

# **CMA Final**

## **Corporate Financial Reporting (CFR)**

### **IND AS Marathon**



**CA BISHNU KEDIA**

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## IND AS 16- PROPERTY, PLANT & EQUIPMENT

### Question 1

H Limited purchased an item of PPE costing 100 million which has useful life of 10 years. The entity has a contractual decommissioning and site restoration obligation, estimated at 5 million to be incurred at the end of 10th year. The current market-based discount rate is 8%.

The company follows SLM method of depreciation. H Limited follows the Cost Model for accounting of PPE.

Determine the carrying value of an item of PPE and decommissioning liability at each year end when there is no change in the expected decommissioning expenses, expected timing of incurring the decommissioning expense and / or the discount rate.

### Solution

The present value of such decommissioning and site restoration obligation at the end of 10th year is ₹ **2.32 million** [being  $5 / (1.08)^{10}$ ]. H Limited will recognize the present value of decommissioning liability of ₹ 2.32 million as an **addition to cost of PPE and** will also recognize a corresponding decommissioning liability. Further, the entity will recognize the unwinding of discount as finance charge.

The following table shows the relevant computations, if there is **no change** in the expected decommissioning expenses, expected timing of incurring the decommissioning expense and / or the discount rate:

(₹ in million)

Year	Opening Amount of PPE	Depreciation Charge (on SLM) for 10 Years	Carrying Amount of PPE at the end of the year	Opening Decommissioning Liability	Unwinding of Interest @ 8%	Closing Decommissioning Liability
1	102.32	10.23	92.08	2.32	0.19	2.50
2	92.08	10.23	81.85	2.50	0.20	2.70
3	81.85	10.23	71.62	2.70	0.22	2.92
4	71.62	10.23	61.39	2.92	0.23	3.15
5	61.39	10.23	51.16	3.15	0.25	3.40
6	51.16	10.23	40.93	3.40	0.27	3.68
7	40.93	10.23	30.69	3.68	0.29	3.97
8	30.69	10.23	20.46	3.97	0.32	4.29
9	20.46	10.23	10.23	4.29	0.34	4.63

10	10.23	10.23	-	4.63	0.37	5.00
<b>Total</b>		<b>102.32</b>			<b>2.68</b>	

**Question 2**

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. The discount rate assumed is 5%.

Analyze whether the cost of the new turbine can be recognized as an asset, and, if yes, then apply the accounting treatment relevant to it.

**Solution**

The new turbine will produce economic benefits to MS Ltd., and the cost is measurable. Hence, the item should be recognized as an asset. The original invoice for the machine did not specify the cost of the turbine; however, the cost of the replacement 45,00,000 can be used as an indication (usually by discounting) of the likely cost, six years previously.

If an appropriate discount rate is 5% per annum, ₹ 45,00,000 discounted back six years amounts to ₹ 33,57,900 [  $45,00,000/(1.05)^6$  ], i.e., the approximate cost of turbine before 6 years.

The current carrying amount of the turbine which is required to be replaced of ₹ 13,43,160 would be derecognized from the books of account, (i.e., Original Cost ₹ 33,57,900 as reduced by accumulated depreciation for past 6 years ₹ 20,14,740, assuming depreciation is charged on straight-line basis.)

The cost of the new turbine, ₹ 45,00,000 would be added to the cost of machine, resulting in a revision of carrying amount of machine to ₹ 71,56,840. (i.e.,  $40,00,000^* - 13,43,160 + 45,00,000$ ).

\*Original cost of machine ₹ 1,00,00,000 reduced by accumulated depreciation (till the end of 6 years) ₹ 60,00,000.

**Question 3 (Ind-AS 23 also)**

On 1<sup>st</sup> April, 2011, 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<sup>st</sup> May, 2011. 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 – 3,00,000.
- Costs of the opening ceremony on 31<sup>st</sup> January, 2012 – 1,50,000.

The factory was completed on 30<sup>th</sup> November, 2011 (which is considered as substantial period of time as per Ind AS 23) and production began on 1<sup>st</sup> February, 2012. 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 0.046.

The construction of the factory was partly financed by a loan of 17.5 million taken out on 1<sup>st</sup> April, 2011. The loan was at an annual rate of interest of 6%. Sun Ltd received investment income of 100,000 on the temporary investment of the proceeds.

Compute the carrying amount of the factory on the Balance Sheet of Sun Ltd at 31<sup>st</sup> March, 2012. Explain the treatment of all the amounts referred to in this part of the answer.

**Solution**

## Computation of Cost of Machinery

Description	Included in P.P.E. ₹ '000	Explanation
Purchase of land	10,000	Both the purchase of the land and the associated legal costs are direct costs of constructing the factory.
Preparation and levelling	300	A direct cost of constructing the factory
Materials	6,080	A direct cost of constructing the factory
Employment costs of construction workers	1,400	A direct cost of constructing the factory for a seven-month period
Direct overhead costs	700	A direct cost of constructing the factory for a seven-month period
Allocated overhead costs	Nil	Not a direct cost of construction
Income from use as a car park	Nil	Not essential to the construction so recognized directly in profit or loss
Relocation costs	Nil	Not a direct cost of construction
Opening ceremony	Nil	Not a direct cost of construction
Finance costs	612.50	Capitalize the interest cost incurred in a seven-month period (purchase of land would not trigger off capitalization since land is not a qualifying asset. Infact, the construction started from 1st May, 2011)
Investment income on temporary investment of the loan proceeds	(100)	offset against the amount capitalized
Demolition cost recognized as a provision	<u>920</u>	Where an obligation must recognize as part of the initial cost
Total	<u>19,912.50</u>	



<b>Computation of accumulated depreciation</b>		
Total depreciable amount	9,912.50	All of the net finance cost of 512.50 (612.50 – 100) has been allocated to the depreciable amount. Also, acceptable to reduce by allocating a portion to the non-depreciable land element principle
Depreciation must be in two parts:		
Depreciation of roof component	49.56	$9,912.50 \times 30\% \times 1/20 \times 4/12$
Depreciation of remainder	<u>57.82</u>	$9,912.50 \times 70\% \times 1/40 \times 4/12$
Total depreciation	<u>107.38</u>	
Computation of carrying amount	<u>19,805.12</u>	$19,912.50 - 107.38$

### Question 4

Entity X has a warehouse which is closer to factory of Entity Y and vice versa. The factories are located in the same vicinity. Entity X and Entity Y agree to exchange their warehouses. The carrying value of warehouse of Entity X is ₹ 1,00,000 and its fair value is ₹ 1,25,000. It exchanges its warehouse with that of Entity Y, the fair value of which is ₹ 1,20,000. It also receives cash amounting to ₹ 5,000. How should Entity X account for the exchange of warehouses?

### Solution

Paragraph 24 of Ind AS 16, inter alia, provides that when an item of property, plant and equipment is acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets, the cost of such an item of property, plant and equipment is measured at fair value 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.

Further as per paragraph 25 of Ind AS 16, 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:

- 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
- 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.

In the given case, the transaction lacks commercial substance as the company's cash flows are not expected to significantly change as a result of the exchange because the factories are located in the same vicinity i.e. it is in the same position as it was before the transaction.

Hence, Entity X will have to recognise the assets received at the carrying amount of asset given up, i.e., ₹ 1,00,000 being carrying amount of existing warehouse of Entity X and ₹ 5,000 received will be deducted from the cost of property, plant and equipment. Therefore, the warehouse of Entity Y is recognised as property, plant and equipment with a carrying value of ₹ 95,000 in the books of Entity X.



## **IND AS 38- INTANGIBLE ASSETS**

### **Question 1**

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 8,00,000 for advertisements before 31<sup>st</sup> March, 2011. 7,00,000 of this sum relates to advertisements shown before 31<sup>st</sup> March, 2011 and 1,00,000 to advertisements shown in April, 2011. Since 31<sup>st</sup> March, 2011, the Company has paid for further advertisements costing 4,00,000.

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.

Analyze the treatment of the above costs in the financial statements for the year ended 31<sup>st</sup> March, 2011.

### **Solution**

Under Ind AS 38 – Intangible Assets – intangible assets can only be recognized 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 recognizing 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 recognized as expenses.

