

PRACTICAL SUMS ON IND AS

INDIAN ACCOUNTING STANDARD 2: INVENTORIES

1).

In a manufacturing process of Mars Ltd, one by-product BP emerges besides two main products MP1 and MP2 apart from scrap. Details of cost of production process are here under:

Item	Unit	Amount	Output	Closing Stock 31-3-20X1
Raw material	14,500	1,50,000	MP I-5,000 units	250
Wages	-	90,000	MP II - 4,000 units	100
Fixed overhead	-	65,000	BP- 2,000 units	
Variable overhead	-	50,000		

Average market price of MP1 and MP2 is ₹60 per unit and ₹50 per unit respectively, by- product is sold @ ₹20 per unit. There is a profit of ₹5,000 on sale of by-product after incurring separate processing charges of ₹8,000 and packing charges of ₹2,000, ₹5,000 was realised from sale of scrap.

Required:

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

Solution

As per Ind 2 'Inventories', most by-products as well as scrap or waste materials, by their nature, are immaterial. They are often measured at net realizable value and this value is deducted from the cost of the main product.

1) Calculation of NRV of By-product BP

Selling price of by-product	2,000 units x 20 per unit	40,000
Less: Separate processing charges of by- product BP		8,000
Packing charges		2,000
Net realizable value of by-product BP		30,000

2) Calculation of cost of conversion for allocation between joint products MP1 and MP2

Raw material		1,50,000
Wages		90,000
Fixed overhead		65,000
Variable overhead		50,000
Less: NRV of by-product BP (See calculation 1)	30,000	
Sale value of scrap	5,000	(35,000)
Joint cost to be allocated between MP1 and MP2		3,20,000

3) Determination of "basis for allocation" and allocation of joint cost to MP1 and MP2

	MP I	MP 2
Output in units (a)		
Sales price per unit (b)	5,000	4,000
Sales value (a x b)	60	50
Ratio of allocation	3,00,000	2,00,000
Joint cost of ₹3,20,000 allocated in the ratio of 3:2 (c)	3	2
Cost per unit [c/a]	38.4	32

4) Determination of value of closing stock of MPI and MP2

Particulars	MP I	MP 2
Closing stock in units	250 units	100 units
Cost per unit	38.4	32
Value of Closing stock	9,600	3,200

2).

Zee Ltd. purchased raw material of 20,000 units at ₹10 per kilogram during the year 2016-17. They provide you with the following other information for the year ended 31st March, 2017:

Particulars	Units	₹
Opening inventory:		
Finished goods	2,000	50,000
Raw materials	2,200	22,000
Labour		1,53,000
Fixed overhead		1,50,000
Sales	20,000	5,60,000
Closing inventory :		
Finished goods	2,400	
Raw materials	1,800	

The expected production of the finished product for the year was 30,000 units. Due to a fall in the market demand, the price of the finished goods in which the raw material is incorporated is, expected to be sold at ₹20 per unit. The replacement cost of raw material was ₹9.50 per unit on the closing day of the accounting period.

You are required to value the closing inventory as on 31st March, 2017 with reference to Ind AS 2.

Solution

Calculation of cost for closing inventory (Finished Goods)

Particulars	₹
Cost of raw material consumed (Refer W.N.) (20,400 kg. x ₹10 per kg.)	2,04,000
Direct labor	1,53,000
Fixed overhead $\frac{1,50,000}{30,000} \times 20,400$	<u>1,02,000</u>
Cost of production	<u>4,59,000</u>
Cost of closing inventory of finished goods per unit (4,59,000/20,400)	₹22.50
Net realisable value (NRV) per unit	₹20.00

Since net realisable value is less than cost, closing inventory of finished goods will be valued at ₹20 per unit.

As NRV of the finished goods is less than its cost, relevant raw materials will be valued at replacement cost i.e. ₹9.50 per kg.

Therefore, value of closing inventory:

Finished goods (2,400 units x ₹20 per unit)	₹48,000
Raw materials (1,800 kg x ₹9.50 per kg)	<u>₹17,100</u>
	<u>₹65,100</u>

Working Note:

Calculation of Raw material as consumed during the year

	Units in kg.
Opening inventory of raw material	2,200
Add: Purchases of raw material	<u>20,000</u>
	122,200
Less: Closing inventory of raw material	<u>(1,800)</u>
Raw material consumed	<u>20,400</u>

INDIAN ACCOUNTING STANDARD 10 – EVENTS AFTER THE REPORTING PERIOD

1).

Mac Ltd. purchased goods on credit from Toy Ltd. for ₹580 lakhs for export. The export order was cancelled. Mac Ltd. decided to sell the same goods in the local market with a price discount. Toy Ltd. was requested to offer a price discount of ₹10%. Toy Ltd. wants to adjust the sales figure to the extent of the discount requested by Mac Ltd. Discuss whether such a treatment in the books of Toy Ltd. is justified as per the provisions of the relevant Ind AS.

