Carrying Amount at the end of Year 5                           | 2,250.00   |
| Less: Depreciation for Year 6 (₹ 2,700 lakhs ÷ 6 years)        | 450.00     |
| Carrying Amount at the end of Year 6                           | 1,800.00   |

**Illustration 25**

Skanda Ltd. acquired a machinery for ₹ 2,50,00,000 five years ago. Depreciation was charged at 10% p.a. on SLM basis, useful life being 10 years. At the beginning of Year 3, the machinery was revalued to ₹ 3,00,00,000 with the surplus on revaluation being credited to Revaluation Reserve. Depreciation was provided on the revalued amount over the balance useful life of 8 years. The machinery was sold in the current year for ₹ 1,12,50,000. Give the accounting treatment for the above in the Company's accounts. What will be the treatment if the machinery fetched only ₹ 42,50,000 now?

**Solution:**

| Particulars                                                      | ₹           |
|------------------------------------------------------------------|-------------|
| Original Cost of the Asset                                       | 2,50,00,000 |
| Less: Depreciation for 2 years (₹ 2,50,00,000 x 10% x 2 years)   | 50,00,000   |
| Book Value at the beginning of Year 3                            | 2,00,00,000 |
| Add: Revaluation Surplus (balancing figure)                      | 1,00,00,000 |
| Revalued Amount as given (= revised depreciable value)           | 3,00,00,000 |
| Less: Depreciation for Years 3-5 (₹ 3,00,00,000 ÷ 8 yrs x 3 yrs) | 1,12,50,000 |

Carrying Amount at the end of Year 5

1,87,50,000

The treatment of Gain / Loss on Disposal / Revaluation is as below:

| Particulars                                                           | Disposal Proceeds = ₹<br>1,12,50,000               | Disposal Proceeds = ₹<br>42,50,000                 |
|-----------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|
| Book Value Less Disposal Proceeds = Loss recognized in Profit or Loss | ₹ 1,87,50,000 – ₹ 1,12,50,000 = ₹ 75,00,000 (Loss) | ₹ 1,87,50,000 – ₹ 42,50,000 = ₹ 1,45,00,000 (Loss) |
| Revaluation Surplus directly transferred to Retained Earnings         | ₹ 1,00,00,000                                      | ₹ 1,00,00,000                                      |

**Illustration 26**

Akshar Ltd. installed a new Plant (not a qualifying asset), at its production facility, and incurred the following costs:

- Cost of the Plant (as per supplier's invoice): ₹ 30,00,000
- Initial delivery and handling costs: ₹ 1,00,000
- Cost of site preparation: ₹ 2,00,000
- Consultant fee for advice on acquisition of Plant: ₹ 50,000
- Interest charges paid to supplier against deferred credit: ₹ 1,00,000
- Estimate of Dismantling and Site Restoration costs: ₹ 50,000 after 10 years (Present Value is ₹ 30,000)
- Operating losses before commercial production: ₹ 40,000

The company identified motors installed in the Plant as a separate component and a cost of ₹ 5,00,000 (Purchase Price) and other costs were allocated to them proportionately. The company estimates the useful life of the Plant and those of the Motors as 10 years and 6 years respectively and SLM method of Depreciation is used.

At the end of Year 4, the company replaces the Motors installed in the Plant at a cost of ₹ 6,00,000 and estimated the useful life of new motors to be 5 years. Also, the company revalued its entire class of Fixed Assets at the end of Year 4. The revalued amount of Plant as a whole is ₹ 25,00,000. At the end of Year 8, the company decides to retire the Plant from active use and also disposed the Plant as a whole for ₹ 6,00,000.

There is no change in the Dismantling and Site Restoration liability during the period of use. You are required to explain how the above transaction would be accounted in accordance with AS 10.

**Solution:****1. Cost at Initial Recognition:**

| Particulars                                                    | ₹                |
|----------------------------------------------------------------|------------------|
| Cost of the Plant (as per Invoice)                             | 30,00,000        |
| Initial Delivery and Handling Costs                            | 1,00,000         |
| Cost of Site Preparation                                       | 2,00,000         |
| Consultants' Fees                                              | 50,000           |
| Estimated Dismantling and Site Restoration Costs               | 30,000           |
| Total Cost of Plant including Motors                           | 33,80,000        |
| Less: Cost of Motors identified as a separate component (1/6)* | 5,63,333         |
| <b>Cost of the Plant (excluding Motors – balance 5/6)</b>      | <b>28,16,667</b> |

\* Purchase price of Motors = ₹ 5,00,000 out of ₹ 30,00,000 i.e., 1/6 of value of Plant

Note: Since the asset is not a qualifying asset, payment of interest to the supplier is not capitalized. Further, operating losses of ₹ 40,000 incurred before commercial production is not a directly attributable cost, and hence excluded from cost of asset. These costs are expensed to the P/L as and when they are incurred.