However, the costs would be recognized on accrual basis. Therefore, of the advertisements paid for before 31<sup>st</sup> March, 2011, ₹ 7,00,000 would be recognized as an expense and ₹ 1,00,000 as a pre-payment in the year ended 31<sup>st</sup> March, 2011. The cost of advertisements amounting ₹ 4,00,000 paid for since 31<sup>st</sup> March, 2011 would be charged as expenses in the year ended 31<sup>st</sup> March, 2012.

### **Question 2**

Venus India Private Ltd. acquired a software for its internal use costing 10,00,000. The amount payable for the software was 6,00,000 immediately and 4,00,000 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.

## Solution

Particulars	Amount in ₹
Cash paid	6,00,000
Deferred consideration (₹4,00,000 / 1.1)	3,63,636
Purchase Tax	1,00,000
Entry tax (not to be considered as it is a refundable tax)	-
Legal fees	87,000
Consultancy fees for implementation	<u>1,20,000</u>
Total cost to be capitalized	<u>12,70,636</u>

## Question 3

Expenditure on a new production process in 2011-2012:	
1 <sup>st</sup> April to 31 <sup>st</sup> December	2,700
1 <sup>st</sup> January to 31 <sup>st</sup> March	<u>900</u>
	<u>3,600</u>

The production process met the intangible asset recognition criteria for development on 1<sup>st</sup> January, 2012. The amount estimated to be recoverable from the process is ₹ 1,000. Expenditure incurred for development of the process in financial year 2012-13 is ₹ 6,000. Asset was brought into use on 31<sup>st</sup> March, 2013 and is expected to be useful for 6 years.

What is the carrying amount of the intangible asset at 31<sup>st</sup> March, 2012 and 31<sup>st</sup> March, 2013. Also determine the charge to profit or loss for 2011-2012?

At 31<sup>st</sup> March, 2014, the amount estimated to be recoverable from the process is ₹ 5,000.

Determine the carrying amount of the intangible asset at 31<sup>st</sup> March, 2014 and the charge to profit or loss for 2013-2014 on account of impairment loss.

**Solution**

<b>1) Expenditure to be transferred to profit or loss in 2011-2012</b>	<b>₹</b>
Total Expenditure	3,600
Less: Expenditure during development phase	(900)
Expenditure to be transferred to profit or loss	<u>2,700</u>
<b>2) Carrying amount of intangible asset on 31<sup>st</sup> March, 2012</b>	
Expenditure during development phase will be capitalised	900
(Recoverable amount is higher being 1,000, hence no impairment)	
<b>3) Carrying amount of intangible asset on 31<sup>st</sup> March, 2013</b>	
Carrying amount of intangible asset on 31 <sup>st</sup> March, 2012	900
Add: Further expenditure during development phase	<u>6,000</u>
Total capital expenditure on development phase	<u>6,900</u>
<b>4) Expenditure to be charged to profit or loss in 2013-2014</b>	
Opening balance of Intangible Asset	6,900
Less: Amortisation for the year (6,900 / 6)	(1,150)
Carrying amount of intangible asset	5,750
Less: Recoverable amount	(5,000)
Amount charged to profit or loss (Impairment Loss)	<u>750</u>
<b>5) Carrying Amount of Intangible Asset on 31<sup>st</sup> March, 2014</b>	
Value of intangible asset will be recoverable amount i.e.	<u>5,000</u>

**Question 4**

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 fertilizer as follows:

<b>Year</b>	<b>(In metric tons)</b>
1	50,000
2	70,000
3	1,00,000
4	1,20,000
5	1,10,000

At the end of the 1<sup>st</sup> year, it achieved its targeted production.

At the end of 2nd year, 65,000 metric tons of fertilizer 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 & 5 respectively.

Advise how X Limited will amortize the technical know-how fees as per Ind AS 38.

**Solution**

Based on the above data, it may be suitable for X Ltd. to use unit of production method for amortization of technical know-how.

The total estimated unit to be produced 4,50,00 MT. The technical know-how will be amortized on the basis of the ratio of yearly production to total production.

The first-year charge should be a proportion of  $50,000 / 4,50,000$  on  $10,00,00,000 = 1,11,11,111$ .

At the end of 2<sup>nd</sup> year, as per revised estimate the total number of units to be produced in future are 3,70,000 MT (i.e.  $65,000 + 85,000 + 1,05,000 + 1,15,000$ ).

The amortization for second year will be  $65,000 / 3,70,000$  on  $(10,00,00,000 - 1,11,11,111)$  i.e., 1,56,15,615.

Amortization for remaining years (unless the estimates are again revised):

Year 3 =  $85,000 / 3,70,000$  on  $(10,00,00,000 - 1,11,11,111)$  i.e., ₹ 2,04,20,420

Year 4 =  $1,05,000 / 3,70,000$  on  $(10,00,00,000 - 1,11,11,111)$  i.e., ₹ 2,52,25,225

Year 5 =  $1,15,000 / 3,70,000$  on  $(10,00,00,000 - 1,11,11,111)$  i.e., ₹ 2,76,27,628

**Question 5**

X Ltd. is engaged in the business of publishing Journals. They acquired 100% 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 assets acquired is ₹ 8,50,00,000. The purchase consideration includes payment for the following as well:

- (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.

However, the above items (a) and (b) are not forming part of the net assets acquired of 8,50,00,000. Determine how the above transactions be accounted for by X Ltd.

**Solution**

X Ltd. should recognize an intangible asset in respect of the consideration paid towards 'Non-Compete Fee'.

However, amount paid for obtaining skilled staff amounting to ₹ 30,00,000 does not meet the definition of intangible asset since X Ltd. has not established any right over

the resource and the same should be expensed. The entity has insufficient control over the expected future economic benefits arising from the team of skilled staff.

Therefore, ₹ 50,00,000 will be separately recognized as an intangible asset, whereas amount paid for obtaining skilled staff does not meet the recognition criteria for being identified as a separate intangible asset. However, since it is acquired as part of a business combination, it forms part of the goodwill recognized at the acquisition date. The value of goodwill would be ₹ 1,00,00,000 (₹ 1,50,00,000 – ₹ 50,00,000).

## IND AS 23- BORROWING COSTS

### Question 1

A real estate company has incurred expenses for the acquisition of a permit allowing the construction of a building. It has also acquired equipment that will be used for the construction of various buildings.

Examine whether the borrowing costs on the acquisition of the permit and the equipment be capitalized until the construction of the building is complete.

### Solution

#### With respect to Permit

Yes, since permit is specific to one building. It is the first step in a wider investment project. It is part of the construction cost of the building, which meets the definition of a qualifying asset.

#### With respect to Equipment

No, since the equipment will be used for other construction projects. It is ready for its 'intended use' at the acquisition date. Hence, it does not meet the definition of a qualifying asset.

### Question 2

Beta Ltd. had the following loans in place at the end of 31<sup>st</sup> March, 2012:

(₹ in 000)

Loan	1 <sup>st</sup> April, 2011	31 <sup>st</sup> March, 2012
18% Bank Loan	1,000	1,000
16% Term Loan	3,000	3,000
14% Debentures	-	2,000

14% Debentures were issued to fund the construction of office building on 1<sup>st</sup> July, 2011 but the development activities are yet to be started.

On 1<sup>st</sup> April, 2011, Beta Ltd. began the construction of a Plant being a qualifying asset using the existing borrowings. Expenditure drawn down for the construction was: ₹ 5,00,000 on 1<sup>st</sup> April, 2011 and ₹ 25,00,000 on 1<sup>st</sup> January, 2012.

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



## Solution

Capitalization Rate	$\{(18\% \times 1000) + (16\% \times 3000) / (1000 + 3000)\}$	16.5%
Borrowing Costs	$(5,00,000 \times 16.5\%) + (25,00,000 \times 16.5\% \times 3/12)$	1,85,625

Capitalization rate for above illustration could also be calculated with the following approach by assigning weights to the borrowings:

Particulars	Loan	Weighted average (a)	Interest rate (b)	Capitalization rate (a*b)
18% Bank Loan	1,000	25%	18%	4.5%
16% Term Loan	3,000	75%	16%	12%
<b>Total</b>	<b>4,000</b>	<b>100%</b>		<b>16.5%</b>

## Question 3

On 1<sup>st</sup> April, 2011, entity A contracted for the construction of a building for ₹ 22,00,000. The land under the building is regarded as a separate asset and is not part of the qualifying assets. The building was completed at the end of March, 2012, and during the period the following payments were made to the contractor:

Payment date	Amount (₹ in '000)
1 <sup>st</sup> April, 2011	200
30 <sup>th</sup> June, 2011	600
31 <sup>st</sup> December, 2011	1,200
31 <sup>st</sup> March, 2012	<u>200</u>
<b>Total</b>	<b><u>2,200</u></b>

Entity A's borrowings at its year end of 31<sup>st</sup> March, 2012 were as follows:

10%, 4-year note with simple interest payable annually, which relates specifically to the project; debt outstanding on 31<sup>st</sup> March, 2012 amounted to ₹ 7,00,000. Interest of ₹ 65,000 was incurred on these borrowings during the year, and interest income of ₹ 20,000 was earned on these funds while they were held in anticipation of payments.