Also, Toy Ltd. entered into a sale deed for its Land on 15th March, 2016. But registration was done with the registrar on 20th April, 2016. But before registration, is it possible to recognize the sale and the gain at the balance sheet date? Give reasons in support of your answer.

Solution

Toy Ltd. had sold goods to Mac Ltd on credit worth for ₹580 lakhs and the sale was completed in all respects. Mac Ltd.'s decision to sell the same in the domestic market at a discount does not affect the amount recorded as sales by Toy Ltd.

The price discount of 10% offered by Toy Ltd. after request of Mac Ltd. was not in the nature of a discount given during the ordinary course of trade because otherwise the same would have been given at the time of sale itself. However, there appears to be an uncertainty relating to the collectability of the debt, which has arisen subsequent to sale. Therefore, it would be appropriate to make a separate provision to reflect the uncertainty relating to collectability rather than to adjust the amount of revenue originally recorded. Hence such discount should be charged to the Statement of Profit and Loss and not shown as deduction from the sales figure.

With respect to sale of land, both sale and gain on sale of land earned by Toy Ltd. shall be recognized in the books at the balance sheet date. In substance, the land was transferred with significant risk & rewards of ownership to the buyer before the balance sheet date and what was pending was merely a formality to register the deed. The registration post the balance sheet date only confirms the condition of sale at the balance sheet date as per Ind AS 10 "Events after the Reporting Period."

INDIAN ACCOUNTING STANDARD (IND AS) 11: CONSTRUCTION CONTRACTS

1).

On 1st December, 20X1, Vishwakarma Construction Co. Ltd. undertook a contract to construct a building for ₹85 lakhs. On 31st March, 20X2, the company found that it had already spent ₹64,99,000 on the construction. Prudent estimate of additional cost for completion was ₹32,01,000. What amount should be charged to revenue in the final accounts for the year ended 31st March, 20X2 as per Ind AS 11?

Solution

	₹
Cost incurred till 31st March, 20X2	64,99,000
Prudent estimate of additional cost for completion	32,01,000
Total cost of construction	97,00,000
Less: Contract price	(85,00,000)
Total foreseeable loss	12,00,000

According to para 33 of Ind AS 11, the amount of ₹12,00,000 is required to be recognized as an expense.

$$\text{Contract work in progress} = \frac{64,99,000 \times 100}{97,00,000} = 67\%$$

Proportion of total contract value recognized as turnover = 67% of ₹85,00,000 = ₹56,95,000.

2).

A Limited enters with a customer a 3 year construction contract for ₹10,00,000. The estimated total costs are ₹7,00,000. In year 2, the management has to revise the estimated costs. The contract however remains profitable. The relevant figures are as under:

	Amount (₹)		
Particulars	Year 1	Year 2	Year 3
Estimated Revenue	10,00,000	10,00,000	10,00,000
Estimated total costs	6,00,000	8,50,000	8,50,000
Estimated total profits	4,00,000	1,50,000	1,50,000
Costs incurred till date	3,00,000	6,80,000	8,50,000
Percentage of completion (based on cost)	50%	80%	100%
Cumulative recognised profits (Estimated revenue x percentage completion – costs incurred till date)	<u>2,00,000</u>	<u>1,20,000</u>	<u>1,50,000</u>
Recognised profit for the year	<u>2,00,000</u>	<u>(80,000)</u>	<u>30,000</u>

Solution

The asset or liability at the end of each year will be computed as under:

	Amount (₹)		
Particulars	Year 1	Year 2	Year 3
Costs incurred till date	3,00,000	6,80,000	8,50,000
Cumulative recognised profits (losses)	2,00,000	1,20,000	1,50,000
Progress billings*	4,00,000	8,50,000	9,50,000
Gross amount due from customers at the year end (Amount recognised as an asset)	1,00,000		50,000
Gross amount due to customers (Amount recognised as an liability) at the year end		(50,000)	

3).

A contract to build a bridge across a river is under execution by a firm of contractors. From the following details, indicate the relevant disclosure that has to be made by the firm in its accounts for the year ended 31st March, 2017, under the relevant Ind AS.

	₹in lakhs
Contract price	2,000
Work certified upto 31-03-2017	1,200
Work pending certification	480
Estimated further costs to complete the contract	520
Amounts received from the contractee so far	1,000
Amounts still to be received	500

Solution

The relevant disclosures under Ind AS 11 are given below:

	₹in lakhs
Contract revenue recognized till 31st March, 2017 by percentage completion method (W.N. 3)	1,527
Contract expenses incurred till 31st March, 2017 (W.N. 2)	1,680
Recognized expected losses till recognized as an expense for the year 31st March, 2017 (W.N. 1)	(200)
Gross amount due to customers (W.N. 4)	20
Amount of retention i.e. Progress billings (not received from contractee)	500

Working Notes:

1. Calculation of profit/ loss for the year ended 31st March, 2017

	(₹in lakhs)
Total estimated cost of construction (1,200 + 480 + 520)	2,200
Less: Total contract price	<u>(2,000)</u>
Total foreseeable loss to be recognized as expense	<u>200</u>

According to Ind AS 11 "Construction Contracts", when it is probable that total contract costs will exceed total contract revenue, the expected loss should be recognized as an expense immediately.