## 2. Recognition of Motors Replacement

| Particulars                                           | ₹               |
|-------------------------------------------------------|-----------------|
| Cost of Motors determined above                       | 5,63,333        |
| Less: Depreciation for 4 years (as per SLM)           | 3,75,555        |
| 5,63,333 ÷ 6 years x 4 years                          |                 |
| <b>Carrying Amount of Motors at the end of Year 4</b> | <b>1,87,778</b> |

Accounting: The company should derecognize the existing Carrying Amount of Motors replaced of ₹ 1,87,778. Further, the acquisition cost of new motors of ₹ 6,00,000 would be capitalized as a separate component. This amount will be depreciated over the next 5 years at ₹ 6,00,000 ÷ 5 years = ₹ 1,20,000 p.a.

## 3. Revaluation

| Particulars                                                                                                              | ₹               |
|--------------------------------------------------------------------------------------------------------------------------|-----------------|
| Cost of the Plant at initial recognition [from (1) above]                                                                | 28,16,667       |
| Less: SLM Depreciation for 4 years: ₹ 28,16,667 ÷ 10 years x 4 years                                                     | 11,26,667       |
| Carrying Amount of Plant at the end of Year 4                                                                            | 16,90,000       |
| Revalued Amount of Plant (Excluding Motors, since the same is treated as a separate component: ₹ 25,00,000 – ₹ 6,00,000) | 19,00,000       |
| <b>Therefore, Gain on Revaluation credited to Revaluation Reserve</b>                                                    | <b>2,10,000</b> |
| <b>Revised Depreciation Charge p.a.: 19,00,000 ÷ 6 years</b>                                                             | <b>3,16,667</b> |

## 4. Derecognition

| Particulars                                                              | Motors                  | Plant (excluding Motors) |
|--------------------------------------------------------------------------|-------------------------|--------------------------|
| Cost / Revalued Amount at end of Year 4                                  | 6,00,000                | 19,00,000                |
| Less: Depreciation for Years 5-8                                         | 1,20,000 x 4 = 4,80,000 | 3,16,667 x 4 = 12,66,668 |
| Carrying Amount before Disposal / Derecognition                          | 1,20,000                | 6,33,332                 |
| Less: Disposal Proceeds ₹ 6,00,000 allocated in ratio of carrying amount | 95,575                  | 5,04,425                 |
| <b>Loss to be written off to P/L</b>                                     | <b>24,425</b>           | <b>1,28,907</b>          |

Notes:

(a) The Revaluation Surplus of ₹ 2,10,000 would be transferred directly to Retained Earnings.

(b) The allocation of disposal proceeds of ₹ 6,00,000 for the plant as whole is apportioned based on carrying amount of motors and plant (excluding motors)

Alternatively, it may be apportioned as 1/6 towards motors and 5/6 plant (excluding motors) based on the reasoning that the initially, motors amounted to 1/6 of the entire plant. This approach may not be preferable because there has been a revaluation of the plant (excluding motors) and a disposal and subsequent acquisition of the Motor, which is not in the initial proportion of 5/6 and 1/6 respectively.

## Illustration 27

Bharat Infrastructure Ltd. acquired a heavy machinery at a cost of ₹ 1,000 lakhs, the breakdown of its components is not provided. The estimated useful life of the machinery is 10 years. At the end of Year 6,

the turbine, which is a major component of the machinery, needed replacement, as further usage and maintenance was uneconomical. The remainder of the machine is in good condition and is expected to last for the remaining 4 years. The cost of the new turbine is ₹ 450 lakhs. Give the accounting treatment for the new turbine, assuming SLM Depreciation and a discount rate of 8%.

**Solution:**

As per AS 10, Property, Plant and Equipment, the derecognition of the carrying amount of components of an item of Property, Plant and Equipment occurs regardless of whether the cost of the previous part / inspection was identified in the transaction in which the item was acquired or constructed. If it is not practicable for an enterprise to determine the carrying amount of the replaced part/ inspection, it may use the cost of the replacement or the estimated cost of a future similar inspection as an indication of what the cost of the replaced part/ existing inspection component was when the item was acquired or constructed.