12.5% 10-year note with simple interest payable annually; debt outstanding at 1<sup>st</sup> April, 2011 amounted to ₹ 1,000,000 and remained unchanged during the year; and

10% 10-year note with simple interest payable annually; debt outstanding at 1<sup>st</sup> April, 2011 amounted to ₹ 1,500,000 and remained unchanged during the year.

Determine the amount of the borrowing costs which can be capitalized at the year-end as per relevant Ind AS.

**Solution**

As per Ind AS 23, when an entity borrows funds specifically for the purpose of obtaining a qualifying asset, the entity should determine the amount of borrowing costs eligible for capitalization as the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings.

The amount of borrowing costs eligible for capitalization, in cases where the funds are borrowed generally, should be determined based on the capitalization rate and expenditure incurred in obtaining a qualifying asset. The costs incurred should first be allocated to the specific borrowings.

**Analysis of expenditure:**

Date	Expenditure (₹'000)	Amount allocated in general borrowings (₹'000)	Weighted for period outstanding (₹'000)
1 <sup>st</sup> April 2011	200	0	0
30 <sup>th</sup> June 2011	600	100*	$100 \times 9/12 = 75$
31 <sup>st</sup> Dec 2011	1,200	1,200	$1,200 \times 3/12 = 300$
31 <sup>st</sup> March 2012	200	200	$200 \times 0/12 = 0$
Total	2,200		375

\*Specific borrowings of ₹ 7,00,000 fully utilized on 1st April & on 30th June to the extent of ₹ 5,00,000 hence remaining expenditure of ₹ 1,00,000 allocated to general borrowings.

The capitalization rate relating to general borrowings should be the weighted average of the borrowing costs applicable to the entity's borrowings that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset.

Capitalization rate =  $(10,00,000 \times 12.5\%) + (15,00,000 \times 10\%) / (10,00,000 + 15,00,000)$   
 = 11%

Borrowing cost to be capitalized:	Amount (₹)
On specific loan	65,000
On General borrowing $(3,75,000 \times 11\%)$	41,250
Total	1,06,250
Less: interest income on specific borrowings	(20,000)
Amount eligible for capitalization	86,250

## IND AS 36- IMPAIRMENT OF ASSETS

### Question 1

A Ltd. purchased a machinery of ₹ 100 crore on April 1, 2021. 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 31<sup>st</sup> March, 2022:

Financial Year	Estimated Future Cash Flows (₹ in crore)
2022-2023	15
2023-2024	30
2024-2025	40
2025-2026	10

Discount rate applicable: 10%

Fair Value less costs to sell as on March 31, 2022: ₹ 70 Crore

- Calculate the impairment loss, if any.
- Assuming in the above question, as on 31<sup>st</sup> March, 2013, there is no change in the estimated future cash flows and discount rate. Fair value less costs to sell as on 31<sup>st</sup> March, 2013 is ₹ 40 crore. Advise, how it should deal with under Ind AS 36.

### Solution

a.

Value in use of the machinery as on 31<sup>st</sup> March, 2012 can be calculated as follows:

Financial year	Estimated cash flows (₹ in crore)	Present value factor @ 10%	Present value
2012-2013	15	0.9091	13.64
2013-2014	30	0.8264	24.79
2014-2015	40	0.7513	30.05
2015-2016	10	0.6830	<u>6.83</u>
			<b><u>75.31</u></b>

The recoverable amount of the machinery is ₹ 75.31 crore (higher of value in use of 75.31 crore and fair value less costs to sell of ₹ 70 crore). The carrying of the machinery is ₹ 80 crore (after providing for one year depreciation @ ₹ 20 crore). Therefore, the impairment loss of ₹ 4.69 crore should be provided in the books. Further, the impaired carrying value of ₹ 75.31 crore will be depreciated, on a straight-line basis, over the remaining four years.

b.

Value in use of the machinery as on March 31, 2013 can be calculated as follows:

Financial year	Estimated cash flows (₹ in crore)	Present value factor @ 10%	Present value
2013-2014	30	0.9091	27.27
2014-2015	40	0.8264	33.06
2015-2016	10	0.7513	<u>7.51</u>
			<u>67.84</u>

The recoverable amount of the machinery is ₹ 67.84 crore (higher of value in use of ₹ 67.84 crore and fair value less costs to sell of ₹ 40 crore). Carrying amount of the machinery at the end of the year 2012 is ₹ 56.48 crore (after providing for two years depreciation  $(100 - 20 - 4.69) = 18.83$ ).

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

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

### Question 2

On 31<sup>st</sup> March, 2011, XYZ Ltd. makes following estimate of cash flows for one of its asset located in USA:

Year	Cash flows
2011-2012	US \$ 80
2012-2013	US \$ 100
2013-2014	US \$ 20

Following information has been provided:

Particulars	India	USA
Applicable discount rate	15%	10%

Exchange rates are as follows:

As on	Exchange rate
31 <sup>st</sup> March, 2011	₹ 45/US \$

31 <sup>st</sup> March, 2012	₹ 48/US \$
31 <sup>st</sup> March, 2013	₹ 51/US \$
31 <sup>st</sup> March, 2014	₹ 55/US \$

Calculate value in use as on 31<sup>st</sup> March, 2011.

### Solution

Year	Cash flows (US \$)	Present value factor @ 10%	Discounted cash flows (US \$)
2011-2012	80	0.9091	72.73
2012-2013	100	0.8264	82.64
2013-2014	20	0.7513	<u>15.03</u>
Total Discounted cash flows in US \$			<u>170.40</u>
Exchange rate as on 31 <sup>st</sup> March, 2011, i.e., date of calculating value in use			45/US \$
Value in use as on 31 <sup>st</sup> March, 2011			₹ 7,668

### Question 3

On 1<sup>st</sup> January Year 1, Entity Q purchased a machine costing ₹ 2,40,000 with an estimated useful life of 20 years and an estimated zero residual value. Depreciation is computed on straight-line basis. The asset had been re-valued on 1<sup>st</sup> January Year 3 to ₹ 2,50,000, but with no change in useful life at that date. On 1<sup>st</sup> January Year 4 an impairment review showed the machine's recoverable amount to be ₹ 1,00,000 and its estimated remaining useful life to be 10 years.

### Calculate:

- The carrying amount of the machine on 31<sup>st</sup> December Year 2 and the revaluation surplus arising on 1 January Year 3.
- The carrying amount of the machine on 31<sup>st</sup> December Year 3 (immediately before the impairment).
- The impairment loss recognized in the year to 31<sup>st</sup> December Year 4 and its treatment thereon.
- The depreciation charge in the year to 31<sup>st</sup> December Year 4.

### Solution

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

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

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

Carrying amount at the beginning of Year 3	2,16,000
Revaluation done at the beginning of Year 3	<u>2,50,000</u>
Revaluation surplus	<u>34,000</u>

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

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

Valuation at 1 January (re-valued amount)	2,50,000
Accumulated depreciation in Year 3 (2,50,000 / 18)	(13,889)
Carrying amount of the asset at the end of Year 3	2,36,111
On 1 January Year 4, recoverable amount of the machine	1,00,000

Impairment loss (2,36,111 – 1,00,000) ₹ 1,36,111

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

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

**(d) Calculation of depreciation charge in the Year 4**

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

**Question 4**

ABC Ltd. has three cash-generating units: A, B and C, the carrying amounts of which as on 31<sup>st</sup> March, 2011 are as follows:

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

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



₹		
Corporate asset	Carrying amount	Remarks
X	600	The carrying amount of X can be allocated on a reasonable basis (i.e., pro rata basis) to the individual cash-generating units.
Y	200	The carrying amount of Y cannot be allocated on a reasonable basis to the individual cash-generating units.