2. Contract work-in-progress i.e. cost incurred to date (₹in lakhs)

	(₹in lakhs)
Work certified	1,200
Work not certified	<u>480</u>
Total foreseeable loss to be recognized as expense	<u>1,680</u>

3. Proportion of total contract value recognised as revenue

Percentage of completion of contract to total estimated cost of construction

$$= (1,680 / 2,200) \times 100 = 76.36\%$$

Revenue to be recognized till date = 76.36% of ₹2,000 lakhs = ₹1,527 lakhs.

4. Amount due from/to customers = Contract costs + Recognised profits – Recognised expected losses – (Progress payments received + Progress payments to be received)

$$= ₹[1,680 + Nil - 200 - (1,000 + 500)] \text{ lakhs}$$

$$= ₹[1,680 - 200 - 1,500] \text{ lakhs}$$

Amount due to customers (shown as a liability) = ₹20 lakhs.

INDIAN ACCOUNTING STANDARD 12: INCOME TAXES

1).

Entity A has acquired an item of asset for ₹1,00,000 for production of certain items to be sold by the entity. It is deductible equally over two years in the books of accounts. The carrying amount as the end of first reporting period is ₹50,000 (₹1,00,000 – ₹50,000). In the income tax, ₹75,000 is deductible in year 1 and balance is deductible in year 2. We have to compute its tax base as on the last day of the first reporting period. However, in income-tax, it can claim only ₹25,000 being 25% of the cost of the asset as 75% has already been claimed in year 1. Thus, the tax base in this case is ₹25,000.

2).

An entity has an item of plant and machinery acquired on the first day of the reporting period for ₹1,00,000. It depreciates it @ 20% p.a on SLM basis. The carrying amount in balance sheet is ₹80,000. The taxation laws require depreciation @ 30% on WDV basis. The tax base at the end of the reporting period is ₹70,000. The temporary difference is ₹10,000 (₹80,000 – ₹70,000).

INDIAN ACCOUNTING STANDARD 16: PROPERTY, PLANT AND EQUIPMENT

1).

Replacement Cost

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

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

Solution

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

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

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

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

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

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

2).

Inspection Cost

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

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

If the actual overhauling expense at the end of 5th year is 6 million, explain the depreciation charge for the next 5 years.

Solution

The depreciation charge for the first five years of the assets life will be as follows:

	Overhaul component (million)	Ship (other than overhaul component) (million)
Cost	5	15
Years	5	20
Depreciation per year	1	0.75

Total accumulated depreciation for the first five years will be ₹8.75, and the carrying amount of the ship at the end of year 5 will be ₹11.25 million.

The actual overhaul costs incurred at the end of year 5 are ₹6 million. This amount will now be capitalised into the costs of the ship, to give a carrying amount of ₹17.25 million.

The depreciation charge for years 6 to 10 will be as follows:

	Overhaul component	Ship (other than overhaul component)
Cost	6	11.25
Years	5	15
Depreciation per year	1.2	0.75

Annual depreciation for years 6 to 10 will now be ₹1.95 million. This process will be continued for years 11 to 15 and years 16 to 20. By the end of year 20, the capital cost of ₹20 million will have been depreciated plus the actual overhaul costs incurred at years 5, 10 and 15.

3).

Change in Depreciation Method

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

At the end of Year 3, the entity estimates that the remaining useful life of the asset is 8 years and determines to adopt straight –line method from that date so as to reflect the revised estimated pattern of recovery of economic benefits.

Show the necessary treatment in accordance of Ind AS 16.

Solution

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

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

Year 1	₹500,000
Year 2	₹450,000
Year 3	₹405,000
Year 4 to Year 11	₹456,000 p.a.

INDIAN ACCOUNTING STANDARD 17: LEASES

1).

Inception of the Lease and Commencement of the lease

A lessee may sign an agreement to lease a car on 31 March 20X1 but does not take delivery of the car until 30 June 20X1.

Lease classification is made at the inception of the lease i.e. on 31 March 20X1.

The recognition of the related assets, liabilities, income and expense in the financial statements will not take place until 30 June 20X1. Commencement of the lease will be on 30 June 20X1.

2).

Calculate minimum lease payments for A Ltd. who took an asset on a 5 years lease from B Ltd. using the following information:

Payments over the lease term	₹1,000 per month
Contingent rent	₹20,000
Cost for services given by B Ltd.	₹40,000
Taxes to be reimbursed to B Ltd.	₹15,000
Residual value guaranteed by A Ltd.	₹5,000
Fair value of asset after 5 years	₹6,000

Also, A Ltd. has an option to purchase the asset after a period of 5 years at ₹2,000. It is reasonably certain that A Ltd. will exercise the option.