In the given case, the new turbine will produce economic benefits to Bharat Infrastructure Ltd. and the cost is measurable. Since the recognition criteria is fulfilled, the same should be recognised as a separate item of Property, Plant and Equipment. However, since the initial breakup of the components is not available, the cost of the replacement of ₹ 450 lakhs can be used as an indication based on the guidance given above, discounted at 8% for the 6-year period lapsed.

Thus, estimate of cost 6 years back = ₹ 450 lakhs ÷ 1.086 = ₹ 283.58 lakhs Current carrying amount of turbine (to be de-recognised) = Estimated cost ₹ 283.58 lakhs (–) SLM depreciation at 10% (useful life 10 years) for 6 years ₹ 170.15 lakhs = ₹ 113.43 lakhs.

Hence revised carrying amount of the machinery will be as under:

| Particulars                                                                            | ₹ in lakhs    |
|----------------------------------------------------------------------------------------|---------------|
| Historical Cost [₹ 1,000 lakhs (–) SLM Depreciation at 10% (10 year life) for 6 years] | 400.00        |
| Add: Cost of new turbine                                                               | 450.00        |
| Less: Derecognition of current carrying amount of old turbine                          | (113.43)      |
| <b>New Carrying Amount of Machinery</b>                                                | <b>736.57</b> |

**Illustration 28**

Preet Ltd. intends to set up a steel plant, for which it has acquired a dilapidated factor having an area of 5,000 acres at a cost of ₹ 60,000 per acre. Preet Ltd. has incurred ₹ 1.10 crores on demolishing the old Factory Building thereon. A sum of ₹ 63,00,000 (including 5% GST thereon) was realized from the sale of material salvaged from the site. Preet Ltd. Incurred Stamp Duty and Registration Charges of 7% of land value, paid legal and consultancy charges ₹ 8,00,000 for land acquisition and incurred ₹ 1,25,000 on title guarantee insurance. Compute the value of the land acquired.

**Solution:**

| Particulars                                         | ₹               |
|-----------------------------------------------------|-----------------|
| Purchase Price: 5,000 acres x ₹ 60,000 per acre     | 3,000.00        |
| Stamp Duty and Registration Charges at 7%           | 210.00          |
| Legal and Consultancy Fees                          | 8.00            |
| Title Guarantee Insurance                           | 1.25            |
| Demolition Expenses (Net of Salvage Income)         |                 |
| [₹ 110 lakhs (–) ₹ 60 lakhs (₹ 63 lakhs x 100/105)] | 50.00           |
| <b>Cost of Land</b>                                 | <b>3,269.25</b> |

**MTP / RTP / Past Exam****Question 1 (MTP Oct'18, Aug 18, Oct'19, Oct'20, Mar 22)**

ABC Ltd. has entered into a binding agreement with XYZ Ltd. to buy a custom-made machine amounting to Rs. 4,00,000. As on 31st March, 2020 before delivery of the machine, ABC Ltd. had to change its method of production. The new method will not require the machine ordered and so it shall be scrapped after delivery. The expected scrap value is 'NIL'. Show the treatment of machine in the books of ABC Ltd

**(5 Marks)****Solution**

A liability is recognized when outflow of economic resources in settlement of a present obligation can be anticipated and the value of outflow can be reliably measured. In the given case, ABC Ltd. should recognize a liability of ₹ 4,00,000 payable to XYZ Ltd. When flow of economic benefit to the enterprise beyond the current accounting period is considered improbable, the expenditure incurred is recognized as an expense rather than as an asset. In the present case, flow of future economic benefit from the machine to the enterprise is improbable. The entire amount of purchase price of the machine should be recognized as an expense. Hence ABC Ltd. should charge the amount of ₹ 4,00,000 (being loss due to change in production method) to Profit and loss statement and record the corresponding liability (amount payable to XYZ Ltd.) for the same amount in the books for the year ended 31st March, 2020.

**Question 2 (MTP Oct '19) (RTP May'18)**

In the year 2018-19, an entity has acquired a new freehold building with a useful life of 50 years for Rs. 75,00,000. The entity desires to calculate the depreciation charge per annum using a straight-line method. It has identified the following components (with no residual value of lifts & fixtures at the end of their useful life) as follows:

| Component             | Useful life (Years) | Cost                 |
|-----------------------|---------------------|----------------------|
| Land                  | Infinite            | Rs. 10,00,000        |
| Roof                  | 25                  | Rs. 15,00,000        |
| Lifts                 | 20                  | Rs. 7,50,000         |
| Fixtures              | 10                  | Rs. 2,50,000         |
| Remainder of building | 50                  | Rs. 40,00,000        |
|                       |                     | <b>Rs. 75,00,000</b> |

Calculate depreciation for the year 2018-19 as per componentization method. Also state the treatment, in case Roof requires replacement at the end of its useful life.