Recoverable amount as on 31<sup>st</sup> March, 2011 is as follows:

Cash-generating units	Recoverable amount (₹ in crore)
A	600
B	900
C	1,400
ABC Ltd.	3,200

Calculate the impairment loss, if any. Ignore decimals.

### Solution

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

(₹ in crore)				
Particulars	A	B	C	Total
Carrying amount	500	750	1,100	2,350
Useful life	10 years	20 years	20 years	—
Weight based on useful life	1	2	2	—
Carrying amount (after assigning weight)	500	1,500	2,200	4,200
Pro-rata allocation of X	12%	36%	52%	100%
	(500/4,200)	(1,500/4,200)	(2,200/4,200)	
Allocation of carrying amount of X	72	216	312	600
Carrying amount (after allocation of X)	572	966	1,412	2,950

**Calculation of impairment loss****Step I: Impairment losses for individual cash-generating units and its allocation****(a) Impairment loss of each cash-generating units****(₹ in crore)**

Particulars	A	B	C
Carrying amount (after allocation of X)	572	966	1,412
Recoverable amount	<u>600</u>	<u>900</u>	<u>1400</u>
Impairment loss	<u>-</u>	<u>66</u>	<u>12</u>

**(b) Allocation of the impairment loss between cash-generating units and corporate asset X, on a pro rata basis, as follows****(₹ in crore)**

Allocation to	B		C	
X	15	(66 x 216/966)	3	(12 x 312/1,412)
Other assets in cash-				
generating units	<u>51</u>	(66 x 750/ 966)	<u>9</u>	(12 x 1,100/ 1,412)
Impairment loss	<u>66</u>		<u>12</u>	

**Step II: Impairment losses for the larger cash-generating unit, i.e., ABC Ltd. as a whole****(₹ in crore)**

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

## IND AS 21- THE EFFECTS OF CHANGES IN FOREIGN EXCHANGE RATES

### Question 1

A is an Oman based company having a foreign operation, B, in India. The foreign operation was primarily set up to execute a construction project in India. The functional currency of A is OMR.

78% of entity B's finances have been raised in USD by way of contribution from A. B's bank accounts are maintained in USD as well as Rupees (₹). Cash flows generated by B are transferred to A on a monthly basis in USD in respect of repayment of finance received from A.

Revenues of B are in USD. Its competitors are globally based. Tendering for the construction project happened in USD.

B incurs 70% of the cost in Rupees (₹) and remaining 30% costs in USD.

Comment since B is located in India, can it presume its functional currency to be Rupees (₹).

### Solution

No, B cannot presume Rupees (₹) to be its functional currency on the basis of its location. It needs to consider various factors listed in Ind AS for determination of functional currency.

### Primary indicators:

1. the currency that mainly influences
  - (a) sales prices for its goods and services. This will often be the currency in which sales prices are denominated and settled; and of the country whose competitive forces and regulations mainly determine the sales prices of its goods and services.
  - (b) labour, material and other costs of providing goods and services. This will often be the currency in which these costs are denominated and settled.
2. Other factors that may provide supporting evidence to determine an entity's functional currency are (Secondary indicators):
  - (a) the currency in which funds from financing activities (i.e. issuing debt and equity instruments) are generated; and
  - (b) the currency in which receipts from operating activities are usually retained.

The analysis is given below:

- ☐ Its significant revenues and competitive forces are in USD.
- ☐ Its significant portion of cost is incurred in Rupees (₹). Only 30% costs are in USD.
- ☐ 78% of its finances have been raised in USD.
- ☐ It retains its operating cash flows partially in USD and partially in Rupees (₹).

Keeping these factors in view, USD should be considered as the functional currency.

## IND AS 108- OPERATING SEGMENTS

### Question 1

T Ltd is engaged in transport sector, running a fleet of buses at different routes. T Ltd has identified 3 operating segments:

- Segment 1: Local Route
- Segment 2: Inter-city Route
- Segment 3: Contract Hiring

### The characteristics of each segment are as under:

Segment 1: The local transport authority awards the contract to ply the buses at different routes for passengers. These contracts are awarded following a competitive tender process; the ticket price paid by passengers are controlled by the local transport authority. T Ltd would charge the local transport authority on a per kilometer basis.

Segment 2: T Ltd operates buses from one city to another, prices are set by T Ltd on the basis of services provided (Deluxe, Luxury or Superior).

Segment 3: T Ltd also leases buses to schools under a long-term arrangement.

While Segment 1 has been showing significant decline in profitability, Segment 2 is performing well in respect of higher revenues and improved margins. The management of the company is not sure why is the segment information relevant for users when they should only be concerned about the returns from overall business. They would like to aggregate the Segment 1 and Segment 2 for reporting under 'Operating Segment'.

### Required:

- i. Whether it is appropriate to aggregate Segments 1 and 2 with reference to Ind AS 108 'Operating Segments'? and
- ii. Discuss, in the above context, whether disclosure of segment information is relevant to an investor's appraisal of financial statements?

### Solution

Ind AS 108 'Operating Segments' requires operating segments to be aggregated to present a reportable segment if the segments have similar economic characteristics, and the segments are similar in each of the following aggregation criteria:

- (a) The nature of the products and services
- (b) The nature of the production process
- (c) The type or class of customer for their products and services

- (d) The methods used to distribute their products or provide their services
- (e) If applicable, the nature of the regulatory environment.

While the products and services are similar, the customers for those products and services are different.

In Segment 1, the decision to award the contract is in the hands of the local authority, which also sets prices and pays for the services. The company is not exposed to passenger revenue risk, since a contract is awarded by competitive tender.

On the other hand, in the inter-city segment, the customer determines whether a bus route is economically viable by choosing whether or not to buy tickets. T Ltd sets the ticket prices but will be affected by customer behaviour or feedback. T Ltd is exposed to passenger revenue-risk, as it sets prices which customers may or may not choose to pay. Operating Segment provides information that makes the financial statements more useful to investors. In making the investment decisions, investors and creditors consider the returns they are likely to make on their investment. This requires assessment of the amount, timing and uncertainty of the future cash flows of T Ltd as well as of management's stewardship of T Ltd's resources. How management derives profit is therefore relevant information to an investor.

Inappropriately aggregating segments reduces the usefulness of segment disclosures to investors. Ind AS 108 requires information to be disclosed that is not readily available elsewhere in the financial statements, therefore it provides additional information which aids an investor's understanding of how the business operates and is managed.

In T Ltd.'s case, if the segments are aggregated, then the increased profits in segment 2 will hide the decreased profits in segment 1. However, the fact that profits have sharply declined in segment 1 would be of interest to investors as it may suggest that future cash flows from this segment are at risk.

## Question 2

John Limited has identified four segments for which revenue data is given as per below:

Particulars	External Sale (₹)	Internal Sale (₹)	Total (₹)
Segment A	4,00,000	Nil	4,00,000
Segment B	80,000	Nil	80,000
Segment C	90,000	20,000	1,10,000
Segment D	<u>70,000</u>	<u>6,20,000</u>	<u>6,90,000</u>
Total sales	<u>6,40,000</u>	<u>6,40,000</u>	<u>12,80,000</u>

The following additional information is available with respect to John Limited:

Segment C is a high growing business and management expects that this segment to make a significant contribution to external revenue in coming years.

Discuss, which of the segments would be reportable under the threshold criteria identified in Ind AS 108 and why?

### **Solution**

Threshold amount of 10% of total revenue is ₹ 1,28,000 ( $₹ 12,80,000 \times 10\%$ ).

Segment A exceeds the quantitative threshold ( $₹ 4,00,000 > ₹ 1,28,000$ ) and hence is a reportable segment.

Segment D exceeds the quantitative threshold ( $₹ 6,90,000 > ₹ 1,28,000$ ) and hence is a reportable segment.

Segment B & C do not meet the quantitative threshold amount and may not be classified as reportable segment.

However, the total external revenue generated by these two segments A & D represent only 73.44% ( $₹ 4,70,000 / 6,40,000 \times 100$ ) of the entity's total external revenue. If the total external revenue reported by operating segments constitutes less than 75% of the entity's total external revenue, additional operating segments should be identified as reportable segments until at least 75% of the revenue is included in reportable segments. In case of John Limited, it is given that Segment C is a high growing business and management expects this segment to make a significant contribution to external revenue in coming years. In accordance with the requirement of Ind AS 108, John Limited may designate segment C as a reportable segment, making the total external revenue attributable to reportable segments be 87.5% ( $₹ 5,60,000 / 6,40,000 \times 100$ ) of total entity's external revenue.