Required

Calculation Minimum Lease Payments.

Solution

Particulars	Amount (₹)
Payments over the lease term (1,000 x 12 x 5)	60,000
Contingent rent	-
Cost for services given by B Ltd.	-
Taxes to be reimbursed to B Ltd.	-
Residual value guaranteed by A Ltd.	5,000
Payment made for option to purchase the asset	<u>2,000</u>
Minimum lease payments for A Ltd.	<u>67,000</u>

INDIAN ACCOUNTING STANDARD 18: REVENUE

1).

A TV manufacturer sells TVs to its dealers at a list price of ₹10,000 per TV. If the dealer takes more than 8,000 sets during the contract period, then he/she is eligible for a discount of 5% on the list price. The contract period starts from June and ends in May of each year. At the end of year on March 31, 2012, a particular dealer has purchased 5,000 sets. Based on the past trends, it is expected that the total purchases made by dealer during the contract period up to May 2012 will be more than 8,000 sets. How revenue should be measured in this case on the balance sheet date?

Solution

Paragraph 10 of Ind AS 18 prescribes that the amount of revenue arising on a transaction is usually determined by agreement between the entity and the buyer or user of the asset. It is measured at the fair value of the consideration received or receivable taking into account the amount of any trade discounts and volume rebates allowed by the entity.

In accordance with the above, the amount of revenue will be determined on the basis of terms of the agreement between the manufacturer and the dealer. In the instant case, based on past trends and other available evidence, it is probable that 5% discount will have to be allowed. Therefore, the amount of revenue should be adjusted for the probable discount that may have to be allowed, as the economic benefits to that extent may not flow to the entity. Therefore, revenue should be adjusted for probable discount on sales made till March 31, 2012. While estimating the amount of discount expected to be allowed, events occurring between the end of the reporting period and the date when the financial statements are approved shall also be considered in accordance with the requirements of Ind AS 10, Events After the Reporting Period.

2).

X Ltd. is engaged in manufacturing and selling of designer furniture. It sells goods on extended credit. X Ltd. sold furniture for ₹40,00,000 to a customer, the payment against which was receivable after 12 months with interest at the rate of 3% per annum. The market interest rate on the date of transaction was 8% per annum. How will X Ltd. recognise revenue for the above transaction?

Solution

X Ltd. should determine the fair value of revenue by calculating the present value of the cash flows receivable.

Total amount receivable = ₹40,00,000 x 1.03 = ₹41,20,000.

Present Value of receivable (Revenue) = ₹41,20,000/1.08 = ₹38,14,815.

Interest income = ₹41,20,000 - ₹38,14,815 = ₹3,05,185.

Therefore, on transaction date ₹38,14,815 will be recognised as revenue from sale of goods and ₹3,05,185 will be recognised as interest income over the period in accordance with Ind AS 109.

3).

X Pvt. Ltd. is a dealer of water purifiers. It sells each purifier for ₹10,000 and promises to service it twice in a year. The value of each service is ₹500 which is included in the sale price. How the above sale transaction will be dealt by X Pvt. Ltd?

Solution

The sale transaction has two components viz sale of water purifiers and maintenance service. Both the components operate independently from each other. Therefore, these components should be unbundled and the revenue earned on sale of each component should be recognised separately. Revenue attributable to both the components is calculated as follows: The value of each service is ₹500. Total cost of service is ₹1,000.

Current revenue from sale of water purifier = ₹9,000 (₹10,000 - ₹1,000). Deferred revenue = ₹1,000.

₹1,000 is considered a payment in advance of service, and will be recognised as revenue as and when each of the service occurs.

4).

A case where goods are sold with extended warranty is illustrated below:

Cars manufactured by X Ltd. are sold with an extended warranty of 2 years for ₹5,00,000 while an identical car without the extended warranty is sold in the market for ₹4,50,000 and equivalent warranty is given in the market for ₹60,000. How should X Ltd. recognise and measure revenue in its books on sale of the car and warranty?

Solution

The substance of the transaction in the issue is that X Ltd. has sold two products: car and the extended warranty, where both the components operate independently from each other, therefore, these components should be unbundled and the revenue earned on sale of each product should be recognised separately. Revenue attributable to both the components is calculated as follows:

Total fair value of car and extended warranty: (4,50,000 + 60,000)	₹5,10,000
Less: Sale price of the car with extended warranty:	(₹5,00,000)
Discount	₹ 10,000

Discount and revenue attributable to each component of the transaction:

Proportionate discount attributable to sale of car: $(10,000 \times 4,50,000/5,10,000)$	₹8,824
Revenue from sale of car: $(4,50,000 - 8,824)$	₹4,41,176
Proportionate discount attributable to extended warranty: $(10,000 \times 60,000/5,10,000)$	₹1,176
Revenue from extended warranty $(60,000 - 1,176)$:	₹58,824

Revenue in respect of sale of car should be recognised immediately and revenue from warranty should be recognised over the period of warranty.