**Solution:****Statement showing amount of depreciation as per Componentization Method**

| Component             | Depreciation (Per annum) |
|-----------------------|--------------------------|
|                       | <b>(Rs.)</b>             |
| Land                  | Nil                      |
| Roof                  | 60,000                   |
| Lifts                 | 37,500                   |
| Fixtures              | 25,000                   |
| Remainder of Building | 80,000                   |

|  |          |
|--|----------|
|  | 2,02,500 |
|--|----------|

**Note:** When the roof requires replacement at the end of its useful life the carrying amount will be nil. The cost of replacing the roof should be recognized as a new component.

### Question 3 (RTP May '21)

You are required to give the correct accounting treatment for the following in line with provisions of AS 10:

- a) Trozen Ltd. operates a major chain of supermarkets all over India. It acquires a new store in Pune which requires significant renovation expenditure. It is expected that the renovations will be done in 2 months during which the store will be closed. The budget for this period, including expenditure related to construction and remodeling costs (Rs. 18 lakhs), salaries of staff (Rs. 2 lakhs) who will be preparing the store before its opening and related utilities costs (Rs. 1.5 lakhs), is prepared. The cost of salaries of the staff and utilities are operating expenditures that would be incurred even after the opening of the supermarket. What will the treatment of all these expenditures in the books of accounts?
- b) ABC Ltd is setting up a new refinery outside the city limits. In order to facilitate the construction of the refinery and its operations, ABC Ltd. is required to incur expenditure on the construction/development of railway siding, road and bridge. Though ABC Ltd. incurs 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. Can ABC Ltd. capitalize expenditure incurred on these items as property, plant and equipment (PPE)?

### Solution:

- a) Trozen Ltd. should capitalize the costs of construction and remodeling the supermarket, because they are necessary to bring the store to the condition necessary for it to be capable of operating in the manner intended. The supermarket cannot be opened without incurring the remodeling expenditure. Therefore, this construction and remodeling expenditure of Rs. 18 lakhs should be considered as part of the cost of the asset. However, the cost of salaries of the staff Rs. 2 lakh and utilities cost Rs. 1.5 lakh are operating expenditures that would be incurred even after the opening of the supermarket. Therefore, these costs are not necessary to bring the store to the condition necessary for it to be capable of operating in the manner intended by the management and should be expensed.
- b) AS 10 states that the cost of an item of property, plant and equipment shall be recognized as an asset if, and only if:
  - (i) it is probable that future economic benefits associated with the item will flow to the entity; and
  - (ii) the cost of the item can be measured reliably.

Further, the standard provides that the standard does not prescribe the unit of measure for recognition, i.e., what constitutes an item of property, plant and equipment. Thus, judgement is required in applying the recognition criteria to an entity's specific circumstances. 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, railway siding, road and bridge are 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 capitalization 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 ABC Ltd. may not be able to recognize expenditure incurred on these assets 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 capitalized as a part of overall cost of the project.

From this, it can be concluded that, in the given case the expenditure incurred on these assets, i.e., railway siding, road and bridge, should be considered as the cost of constructing the refinery and accordingly, expenditure incurred on these items should be allocated and capitalized as part of the items of property, plant and equipment of the refinery.

#### Question 4 (RTP May 20)

The following items are given to you:

##### ITEMS

1. Costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition (such as samples produced when testing equipment);
2. Costs of conducting business in a new location or with a new class of customer (including costs of staff training);
3. 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
4. Costs of opening a new facility or business, such as, inauguration costs;
5. Purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.

With reference to AS 10 "Property, Plant and Equipment", classify the above items under the following heads:

##### HEADS

- (i) Purchase Price of PPE
- (ii) Directly attributable cost of PPE or
- (iii) Cost not included in determining the carrying amount of an item of PPE.

##### Solution

- 1) Costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition (such as samples produced when testing equipment) will be classified as "Directly attributable cost of PPE";
- 2) Costs of conducting business in a new location or with a new class of customer (including costs of staff training) will be classified under head (iii) as it will not be included in determining the carrying amount of an item of PPE.
- 3) 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 will be included in determination of Purchase Price of PPE
- 4) Costs of opening a new facility or business, such as, inauguration costs will be classified under head (iii) as it will not be included in determining the carrying amount of an item of PPE.
- 5) Purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates will be included in determination of Purchase Price of PPE.