In this situation, Segments A, C and D will be reportable segments and Segment B will be shown as other segment.

**Alternatively,** Segment B may be considered as a reportable segment instead of Segment C, based on the choice of John Ltd. 's management, if it meets the definition of operating segment.

If Segment B is considered as reportable segment, external revenue reported will be



$$₹ 4,00,000 + ₹ 80,000 + ₹ 70,000 = ₹ 5,50,000$$

$$\% \text{ of Total External Revenue} = ₹ 5,50,000 / ₹ 6,40,000 = 85.94\%$$

Segments A, B and D will be reportable segments and Segment C will be shown as other segment.

### Question 3

X Ltd. is operating in coating industry. Its business segments comprise Coating (consisting of decorative, automotive, industrial paints and related activities) and Others (consisting of chemicals, polymers and related activities). Certain information for financial year 2011-2012 is given below:

(₹ in lakh)

Segments	External Revenue (including GST)	GST	Other operating income	Result	Assets	Liabilities
Coating	2,00,000	5,000	40,000	10,000	50,000	30,000
Others	70,000	3,000	15,000	4,000	30,000	10,000

### Additional information:

1. Unallocated income net of expenses is ₹ 30,00,00,000
2. Interest and bank charges is ₹ 20,00,00,000
3. Income tax expenses is ₹ 20,00,00,000 (current tax ₹ 19,50,00,000 and deferred tax ₹ 50,00,000)
4. Unallocated Investments are ₹ 1,00,00,00,000 and other assets are ₹ 1,00,00,00,000.
5. Unallocated liabilities, Reserves and surplus and share capital are ₹ 2,00,00,00,000, ₹ 3,00,00,00,000 & ₹ 1,00,00,00,000 respectively.
6. Depreciation amounts for coating and others are ₹ 10,00,00,000 and ₹ 3,00,00,000 respectively.
7. Capital expenditure for coating and others are ₹ 50,00,00,000 and ₹ 20,00,00,000 respectively.
8. Revenue from outside India is ₹ 6,20,00,00,000 and segment asset outside India ₹ 1,00,00,00,000.

Based on the above information, how X Ltd. would disclose information about reportable segment revenue, profit or loss, assets and liabilities for financial year 2011-2012?

**Solution****Segment information**

Information about operating segment

**(1) The company's operating segments comprise:**

**Coatings:** consisting of decorative, automotive, industrial paints and related activities.

**Others:** consisting of chemicals, polymers and related activities.

**(2) Segment revenues, results and other information. (₹ in Lakh)**

	Revenue	Coating	Others	Total
<b>1. External Revenue (gross)</b>	<b>2,00,000</b>	<b>70,000</b>	<b>2,70,000</b>	
Less: GST	<u>(5,000)</u>	<u>(3,000)</u>	<u>(8,000)</u>	
Total Revenue (net)	1,95,000	67,000	2,62,000	
Other Operating Income	<u>40,000</u>	<u>15,000</u>	<u>55,000</u>	
Total Revenue	<u>2,35,000</u>	<u>82,000</u>	<u>3,17,000</u>	
<b>2. Results</b>				
Segment results	10,000	4,000	14,000	
Unallocated income (net of unallocated expenses)			3,000	
<b>Profit from operation before interest, taxation and exceptional items</b>			<b>17,000</b>	
Interest and bank charges			<u>(2,000)</u>	
<b>Profit before exceptional items</b>			<b>15,000</b>	
Exceptional items			<u>Nil</u>	
<b>Profit before Taxation</b>			<b>15,000</b>	
Income Taxes				
-Current taxes			(1,950)	
-Deferred taxes			<u>(50)</u>	
<b>Profit after taxation</b>			<b>13,000</b>	
<b>3. Other Information</b>				
<b>(a) Assets</b>				
Segment Assets	50,000	30,000	80,000	
Investments			10,000	
Unallocated assets			<u>10,000</u>	
<b>Total Assets</b>			<b>1,00,000</b>	
<b>(b) Liabilities and Shareholder's funds</b>				

Segment liabilities	30,000	10,000	40,000
Unallocated liabilities			20,000
Share capital			10,000
Reserves and surplus			30,000
<b>Total liabilities and shareholder's funds</b>			<b><u>1,00,000</u></b>
<b>(c) Others</b>			
Capital Expenditure	(5,000)	(2,000)	(7,000)
Depreciation	(1,000)	(300)	(1,300)

## Geographical Information

(₹ in lakh)

		India (₹)	Outside India (₹)	Total (₹)
	Revenue	2,55,000	62,000	3,17,000
	Segment assets	90,000	10,000	1,00,000
	Capital expenditure	7,000		7,000

## IND AS 12- INCOME TAXES

### Question 1

A Limited recognises interest income in its books on accrual basis. However, for income tax purposes the method is 'cash basis'. On 31<sup>st</sup> December, 2011, it has interest receivable of 10,000 and the tax rate was 25%. On 28th February, 2012, the finance bill is introduced in the legislation that changes the tax rate to 30%. The finance bill is enacted as Act on 21<sup>st</sup> May, 2012.

Discuss the treatment of deferred tax in case the reporting date of A Limited's financial statement is 31<sup>st</sup> December, 2011 and these are approved for issued on 31<sup>st</sup> May, 2012.

### Solution

The difference of 10,000 between the carrying value of interest receivable of 10,000 and its tax base of NIL is a taxable temporary difference.

A Limited has to recognise a deferred tax liability of 2,500 ( $10,000 \times 25\%$ ) in its financial statements for the reporting period ended on 31st December, 2011.

It will not recognise the deferred tax liability @ 30% because as on 31<sup>st</sup> December, 2011, this tax rate was neither substantively enacted or enacted on the reporting date. However, if the effect of this change is material, A Limited should disclose this difference in its financial statements.

### Question 2

On 1<sup>st</sup> April 2011, S Ltd. leased a machine over a 5 year period. The present value of lease liability is 120 Cr (discount rate of 8%) and is recognized as lease liability and corresponding Right of Use (ROU) Asset on the same date. The ROU Asset is depreciated under straight line method over the 5 years. The annual lease rentals are 30 Cr payable starting 31<sup>st</sup> March 2012. The tax law permits tax deduction on the basis of payment of rent. Assuming tax rate of 30%, you are required to explain the deferred tax consequences for the above transaction for the year ended 31<sup>st</sup> March 2012.

### Solution

A temporary difference effectively arises between the value of the machine for accounting purposes and the amount of lease liability, since the rent payment is eligible for tax deduction.

Tax base of the machine is nil as the amount is not eligible for deduction for tax purposes.

Tax base of the lease liability is nil as it is measured at carrying amount less any future tax deductible amount.

**Recognition of deferred tax on 31<sup>st</sup> March 2012:**

Carrying amount in balance sheet ROU Asset (120 Cr – 24 Cr (Depreciation))	96.00 Dr
Lease Liability (120 Cr + 9.60 Cr (120 Cr x 8%) - 30 Cr)	99.60 Cr
Net Amount	3.60 Cr
Tax Base	0.00 Cr
Temporary Difference (deductible)	3.60 Cr
Deferred Tax asset to be recognized ( 3.60 Cr x 30%)	<b>1.08 Cr</b>

## IND AS 113- FAIR VALUE MEASUREMENT

### Question 1

UK Ltd. is in the process of acquisition of shares of PT Ltd. as part of business reorganization plan. The projected free cash flows of PT Ltd. for the next 5 years are as follows:

(₹ in crores)

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
Cash flows	187.1	187.6	121.8	269	278.8
Terminal Value					3,965

The weightage average cost of capital of PT Ltd. is 11%. The total debt as on measurement date is 1,465 crores and the surplus cash & cash equivalent is ₹ 106.14 crores.

The total numbers of shares of PT Ltd. as on the measurement date is 8,52,84,223 shares. Determine value per share of PT Ltd. as per Income Approach.

### Solution

Determination of equity value of PT Ltd.