INDIAN ACCOUNTING STANDARD 19: EMPLOYEE

1).

Sunderam Pvt. Ltd. has a headcount of 100 employees in 2010-11. As per the employee policy, the employees are entitled for 30 annual leaves out of which 10 may be carried forward to the next current year, 10 sick leaves out of which 2 may be carried forward as paid leave. At March 31, 2011, the average unused entitlement is 5 days per employee for privilege leave and 1 for sick leave. On an average, it is found that the number of such employees who would be claiming annual leaves would be 30 and 10 employees who would claim sick leaves. Compute the liability to be recognised as sick pay and privilege leave by the entity in 2010-11.

Solution

The entity will recognise liability in the books equal to 150 (30 x 5) days of annual leave and 10 (10 x 1) days of sick leave.

2).

Amra Pvt. Ltd. has a plan for its employees where it has decided to pay a lump-sum benefit of ₹2,000 that will vest after ten years of service to the employee. However, such kind of plan will provide no further benefit for subsequent service. Compute the benefit attributed for last 10 years and after these years?

Solution

In this case, as per the company's plan, a benefit of ₹200 (₹2,000 divided by ten) is attributed to each of the first ten years. As per Ind AS 19, the benefit will be attributed till the period the employee service will lead to no material amount of benefits. Hence, since the current service cost in each of the first ten years reflects the probability that the employee may not complete ten years of service no benefit is attributed to subsequent years.

INDIAN ACCOUNTING STANDARD 21: THE EFFECTS OF CHANGES IN FOREIGN EXCHANGE RATES

1).

Future Ltd. sells a revitalising energy drink that is sold throughout the world. Sales of the energy drink comprise over 90% of the revenue of Future Ltd. For convenience and consistency in pricing, sales of the energy drink are denominated in USD. All financing activities of Future Ltd. are in its local currency (L\$), although the company holds some USD cash reserves. Almost all of the costs incurred by Future Ltd. are denominated in L\$. What is the functional currency of Future Ltd.?

Solution

The functional currency of Future Ltd. is the L\$. Looking at the primary indicators, the facts presented indicate that the currency that mainly influences the cost of producing the energy drink is the L\$. As stated in the fact pattern, pricing of the product in USD is done for convenience and consistency purposes; there is no indication that the sales price is influenced by the USD.

2).

The functional and presentation currency of parent P is USD while the functional currency of its subsidiary S is EURO. P sold goods having a value of USD 100 to S when the exchange rate was USD 1 = Euro 2. At year-end, the amount is still due and the exchange rate is USD 1 = Euro 2.2. How should the exchange differences be accounted for in the consolidated financial statements?

Solution

At year-end, S should revalue its accounts payable to EURO 220, recognising a loss of 20 in its standalone profit or loss. Thus, in the books of S, the balance payable to P will appear at EURO 220 while in the books of P the balance receivable from S will be USD 100.

For consolidation purposes, the assets and liabilities of S will be translated to USD at the closing rate i.e., USD 100 which will get eliminated against the receivable in the books of P but the EURO 20 exchange loss recorded in the subsidiary's statement of profit and loss has no equivalent gain in the parent's financial statements. Therefore, the EURO 20 loss will remain in the consolidated statement of profit and loss.

The reason for this is that the intra-group balance represents a commitment to translate Euro into USD and this is similar to holding a foreign currency asset in the parent company. The subsidiary must go out and buy USD to settle the obligation to the parent, so the Group as a whole has an exposure to foreign currency risk.

INDIAN ACCOUNTING STANDARD 23: BORROWING COSTS

1).

An entity borrowed \$1000 on April 1, 20x1 when 1\$ = 40. The rate of interest is 4%. Indian loan interest is 12%. Exchange rate on 31.3. 20x2 is 50. The loan is used for a qualifying asset. Find out the interest eligible for capitalization.

How much it will be, if the closing exchange rate is 41, or 39.

Solution

An entity can borrow funds in its functional currency (₹) @ 12%. It borrows \$1,000 @ 4% on April 1, 20X1 when \$ 1 = ₹40. The equivalent amount in functional currency is Rs 40,000. Interest is payable on March 31, 20X2. On March 31, 20X2, exchange rate is \$ 1 = ₹50. The loan is not due for repayment. The exchange loss in this case is ₹10,000 [$\$ 1000 \times (\text{₹}50 - \text{₹}40)$]. The borrowing cost is ₹2,000 ($\$ 1,000 \times 4\% \times \text{₹}50$). Had the entity borrowed in functional currency the borrowing cost would have been ₹4,800 ($\text{₹}40,000 \times 12\%$). The entity will treat exchange difference upto ₹2,800 ($\text{₹}4,800 - \text{₹}2,000$) as a borrowing cost that may be eligible for capitalization under this

Standard. Thus the total eligible borrowing cost is ₹4,800 ($\text{₹}2,000 + \text{₹}2,800$) equivalent to the cost of borrowing cost in functional currency.