#### Question 5 (RTP Nov 19)

Shrishti Ltd. contracted with a supplier to purchase machinery which is to be installed in its Department A in three months' time. Special foundations were required for the machinery which were to be prepared within this supply lead time. The cost of the site preparation and laying foundations were Rs.1,41,870. These activities were supervised by a technician during the entire period, who is employed

for this purpose of Rs.45,000 per month. The technician's services were given by Department B to Department A, which billed the services at Rs.49,500 per month after adding 10% profit margin.

The machine was purchased at Rs.1,58,34,000 inclusive of IGST @ 12% for which input credit is available to Shrishti Ltd. Rs.55,770 transportation charges were incurred to bring the machine to the factory site. An Architect was appointed at a fee of Rs. 30,000 to supervise machinery installation at the factory site.

Ascertain the amount at which the Machinery should be capitalized under AS 10 considering that IGST credit is availed by the Shristhi Limited. Internally booked profits should be eliminated in arriving at the cost of machine.

### Solution

#### Calculation of Cost of Property Plant & Equipment (i.e. Machinery)

| Particulars                        |                                                                        | ₹           |
|------------------------------------|------------------------------------------------------------------------|-------------|
| Purchase Price                     | Given (Rs.158,34,000 x 100/112)                                        | 1,41,37,500 |
| Add: Site Preparation Cost         | Given                                                                  | 1,41,870    |
| Technician's Salary                | Specific/Attributable overheads for 3 months<br>(See Note) (45,000 x3) | 1,35,000    |
| Initial Delivery Cost              | Transportation                                                         | 55,770      |
| Professional Fees for Installation | Architect's Fees                                                       | 30,000      |
| Total Cost of Asset                |                                                                        | 1,45,00,140 |

### Question 6 (RTP Nov'22)

RS Ltd. has acquired a heavy plant at a cost of ₹ 2,00,00,000. The estimated useful life is 10 years. At the end of the 2nd year, one of the major components i.e., the Boiler has become obsolete (which was acquired at price of ₹ 50,00,000) and requires replacement, as further maintenance is uneconomical. The remainder of the plant is perfect and is expected to last for next 8 years. The cost of a new boiler is ₹ 60,00,000. Can the cost of the new boiler be recognised as an asset, and, if so, what should be the carrying value of the plant at the end of second year?

### Solution

Recognition of Asset: The new boiler will produce economic benefits to RS Ltd., and the cost is measurable. Hence, the item should be recognized as an asset. The cost old boiler should be derecognized and the new boiler will be added.

#### Statement showing cost of new boiler and machine after year 2

|                                                                 |               |
|-----------------------------------------------------------------|---------------|
| Original cost of plant                                          | ₹ 2,00,00,000 |
| Less: Accumulated depreciation [(2,00,00,000 /10) x 2]          | ₹ 40,00,000   |
| Carrying value of the plant after two years                     | ₹ 1,60,00,000 |
| Less: Current Cost of Old Boiler to be derecognized             |               |
| Less: WDV of Boiler (replaced) after 2 years (50,00,000/10 x 8) | ₹ 40,00,000   |
|                                                                 | ₹ 1,20,00,000 |
| Add: Cost of new Boiler to be recognized                        | ₹ 60,00,000   |
| Revised carrying amount of Plant                                | ₹ 1,80,00,000 |

**Question 7 (RTP May 23)**

Star Limited purchased machinery for ₹ 6,80,000 (inclusive of GST of ₹ 40,000). Input credit is available for entire amount of GST paid. The company incurred the following other expense for installation.

|                                                                                             | ₹      |
|---------------------------------------------------------------------------------------------|--------|
| Cost of preparation of site for installation                                                | 21,200 |
| Total Labour charges                                                                        | 56,000 |
| (200 out of the total of 500 men hours worked, were spent on installation of the machinery) |        |
| Spare parts and tools consumed in installation                                              | 5,000  |
| Total salary of supervisor                                                                  | 26,000 |
| (Time spent for installation was 25% of the total time worked)                              | 34,000 |
| Total technical expense                                                                     |        |
| (1/10 relates to the plant installation)                                                    | 18,000 |
| Test run and experimental production expenses                                               |        |
| Consultancy charges to architect for plant set up                                           | 11,000 |
| Depreciation on assets used for installation                                                | 12,000 |

The machine was ready for use on 15.01.2021 but was used from 01.02.2021. Due to this delay further expenses of ₹ 8,900 were incurred. Calculate the value at which the plant should be capitalized in the books of Star Limited.