(₹ in crores)

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
Cash flows	187.1	187.6	121.8	269	278.8
Terminal Value					3,965
Discount rate factor	0.9009	0.8116	0.7312	0.6587	0.5935
Free Cash Flow available to firm	168.56	152.26	89.06	177.19	2,518.69
Total of all years					3,105.76
Less: Debt					(1,465)
Add: Cash & Cash equivalent					<u>106.14</u>
Equity Value of PT Ltd.					<u>1,746.90</u>
No. of Shares					85,284,223.0
Per Share Value					204.83



## Question 2

You are a senior consultant of your firm and are in process of determining the valuation of KK Ltd. You have determined the valuation of the company by two approaches i.e. Market Approach and Income approach and selected the highest as the final value. However, based upon the discussion with your partner you have been requested to assign equal weights to both the approaches and determine a fair value of shares of KK Ltd. The details of the KK Ltd. are as follows:

Particulars	₹ in crore
Valuation as per Market Approach	5268.2
Valuation as per Income Approach	3235.2
Debt obligation as on Measurement date	1465.9
Surplus cash & cash equivalent	106.14
Fair value of surplus assets and Liabilities	312.4
Number of shares of KK Ltd.	8,52,84,223 shares

Determine the Equity value of KK Ltd. as on the measurement date on the basis of above details.

## Solution

### Equity Valuation of KK Ltd.

Particulars	Weights	(₹ in crore)
As per Market Approach	50	5268.2
As per Income Approach	50	3235.2
Enterprise Valuation based on weights (5268.2 x 50%) + (3235.2 x 50%)		4,251.7
Less: Debt obligation as on measurement date		(1465.9)
Add: Surplus cash & cash equivalent		106.14
Add: Fair value of surplus assets and liabilities		<u>312.40</u>
Enterprise value of KK Ltd.		<u>3204.33</u>
No. of shares		85,284,223
Value per share		375.72

## IND AS 8- ACCOUNTING POLICIES, CHANGES IN ACCOUNTING ESTIMATES AND ERRORS

### Question 1

While preparing the financial statements for the year ended 31<sup>st</sup> March, 2013, Alpha Limited has observed two issues in the previous year Ind AS financial statements (i.e. 31<sup>st</sup> March, 2012) which are as follows:

#### Issue 1:

The company had presented certain material liabilities as non-current in its financial statements for periods as on 31<sup>st</sup> March, 2012. While preparing annual financial statements for the year ended 31<sup>st</sup> March, 2013, management discovers that these liabilities should have been classified as current. The management intends to restate the comparative amounts for the prior period presented (i.e., as at 31<sup>st</sup> March, 2012).

#### Issue 2:

The company had charged off certain expenses as finance costs in the year ended 31<sup>st</sup> March, 2012. While preparing annual financial statements for the year ended 31<sup>st</sup> March, 2013, it was discovered that these expenses should have been classified as other expenses instead of finance costs. The error occurred because the management inadvertently misinterpreted certain facts. The entity intends to restate the comparative amounts for the prior period presented in which the error occurred (i.e., year ended 31<sup>st</sup> March, 2012).

What is your analysis and recommendation in respect of the issues noted with the previously presented set of financial statements for the year ended 31<sup>st</sup> March, 2012?

### Solution

As per paragraph 41 of Ind AS 8 'Accounting Policies, Changes in Accounting Estimates and Errors', errors can arise in respect of the recognition, measurement, presentation or disclosure of elements of financial statements. Financial statements do not comply with Ind AS if they contain either material errors or immaterial errors made intentionally to achieve a particular presentation of an entity's financial position, financial performance or cash flows. Potential current period errors discovered in that period are corrected before the financial statements are approved for issue. However, material errors are sometimes not discovered until a subsequent period, and these prior period errors are corrected in the comparative information presented in the financial statements for that subsequent period.

Accordingly, the stated issues in question are to dealt as under:

**Issue 1**

In accordance with para 41, the reclassification of liabilities from non-current to current would be considered as correction of an error under Ind AS 8. Accordingly, in the financial statements for the year ended March 31, 2013, the comparative amounts as at 31 March 2012 would be restated to reflect the correct classification.

**Issue 2**

In accordance with para 41, the reclassification of expenses from finance costs to other expenses would be considered as correction of an error under Ind AS 8. Accordingly, in the financial statements for the year ended 31 March, 2013, the comparative amounts for the year ended 31 March 2012 would be restated to reflect the correct classification.

**Question 2**

While preparing the annual financial statements for the year ended 31<sup>st</sup> March, 2023, an entity discovers that a provision for constructive obligation for payment of bonus to selected employees in corporate office (material in amount) which was required to be recognized in the annual financial statements for the year ended 31<sup>st</sup> March, 2021 was not recognized due to oversight of facts. The bonus was paid during the financial year ended 31<sup>st</sup> March, 2022 and was recognized as an expense in the financial statements for the said year. Would this situation require retrospective restatement of comparatives considering that the error was material?

**Solution**

As per paragraph 14 of Ind AS 8, errors can arise in respect of the recognition, measurement, presentation or disclosure of elements of financial statements. Financial statements do not comply with Ind AS if they contain either material errors or immaterial errors made intentionally to achieve a particular presentation of an entity's financial position, financial performance or cash flows. Potential current period errors discovered in that period are corrected before the financial statements are approved for issue. However, material errors are sometimes not discovered until a subsequent period, and these prior period errors are corrected in the comparative information presented in the financial statements for that subsequent period.

In the given case, expenses for the year ended 31<sup>st</sup> March, 2021 and liabilities as at 31<sup>st</sup> March, 2021 were understated because of non-recognition of bonus expense and related provision. Expenses for the year ended 31<sup>st</sup> March, 2022, on the other hand, were overstated to the same extent because of recognition of the aforesaid bonus as expense for the year. To correct the above errors in the financial statements for the year ended

31<sup>st</sup> March, 2023, the entity should restate the comparative amounts in the statement of profit and loss.

### Question 3

A carpet retail outlet sells and fits carpets to the general public. It recognizes revenue when the carpet is fitted, which on an average is six weeks after the purchase of the carpet.

It then decides to sub-contract the fitting of carpets to self-employed fitters. It now recognizes revenue at the point of sale of carpet.

Whether this change in recognizing the revenue is a change in accounting policy as per the provisions of Ind AS 8?

### Solution

This is not a change in accounting policy as the carpet retailer has changed the way that the carpets are fitted.

Therefore, there would be no need to retrospectively change prior period figures for revenue recognized.

### Question 4

Whether an entity can change its accounting policy of subsequent measurement of property, plant and equipment (PPE) from revaluation model to cost model?

### Solution

Paragraph 29 of Ind AS 16 provides that an entity shall choose either the cost model or the revaluation model as its accounting policy for subsequent measurement of an entire class of PPE. A change from revaluation model to cost model for a class of PPE can be made only if it meets the condition specified in Ind AS 8 paragraph 14(b) i.e., the change results in the financial statements providing reliable and more relevant information to the users of the financial statements. For example, an unlisted entity planning IPO may change its accounting policy from revaluation model to cost model for some or all classes of PPE to align the entity's accounting policy with that of the listed market participants within that industry so as to enhance the comparability of its financial statements with those of other listed market participants within the industry.

Such a change – from revaluation model to cost model is not expected to be frequent.

Where the change in accounting policy from revaluation model to cost model is considered permissible in accordance with Ind AS 8, it shall be accounted for retrospectively, in accordance with Ind AS 8.

**Question 5**

Given the decreased revenue in financial year 2011-2012, management of PQR Ltd is keen to identify ways to reduce the overall impact on profit and loss. A consultant has suggested that they could explore changing the basis of depreciation from SLM to hours-in-use but not entirely sure if this is permitted. Annual depreciation charge for financial year 2011-2012 would be ₹ 25 lacs using SLM and ₹ 7 lacs using new method. This difference is significant for PQR Ltd.'s financial statements.

What are the considerations in determining whether a change in depreciation methodology is appropriate, and how should this change be accounted for? Given the risk of charging lower depreciation per annum and the possibility that the asset will be depreciated over a period longer than it would otherwise be (under SLM basis), what other safeguards do you suggest, in order to ensure compliance with relevant standards in Ind AS and its framework?

**Solution**

As illustrated in per para 32 of Ind AS 8, Change in method of depreciation is a change in accounting estimates.

Considerations in determining whether the change in depreciation methodology is appropriate:

Paragraphs 60 and 61 of Ind AS 16, Property, Plant and Equipment, state that 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 shall 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 shall be changed to reflect the changed pattern.