If the exchange rate on March 31, 20X2, is \$ 1 = ₹41. The exchange loss is ₹1,000 [$\$ 1,000 - (\text{₹}41 - \text{₹}40)$]. The entity will treat the entire exchange loss as an eligible borrowing cost as total cost of the borrowing ₹3,000 ($\text{₹}2,000 + \text{₹}1,000$) in foreign currency does not exceed the cost of borrowings in functional currency, i.e., ₹4,800.

If the exchange rate on March 31, 20X2, is \$ 1 = ₹39. There is an exchange gain of is ₹1,000 [$(\$ 1,000 \times (\text{₹}40 - \text{₹}39))$]. The eligible borrowing cost will be ₹2,000 being interest paid to the foreign lender.

2).

Alpha Ltd on 1st April 20X1 borrowed 9% ₹30,00,000 to finance the construction of two qualifying assets. Construction started on 1st April 20X1. The loan facility was availed on 1st April 20X1 and was utilized as follows with remaining funds invested temporarily at 7%.

	Factory Building	Office Building
1st April 20X1	5,00,000	10,00,000
1st October 20X1	5,00,000	10,00,000

Calculate the cost of the asset and the borrowing cost to be capitalized.

Solution:

Particulars	Factory Building	Office Building
Borrowing Costs	(10,00,000*9%) 90,000	(20,00,000*9%) 1,80,000
Less: Investment Income	(5,00,000*7%*6/12) (17,500)	(10,00,000*7%*6/12) (35,000)
	72,500	1,45,000
Cost of the asset:		
Expenditure incurred	10,00,000	20,00,000
Borrowing Costs	<u>72,500</u>	<u>1,45,000</u>
Total	<u>10,72,500</u>	<u>21,45,000</u>

INDIAN ACCOUNTING STANDARD 24: RELATED PARTY DISCLOSURES

1).

(key management personnel)

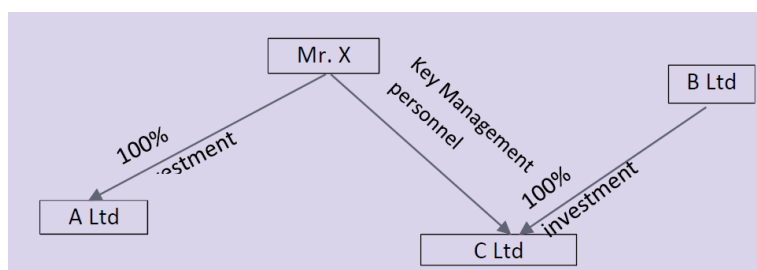
Mr. X has a 100% investment in A Limited. He is also a member of the key management personnel (KMP) of C Limited. B Limited has a 100% investment in C Limited.

Required

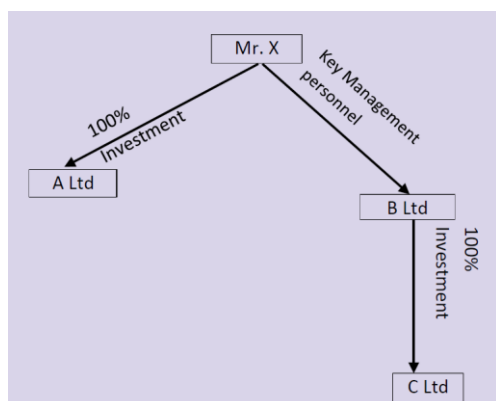
- (a) Examine related party relationships from the perspective of C Limited for A Limited.
- (b) Examine related party relationships from the perspective of C Limited for A Limited if Mr. X is a KMP of B Limited and not C Limited.
- (c) Will the outcome in (a) & (b) would be different if Mr. X has joint control over A Limited.
- (d) Will the outcome in (a) & (b) would be different if Mr. X has significant influence over A Limited.

Solution

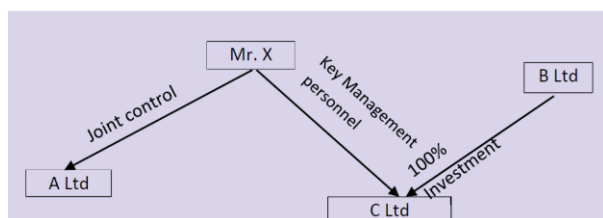
(a) A Limited is related to C Limited because Mr. X controls A Limited and is a member of KMP of C Limited.