**Solution****Calculation of Cost of Plant**

| Particulars                                  |                        | ₹        |
|----------------------------------------------|------------------------|----------|
| Purchase Price                               | Given                  | 6,80,000 |
| Add: Site Preparation Cost                   | Given                  | 21,200   |
| Labour charges                               | (56,000×200/500) Given | 22,400   |
| Spare parts                                  |                        | 5,000    |
| Supervisor's Salary                          | 25% of ₹ 26,000        | 6,500    |
| Technical costs                              | 1/10 of ₹ 34,000       | 3,400    |
| Test run and experimental production charges | Given                  | 18,000   |
| Architect Fees for set up                    | Given                  | 11,000   |
| Depreciation on assets used for installation | Given                  | 12,000   |
| Total Cost of Asset                          |                        | 7,79,500 |
| Less: GST credit receivable                  |                        | (40,000) |
| Value to be capitalized                      |                        | 7,39,500 |

**Note:** Further Expenses of ₹ 8,900 from 15;1;2021 to 1;2;2021 to be charged to profit and loss A/c as plant was ready for production on 15.1.2021.

**Question 8 (Past Exam Nov 20) (MTP Sep '23)**

A Ltd. had following assets. Calculate depreciation for the year ended 31st March, 2020 for each asset as per AS 10:

- (i) Machinery purchased for ₹ 10 lakhs on 1st April, 2015 and residual value after useful life of 5 years, based on 2015 prices is ₹ 10 lakhs.
- (ii) Land for ₹ 50 lakhs.
- (iii) A Machinery is constructed for ₹ 5,00,000 for its own use (useful life is 10 years). Construction is completed on 1st April, 2019, but the company does not begin using the machine until 31st March, 2020.
- (iv) Machinery purchased on 1st April, 2017 for ₹ 50,000 with useful life of 5 years and residual value is NIL. On 1st April, 2019, management decided to use this asset for further 2 years only **(5 Marks)**

### Solution

#### Computation of amount of depreciation as per AS 10

|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ₹      |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| (i)   | Machinery purchased on 1/4/15 for ₹ 10 lakhs (having residual value of ₹ 10 lakhs)<br>Reason: The company considers that the residual value, based on prices prevailing at the balance sheet date, will equal the cost. Therefore, there is no depreciable amount and depreciation is correctly zero.                                                                                                                                                                                                                                                                            | Nil    |
| (ii)  | Land (50 lakhs) (considered freehold)<br>Reason: Land has an unlimited useful life and therefore, it is not depreciated.                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Nil    |
| (iii) | Machinery constructed for own use (₹ 5,00,000/10) Reason: The entity should begin charging depreciation from the date the machine is ready for use i.e. 1st April, 2019. The fact that the machine was not used for a period after it was ready to be used is not relevant in considering when to begin charging depreciation.                                                                                                                                                                                                                                                   | 50,000 |
| (iv)  | Machinery having revised useful life<br>Reason: The entity has charged depreciation using the straight-line method at ₹ 10,000 per annum i.e. (50,000/5 years). On 1st April, 2019 the asset's net book value is [50,000 – (10,000 x 2)] i.e.; ₹ 30,000; The remaining useful life is 2 years as per revised estimate. The company should amend the annual provision for depreciation to charge the unamortized cost over the revised remaining life of 2 years. Consequently, it should charge depreciation for the next 2 years at ₹ 15,000 per annum i.e. (30,000 / 2 years). | 15,000 |

### Question 9 (Past Exam May'22)

XYZ Limited provided you the following information for the year ended 31 st March, 2022.

- (i) The carrying amount of a property at the end of the year amounted to ₹ 2,16,000 (cost/value ₹ 2,50,000 and accumulated depreciation ₹ 34,000). On this date the property was revalued and was deemed to have a fair value of ₹ 1,90,000. The balance in the revaluation surplus relating to a previous revaluation gain for this property was ₹ 20,000. You are required to calculate the revaluation loss as per AS 10 (Revised) and give its treatment in the books of accounts.
- (ii) An asset that originally cost ₹ 76,000 and had accumulated depreciation of ₹ 62,000 was disposed of during the year for ₹ 4,000 cash. You are required to explain how the disposal should be accounted for in the financial statements as per AS 10. **(5 Marks)**

### Solution

- (i) As per AS 10, a decrease in the carrying amount of an asset arising on revaluation should be charged to the statement of profit and loss. However, the decrease should be debited directly to owners' interests under the heading of revaluation surplus to the extent of any credit balance existing in the revaluation surplus in respect of that asset.