Accounting procedure:

Such a change is accounted for as a change in an accounting estimate in accordance with Ind AS 8.

Depreciation is a function of several factors, with extent of usage and efflux of time being its primary determinants. The hours-in-use method relates the amount of periodic depreciation charge only to one of the above two factors, namely, the extent of usage as reflected by the number of hours. This method may therefore be said to be appropriate as per para 62 of Ind AS 16.

Determination of depreciation method involves an accounting estimate; depreciation method is not a matter of an accounting policy. Accordingly, as per Ind AS 8 and Ind AS 16, a change in depreciation method shall be accounted for as a change in accounting estimate, i.e; prospectively.

However, given the possibility that the asset will be depreciated over a period longer than it would be under SLM basis, the company will need to assess if there are any impairment triggers and carry out impairment testing as required under Ind AS 36.

## IND AS 116- LEASES

### Question 1

Coups Limited availed a machine on lease from Ferrari Limited. The terms and conditions of the Lease are as under:

Lease period is 3 years, machine costing ₹ 8,00,000.

- Machine has expected useful life of 5 years.
- Machine reverts back to Ferrari Limited on termination of lease.
- The unguaranteed residual value is estimated at ₹ 50,000 at the end of 3rd year.
- 3 equal annual installments are made at the end of each year.
- Implicit Interest Rate (IRR) = 10%.
- Present value of ₹ 1 due at the end of 3rd year at 10% rate of interest is 0.7513.
- Present value of annuity of ₹ 1 due at the end of 3rd year at 10% IRR is 2.4868.

You are required to ascertain whether it is a Finance Lease or Operating Lease and also calculate Unearned Finance Income with the relevant context to relevant Ind AS.

### Solution

It is assumed that the fair value of the machine on lease is equivalent to the cost of the machine.

- (i) A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership of an underlying asset.

Computation of annual lease payment to the lessor

	₹
Cost of equipment / fair value	8,00,000
Unguaranteed residual value	50,000
Present value of residual value after third year @ 10% (50,000 x 0.7513)	37,565
	7,62,435
Fair value to be recovered from lease payments (8,00,000 - 37,565)	
Present value of annuity for three years is 2.4868	3,06,593
Annual lease payment = 7,62,435 / 2.4868	
The present value of lease payment i.e., ₹ 7,62,435 is more than 95% of the fair market value i.e., ₹8,00,000. The present value of minimum lease payments substantially covers the initial fair value of the leased asset and lease term (i.e. 3 years) covers the major part of the life of asset (i.e. 5 years).	
Therefore, it constitutes a finance lease.	



	₹
(ii) Computation of Unearned Finance Income	9,19,779
Total lease payments (₹ 3,06,593 x 3)	<u>50,000</u>
Add: Unguaranteed residual value	9,69,779
Gross investment in the lease	
Less: Present value of investment	
(lease payments and residual value) (37,565 + 7,62,435)	<u>(8,00,000)</u>
Unearned finance income	1,69,779

### Question 2

The Company has entered into a lease agreement for its retail store as on 1<sup>st</sup> April, 2011 for a period of 10 years. A lease rental of ₹ 56,000 per annum is payable in arrears. The Company recognized a lease liability of ₹ 3,51,613 at inception using an incremental borrowing rate of 9.5% p.a. as at 1<sup>st</sup> April 2011. As per the terms of lease agreement, the lease rental shall be adjusted every 2 years to give effect of inflation. Inflation cost index as notified by the Income tax department shall be used to derive the lease payments. Inflation cost index was 280 for financial year 2011-2012 and 301 for financial year 2013-2014. The current incremental borrowing rate is 8% p.a.

Show the Journal entry at the beginning of year 3, to account for change in lease.

### Solution

As per para 27 (b) of Ind AS 116, variable lease payments that depend on an index or a rate, are initially measured using the index or rate as at the commencement date.

At the beginning of the third year, Lessee remeasures the lease liability at the present value of eight payments of ₹ 60,200 discounted at an original discount rate of 9.5% per annum as per para 43 of Ind AS 116.

Year	Revised Lease Rental	Discount Factor @ 9.5%	Present Value
	$[(56,000 / 280) \times 301] =$		
3	60,200	0.913	54,963
4	60,200	0.834	50,207
5	60,200	0.762	45,872
6	60,200	0.696	41,899
7	60,200	0.635	38,277
8	60,200	0.580	34,916
9	60,200	0.530	31,906
10	60,200	0.484	29,137
			<b>3,27,127</b>

Table showing amortised cost of lease liability

Year	Opening Balance	Interest @ 9.5%	Rental Paid	Closing Balance
1	3,51,613	33,403	56,000	3,29,016
2	3,29,016	31,257	56,000	3,04,273

Difference of ₹ 22,854 (3,27,127 - 3,04,273) will increase the lease liability with corresponding increase in ROU Asset as per para 39 of Ind AS 116.

Journal entry at the beginning of year 3 would be:

Right-of-use asset	Dr.	₹ 22,854	
To Lease liability			₹ 22,854

### Question 3

A company manufactures specialised machinery. The company offers customers the choice of either buying or leasing the machinery. A customer chooses to lease the machinery. Details of the arrangement are as follows:

- The lease commences on 1<sup>st</sup> April, 2011 and lasts for three years.
- The lessee is required to make three annual rentals payable in arrears of ₹ 57,500.
- The leased machinery is returned to the lessor at the end of the lease.
- The fair value of the machinery is ₹ 1,50,000, which is equivalent to the selling price of the machinery
- The machinery cost ₹ 1,00,000 to manufacture. The lessor incurred costs of ₹ 2,500 to negotiate and arrange the lease.
- The expected useful life of the machinery is 3 years. The machinery has an expected residual value of ₹ 10,000 at the end of year three. The estimated residual value does not change over the term of the lease.
- The interest rate implicit in the lease is 10.19%. The lessor classifies the lease as a finance lease.

How should the Lessor account for the same in its books of accounts? Pass necessary journal entries.

### Solution

The cost to the lessor for providing the machinery on lease consists of the book value of the machinery (₹ 1,00,000), plus the initial direct costs associated with entering into the lease (₹ 2,500), less the future income expected from disposing of the machinery at the end of the lease (the present value of the unguaranteed residual value of ₹ 10,000 discounted @ 10.19%, being ₹ 7,470). This gives a cost of sale of ₹ 95,030.

The lessor records the following entries at the commencement of the lease:

		₹	₹
Lease receivable	Dr.	1,50,000	
Cost of sales	Dr.	95,030	
	To Inventory		1,00,000
	To Revenue		1,42,530
	To Creditors/Cash		2,500

The sales profit recognised by the lessor at the commencement of the lease is therefore ₹ 47,500 (₹ 1,42,530 - ₹ 95,030). This is equal to the fair value of the machinery of ₹ 1,50,000, less the book value of the machinery (₹ 1,00,000) and the initial direct costs of entering into the lease (₹ 2,500). Revenue is equal to the lease receivable (₹ 1,50,000), less the present value of the unguaranteed residual value (₹ 7,470).

Year	Lease receivable at the beginning of year (₹) (a)	Lease Payments (₹) (b)	Interest Income (10.19% per annum) (₹) (c)	Decrease In lease receivable (₹) (d)=(b)-(c)	Lease receivable at the end of year (₹) (e)=(a)-(d)
1	1,50,000	57,500	15,285	42,215	1,07,785
2	1,07,785	57,500	10,983	46,517	61,268
3	61,268	57,500	6,232*	51,268	10,000

\*Difference is due to approximation

The lessor will record the following entries:

		₹	₹
Year 1	Cash/Bank Dr. To Lease receivable To Interest income	57,500	42,215 15,285
Year 2	Cash/Bank Dr. To Lease receivable To Interest income	57,500	46,517 10,983
Year 3	Cash/Bank Dr. To Lease receivable To Interest income	57,500	51,268 6,232

At the end of the three-year lease term, the leased machinery will be returned to the lessor, who will record the following entries:

Inventory	Dr.	₹ 10,000	
To Lease Receivable			₹ 10,000

## IND AS 115- REVENUE FROM CONTRACTS WITH CUSTOMERS

### Question 1

KK Ltd. runs a departmental store which awards 10 points for every purchase of ₹ 500 which can be discounted by the customers for further shopping with the same merchant. Unutilised points will lapse on expiry of two years from the date of credit. Value of each point is ₹ 0.50. During the accounting period 2011-2012, the entity awarded 1,00,00,000 points to various customers of which 18,00,000 points remained undiscounted. The management expects only 80% will be discounted in future of which normally 60-70% are redeemed during the next year. The Company has approached your firm with the following queries and has asked you to suggest the accounting treatment (Journal Entries) under the applicable Ind AS for these award points:

- How should the recognition be done for the sale of goods worth ₹ 10,00,000 on a particular day?
- How should the redemption transaction be recorded in the year 2011-2012? The Company has requested you to present the sale of goods and redemption as independent transaction. Total sales of the entity is Rs. 5,000 lakhs.
- How much of the deferred revenue should be recognised at the year-end (2011-2012) because of the estimation that only 80% of the outstanding points will be redeemed?
- In the next year 2012-2013, 60% of the outstanding points were discounted Balance 40% of the outstanding points of 2011-2012 still remained outstanding. How much of the deferred revenue should the merchant recognize in the year 2012-2013 and what will be the amount of balance deferred revenue?
- How much revenue will the merchant recognized in the year 2012-2013, if 3,00,000 points are redeemed in the year 2012-2013?