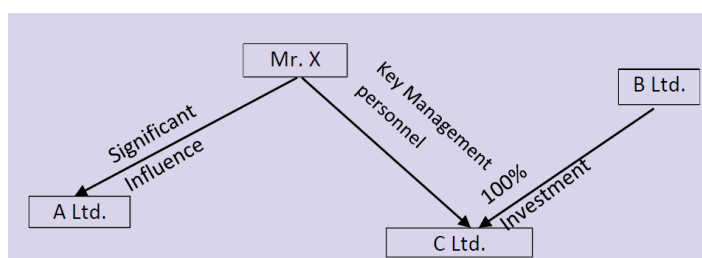
(b) Still A Limited will be related to C Limited.



(c) No, Still A Limited will be related to C Limited.



(d) Yes, A Ltd. is not controlled by Mr. X. Therefore, despite Mr. X being KMP of C Ltd., A Ltd.,



2).

Power Limited is a producer of electricity. Transmission Limited regularly purchases electricity from Power Limited. Power Limited whose financial year ends on March 31, 20X2, acquired 100% shareholding of Transmission Limited on July 15, 20X1. However, the entire shareholding is disposed of on March 21, 20X2. Power Limited and Transmission Limited had transactions when

Transmission Limited was a subsidiary of Power Limited and also in the period when it was not a subsidiary of Power Limited.

Required

What related party disclosures should Power Limited make in its financial statements for the year ended March 31, 20X2 with respect to transactions with Transmission Limited?

Solution

Power Limited should in its financial statements for the year ended March 31, 20X2 make related party disclosures for the period from July 15, 20X1 to March 21, 20X2 when Transmission Limited was its subsidiary.

INDIAN ACCOUNTING STANDARD 33 : EARNINGS PER SHARE

1).

ABC Company issues 9% preference shares of FV of ₹10 each on 1.4.20X1. Total value of the issue is ₹10,00,000. The shares are issued at a discount of ₹0.50 each, for a period of 5 years and would be redeemed at the end of 5th year. The shares are to be redeemed at ₹11 each.

At the end of the year 3, i.e. on 31.3.20X4, company finds that it has earned good returns than expected over last three years and can make the redemption of preference shares early. To compensate the shareholders for two years of dividend which they need to forego, company decided to redeem the shares at ₹12 each instead of original agreement of ₹11. Comment on the earnings for the year 20X3-20X4.

Solution

In the given situation, ₹2 per share is the excess payment made by the company amounting to ₹2,00,000 in all. The amount of ₹2,00,000 will be deducted from the earnings of the year 20X3-20X4 while calculating the basic EPS of year 20X3-20X4.

2).

ABC Company has issued contingently issuable shares on 1st January 20X1. The condition to be satisfied is the average turnover of the company for last three quarters must exceed ₹100 million. If the condition is satisfied the company will issue the shares within a period of 6 months. The conditions will be effective from the quarter ending 31st March 20X1. Company achieves the said target on ending 31st December 20X1.

Explain what will be the status of shares while calculating diluted EPS?

Solution

In the above case, company will calculate its average turnover for last 3 quarter, every quarter starting from 31st March 20X1.

Average of 3 quarters ending 31st March 20X1 – Not achieved – Therefore shares will not be included in Basic as well as Diluted for the year 20X0-20X1

Average of 3 quarters ending 30th June 20X1, September 20X1 – Target not achieved therefore shares will not be considered for calculation of Basic as well as Diluted.

Average of 3 quarters ending on 31st of December 20X2 – Targeted turnover is achieved. Thus the contingent condition which was needed to be satisfied for, is satisfied. Therefore, the shares will be considered for calculation of Basic and diluted EPS for the 20X1-20X2. The date that would be considered for calculation of weighted average number of shares will be 31st December 20X1. The shares can be issued at any time during 6 months period. Therefore, shares can be issued at any moment of time from the 1st January 20X2 to 30th June 20X2. In this case, for calculation of weighted average number of shares for years 20X1-20X2, the period that will be considered would be 1st January 20X2 to 31st March 20X2. For 20X2-20X3 the period will start from 1st April 20X2. After 30th June 20X2, all the share will become ordinary shares (those actually issued) and there will not be any shares for diluted as the date of agreement is over, contingent condition is met.

Written put options

Example

An entity has outstanding 120 written put options on its ordinary shares with an exercise price of ₹35. The average market price of its ordinary shares for the period is ₹28. In calculating diluted earnings per share, the entity assumes that it issued 150 shares at ₹28 per share at the beginning of the period to satisfy its put obligation of ₹4,200. The difference between the 150 ordinary shares issued and the 120 ordinary shares received from satisfying the put option (30 incremental ordinary shares) is added to the denominator in calculating diluted earnings per share.

INDIAN ACCOUNTING STANDARD 36 : IMPAIRMENT OF ASSETS

1).

A mining entity owns a private railway to support its mining activities. The private railway could be sold only for scrap value and it does not generate cash inflows that are largely independent of the cash inflows from the other assets of the mine.

Solution

It is not possible to estimate the recoverable amount of the private railway because its value in use cannot be determined and is probably different from scrap value. Therefore, the entity estimates the recoverable amount of the cash-generating unit to which the private railway belongs, ie the mine as a whole.