#### Calculation of revaluation loss and its accounting treatment

|                                                                   |       | ₹          |
|-------------------------------------------------------------------|-------|------------|
| Carrying value of the asset as on 31st March, 2022                | a     | 2,16,000   |
| Revalued amount of the asset                                      | b     | (1,90,000) |
| Total revaluation loss on asset                                   | c=a-b | 26,000     |
| Adjustment of previous revaluation reserve                        | d     | (20,000)   |
| Net revaluation loss to be charged to the Profit and loss account | e=c-d | 6,000      |

- (ii) AS 10 states that the carrying amount of an item of property, plant and equipment is derecognized on disposal of the asset. It further states that the gain or loss arising from the derecognition of an item of property, plant and equipment should be included in the statement of profit and loss when the item is derecognized. Gains should also not be classified as revenue.

#### Calculation of loss on disposal of the asset and its accounting treatment

|                                                                  |       | ₹      |
|------------------------------------------------------------------|-------|--------|
| Original cost of the asset                                       | a     | 76,000 |
| Accumulated depreciation till date                               | b     | 62,000 |
| Carrying value of the asset as on 31st March, 2022               | c=a-b | 14,000 |
| Cash received on disposal of the asset                           | d     | 4,000  |
| Loss on disposal of asset charged to the Profit and loss account | e=c-d | 10,000 |

#### Question 10 (Past Exam May '23)

In the books of Top maker Limited, carrying amount of Plant and Machinery as on 1st April, 2022 is ₹ 56,30,000. On scrutiny, it was found that a purchase of Machinery worth ₹ 21,12,000 was included in the purchase of goods on 1st June, 2022. On 30th June, 2022 the company disposed a Machine having book value of ₹ 9,60,000 (as on 1st April, 2022) for ₹ 8,25,000 in part exchange of a new machine costing ₹ 15,65,000. The company charges depreciation @ 10% p.a. on written down value method on Plant and Machinery.

You are required to compute:

- Depreciation to be charged to Profit & Loss Account;
- Book value of Plant & Machinery as on 31st March, 2023; and
- Profit/Loss on exchange of Plant & Machinery.

(5 Marks)

#### Solution

- (i) Depreciation to be charged in the Profit & Loss Account

| Particulars                                                                       | Amount in ₹ |
|-----------------------------------------------------------------------------------|-------------|
| Depreciation on old Machinery                                                     | 1,40,750    |
| [10% on ₹ 56,30,000 for 3 months (01.04.2022 to 30.06.2022)] Add: Depreciation on | 1,76,000    |

|                                                                                                                                                 |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Machinery acquired on 01.06.2022                                                                                                                |                 |
| (₹21,12,000 X 10% X10/12) Add: Depreciation on Machinery after adjustment of Exchange [10% of ₹ 56,30,000 – 9,60,000 + 15,65,000] for 9 months] | 4,67,625        |
| <b>Total Depreciation to be charged in Profit &amp; Loss A/c</b>                                                                                | <b>7,84,375</b> |

**(ii) Book value of Plant & Machinery as on 31.3.2023**

| Particulars                                                 |           | Amount in ₹             |
|-------------------------------------------------------------|-----------|-------------------------|
| Balance as per books on 01.04.2022                          |           | 56,30,000               |
| Add: Included in purchases on 01.06.2022                    | 21,12,000 |                         |
| Add: Purchases on 30.06.2022                                | 15,65,000 | 36,77,000<br>93,07,000  |
| Less: Book value of Machine sold on 30.06.2022              |           | (9,60,000)<br>83,47,000 |
| Less: Depreciation on Machinery in use ₹ (7,84,375 -24,000) |           | (7,60,375)              |
| Book Value as on 31.03.2023                                 |           | 75,86,625               |

Note: The computation of depreciation and book value of Plant & Machinery can be presented in the following alternative manner:

| Particulars   | Book Value or Cost or Acquisition   | Period                   | Depreciation                          | Book Value as on 31.03.2023 |
|---------------|-------------------------------------|--------------------------|---------------------------------------|-----------------------------|
| Opening Value | 46,70,000<br>(56,30,000 – 9,60,000) | 01.04.2022 to 31.03.2023 | 4,67,000<br>(46,70,000 x 10%)         | 42,03,000                   |
| Sold          | 9,60,000                            | 01.04.2022 to 30.06.2022 | 24,000<br>(9,60,000 x 10% x 3/12)     |                             |
| Purchases     | 21,12,000                           | 01.06.2022 to 31.03.2023 | 1,76,000<br>(21,12,000 x 10% x 10/12) | 19,36,000                   |
| New Machinery | 15,65,000                           | 01.07.2022 to 31.03.2023 | 1,17,375<br>(15,65,000 x 10% x 9/12)  | 14,47,625                   |
| Total         |                                     |                          | 7,84,375                              | 75,86,625                   |