### SOLUTION

- Points earned on ₹ 10,00,000 @ 10 points on every ₹ 500 =  $[(10,00,000/500) \times 10]$  = 20,000 points.

Value of points = 20,000 points x ₹ 0.5 each point = ₹ 10,000

Revenue recognized for sale of goods	₹ 9,90,099	$[10,00,000 \times (10,00,000/10,10,000)]$
Revenue for points deferred	₹ 9,901	$[10,00,000 \times (10,000/10,10,000)]$

**Journal Entry**

Bank A/c Dr.	10,00,000	
To Sales A/c		9,90,099
To Liability under Customer Loyalty programme		9,901

- (b) Points earned on ₹ 50,00,00,000 @ 10 points on every ₹ 500 =  $[(50,00,00,000/500) \times 10] = 1,00,00,000$  points.

Value of points = 1,00,00,000 points x ₹ 0.5 each point = ₹ 50,00,000

Revenue recognized for sale of goods = ₹ 49,50,49,505  $[50,00,00,000 \times (50,00,00,000 / 50,50,00,000)]$

Revenue for points = ₹ 49,50,495  $[50,00,00,000 \times (50,00,000 / 50,50,00,000)]$

**Journal Entry in the year 2011**

Bank A/c	Dr.	50,00,00,000	
To Sales A/c			49,50,49,505
To Liability under Customer Loyalty programme			49,50,495
Liability under Customer Loyalty programme	Dr.	42,11,002	
To Sales A/c			42,11,002

**Revenue for points to be recognized**

Undiscounted points estimated to be recognized next year  $18,00,000 \times 80\% = 14,40,000$  points

Total points to be redeemed within 2 years =  $[(1,00,00,000 - 18,00,000) + 14,40,000] = 96,40,000$

Revenue to be recognised with respect to discounted point =  $49,50,495 \times (82,00,000/96,40,000) = 42,11,002$

- (c) Revenue to be deferred with respect to undiscounted point in 20X1-20X2 =  $49,50,495 - 42,11,002 = 7,39,493$

- (d) In 2012-2013, KK Ltd. would recognize revenue for discounting of 60% of outstanding points as follows:

Outstanding points =  $18,00,000 \times 60\% = 10,80,000$  points

Total points discounted till date =  $82,00,000 + 10,80,000 = 92,80,000$  points

Revenue to be recognized in the year 2012-2013 =  $[49,50,495 \times (92,80,000 / 96,40,000)] - 42,11,002 = ₹ 5,54,620$ .

Liability under Customer Loyalty programme	Dr.	5,54,620	
To Sales A/c			5,54,620

The Liability under Customer Loyalty programme at the end of the year 20X2-2013 will be ₹ 7,39,493 – 5,54,620 = 1,84,873.

- (e) In the year 2013-2014, the merchant will recognized the balance revenue of ₹ 1,84,873 irrespective of the points redeemed as this is the last year for redeeming the points. Journal entry will be as follows:

Liability under Customer Loyalty programme	Dr.	5,54,620	
To Sales A/c			5,54,620

## Question 2

A contractor enters into a contract with a customer to build an asset for ₹ 1,00,000, with a performance bonus of ₹ 50,000 that will be paid based on the time of completion. The amount of the performance bonus decreases by 10% per week for every week beyond the agreed-upon completion date. The contract requirements are similar to those of contracts that the contractor has performed previously, and management believes that such experience is predictive for this contract. The contractor concludes that the expected value method is most predictive in this case.

The contractor estimates that there is a 60% probability that the contract will be completed by the agreed-upon completion date, a 30% probability that it will be completed one week late, and a 10% probability that it will be completed two weeks late.

Determine the transaction price.

## SOLUTION

The transaction price should include management's estimate of the amount of consideration to which the entity will be entitled for the work performed.

Probability-Weighted	Consideration
₹ 1,50,000 (fixed fee plus full performance bonus) * 60%	₹ 90,000
₹ 1,45,000(fixed fee plus 90% of performance bonus) * 30%	₹ 43,500
₹ 1,40,000(fixed fee plus 80% of performance bonus) * 10%	₹ 14,000
Total Probability-Weighted Consideration	₹ 1,47,500

The total transaction price is ₹ 1,47,500, based on the probability-weighted estimate. The contractor will update its estimate at each reporting date.

**Question 3**

Prime Ltd. is a technology company and regularly sells Software S, Hardware H and Accessory A. The stand-alone selling prices for these items are stated below:

Software S = ₹ 50,000 Hardware H = ₹ 10,0000 and Accessory A = ₹ 20,000

Since the demand for Hardware H and Accessory A is low, Prime Ltd. sells H and A together at ₹ 1,00,000. Prime Ltd. enters into a contract with Zeta Ltd. to sell all the three items for a consideration of ₹ 1,50,000.

What will be the accounting treatment for the discount in the financial statements of Prime Ltd., considering that the three items are three different performance obligations which are satisfied at different points in time? Further, what will be the accounting treatment if Prime Ltd. would have transferred the control of Hardware H and Accessory A at the same point in time.

**Solution**

Paragraph 82 of Ind AS 115 states that, "An entity shall allocate a discount entirely to one or more, but no all, performance obligations in the contract if all of the following criteria are met:

- (a) the entity regularly sells each distinct good or service (or each bundle of distinct goods or services) in the contract on a stand-alone basis;
- (b) the entity also regularly sells on a stand-alone basis a bundle (or bundles) of some of those distinct goods or services at a discount to the stand-alone selling prices of the goods or services in each bundle; and
- (c) the discount attributable to each bundle of goods or services described in paragraph 82(b) is substantially the same as the discount in the contract and an analysis of the goods or services in each bundle provides observable evidence of the performance obligation (or performance obligations) to which the entire discount in the contract belongs".

In the given case, the contract includes a discount of ₹ 20,000 on the overall transaction, which should have been allocated proportionately to all three performance obligations when allocating the transaction price using the relative stand-alone selling price method (in accordance with paragraph 81 of Ind AS 115). However, as Prime Ltd. meets all the criteria specified in paragraph 82 above, i.e., it regularly sells Hardware H and Accessory A together for ₹ 1,00,000 and Software S for ₹ 50,000, accordingly, it is evident that the entire discount should be allocated to the promises to transfer Hardware H and Accessory A.



In the given case, since the contract requires the entity to transfer control of Hardware H and Accessory A at different points in time, then the allocated amount of ₹ 1,00,000 should be individually allocated to the promises to transfer Hardware H (stand-alone selling price of ₹ 1,00,000) and Accessory A (stand-alone selling price of ₹20,000).

Product	Allocated Transaction Price (₹)
Hardware H	83,333 $(1,00,000/1,20,000*1,00,000)$
Accessory A	16,667 $(20,000/1,20,000*1,00,000)$
Total	1,00,000

However, if Prime Ltd. would have transferred the control of Hardware H and Accessory A at the same point in time, then the Prime Ltd. could, as a practical matter, account for the transfer of those products as a single performance obligation. That is, Prime Ltd. could allocate ₹ 1,00,000 of the transaction price to the single performance obligation and recognise revenue of ₹ 1,00,000 when Hardware H and Accessory A simultaneously transfer to Zeta Ltd.