**iii) Profit/Loss on Exchange of Machinery**

| Particulars                                                     | Amount in  |
|-----------------------------------------------------------------|------------|
| Balance as per books on 01.04.2022                              | 9,60,000   |
| Less: Depreciation for 3 months (₹ 9,60,000 x 10 /100 x 3 / 12) | (24,000)   |
| W.D.V. as on 30.06.2022                                         | 9,36,000   |
| Less: Exchange value                                            | (8,25,000) |
| Loss on Exchange of Machinery                                   | 1,11,000   |

**MCQ**

1. As per AS 10 (Revised) 'Property, plant and equipment', which of the following costs is not included in the carrying amount of an item of PPE
  - a. Costs of site preparation
  - b. Costs of relocating
  - c. Installation and assembly costs.
  - d. initial delivery and handling costs
2. As per AS 10 (Revised) 'Property, Plant and Equipment', an enterprise holding investment properties should value Investment property
  - a. as per fair value
  - b. under discounted cash flow model.
  - c. under cost model
  - d. under cash flow model
3. A plot of land with carrying amount of ₹ 1,00,000 was revalued to ₹ 1,50,000 at the end of Year 2. Subsequently, due to drop in market values, the land was determined to have a fair value of ₹ 1,30,000 at the end of Year 4. Assuming that the entity adopts Revaluation Model, what would be the accounting treatment of Revaluation?
  - a. Initial upward valuation of ₹ 50,000 credited to Revaluation Reserve. Subsequent downward revaluation of ₹ 20,000 debited to P/L.
  - b. Initial upward valuation of ₹ 50,000 credited to P/L. Subsequent downward revaluation of ₹ 20,000 debited to P/L.
  - c. Initial upward valuation of ₹ 50,000 credited to Revaluation Reserve. Subsequent downward revaluation of ₹ 20,000 debited to Revaluation Reserve.
  - d. Initial upward valuation of ₹ 50,000 debited to P/L. Subsequent downward revaluation of ₹ 20,000 credited to P/L.
4. A plot of land with carrying amount of ₹ 1,00,000 was revalued to ₹ 90,000 at the end of Year 2. Subsequently, due to increase in market values, the land was determined to have a fair value of ₹ 1,05,000 at the end of Year 4. Assuming that the entity adopts Revaluation Model, what would be the accounting treatment of Revaluation?
  - a. Initial downward valuation of ₹ 10,000 debited to Revaluation Reserve. Subsequent upward revaluation of ₹ 15,000 credited to P/L.
  - b. Initial downward valuation of ₹ 10,000 debited to P/L. Subsequent upward revaluation of ₹ 15,000 credited to P/L.
  - c. Initial downward valuation of ₹ 10,000 debited to P/L. Subsequent upward revaluation of ₹ 10,000 credited to P/L and ₹ 5,000 credited to Revaluation Reserve.
  - d. Initial downward valuation of ₹ 10,000 credited to P/L. Subsequent upward revaluation of ₹ 10,000 debited to P/L and ₹ 5,000 debited to Revaluation Reserve.
5. On sale of an asset which was revalued upwards, what would be the treatment of Revaluation Reserve?
  - a. The Revaluation Reserve is credited to P/L since the profit on sale of such asset is now realized.
  - b. The Revaluation Reserve is credited to Retained Earnings as a movement in reserves without impacting the P/L.

- c. No change in Revaluation Reserve since profit on sale of such asset is already impacting the P/L.
  - d. The Revaluation Reserve is reduced from the asset value to compute profit or loss.
6. A machinery was purchased having an invoice price ₹ 1,18,000 (including GST ₹ 18,000) on 1 April 20X1. The GST amount is available as input tax credit.

The rate of depreciation is 10% on SLM basis. The depreciation for 20X2-X3 would be

- a. ₹ 10,000.
- b. ₹ 11,800.
- c. ₹ 9,000.
- d. ₹ 10,500.

#### MCQs

1. (b) 2. (c) 3. (c) 4. (c) 5. (b) 6. (a)