2).

Earth Infra Ltd has two cash-generating units, X and Y. There is no goodwill within the units' carrying values. The carrying values of the CGUs are CGU A for ₹20 million and CGU B for 30 million. The company has an office building which it is using as a office headquarter has not been included in the above values and can be allocated to the units on the basis of their carrying values. The office building has a carrying value of ₹10 million. The recoverable amounts are based on value-in-use of ₹18 million for CGU A and ₹38 million for CGU B.

Required: Determine whether the carrying values of CGU A and B are impaired.

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

Solution

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

	A	B	Total
Carrying value of CGUs	20	30	50
Allocation of office building (office building is allocated in the ratio of Carrying value of CGU's)			
Carrying value of CGU after	4	6	10
Allocation of corporate asset	24	36	60
Recoverable Amount	18	38	56
Impairment Loss	6	-	

The impairment loss will be allocated on the basis of 4/24 against the building (₹1 million) and 20/24 against the other assets (₹5 million).

INDIAN ACCOUNTING STANDARD 37 INDIAN ACCOUNTING STANDARD 37: PROVISIONS, CONTINGENT LIABILITIES AND CONTINGENT ASSETS

1).

X Shipping Ltd. is required by law to overhaul its shipping fleet once in every 3 years. The company's finance team was of the view that recognising the costs only when paid would prevent matching of revenue earned all the time with certain costs of large amounts which are incurred occasional. Thereby, it has formulated an accounting policy of providing in its books of account for the future cost of maintenance (overhauls, annual inspection etc.) by calculating a rate per hours sailed on sea and accumulating a provision over time. The provision is adjusted when the expenditure is actually incurred. Is the accounting policy of X Shipping Ltd. correct?

Solution

A provision is made for a present obligation arising out of a past event. Overhauling does not arise out of past event. Even a legal requirement to overhaul does not make the cost of overhaul a liability, because no obligation exists to overhaul the ships independently of the company's future actions - the company could avoid the future expenditure by its future actions for example by selling the ships. So there is no present obligation.

As per the standard, financial statements deal with the financial position of an entity at the end of its reporting period and not its possible position in the future. Therefore, no provision is recognised for costs that need to be incurred to operate in the future. The only liabilities recognised in an entity's balance sheet are those that exist at the end of the reporting period.

Therefore, the accounting policy of X Shipping Ltd. is not correct.

2).

X Sugars Ltd. has entered into a sale contract of ₹3,00,00,000 with Y Chocolates Ltd. for the supply of sugar during 20X1-20X2. As per the contract the delivery is to be made within 2 months from the date of contract. In case of failure to deliver within the schedule, X Sugars Ltd. has to pay a compensation of ₹30,00,000 to Y Chocolates Ltd.

During the transit, the vehicle carrying the sugar met accident and X Sugar Ltd. lost the entire consignment. It is, however covered by an insurance policy. According to the report of the surveyor, the amount is collectible, subject to the deductible clause [i.e., 15% of the claim] in the insurance policy. The cost of goods lost was ₹2,50,00,000.

Before the financial year end, X Sugars Ltd. received informal information from the insurance company that their claim had been processed and the payment had been dispatched for 85% of the claim amount. Meanwhile Y Chocolates Ltd. has made demand of ₹30,00,000 since the goods were not delivered on time.

What provision or disclosure would X Ltd. need to make at year end?

Solution

As per the standard, where an inflow of economic benefits is probable, an entity should disclose a brief description of the nature of the contingent assets at the end of the reporting period, and, where practicable, an estimate of their financial effect, measured using the principles set out in Ind AS 37.

So X Sugars Ltd. would need to disclose the contingent asset of ₹2,12,50,000 (₹2,50,00,000 x 85%) at the end of the financial year 20X1-20X2.

It would also need to make a provision of ₹30,00,000 towards the clam of Y Chocolates Ltd. required to settle the present obligation at the end of the reporting period.

3).

X Solar Power Ltd., a power company, has a present obligation to dismantle its plant after 35 years of useful life. X Solar Power Ltd. cannot cancel this obligation or transfer to third party. X Solar Power Ltd. has estimated the total cost of dismantling at ₹50,00,000, the present value of which is ₹30,00,000. Based on the facts and circumstances, X Solar Power Ltd. considers the risk factor of 5% i.e., the risk that the actual outflows would be more from the expected present value. How should X Solar Power Ltd. account for the obligation?

Solution

The obligation should be measured at the present value of outflows i.e., ₹30,00,000. Further a risk adjustment of 5% i.e., ₹1,50,000 (₹30,00,000 x 5%) would be made.

So, the liability will be recognised at = ₹30,00,000 + ₹1,50,000 = ₹31,50,000.

4).

X Metals Ltd. had entered into a non-cancellable contract with Y Ltd. to purchase 10,000 units of raw material at ₹50 per unit at a contract price of ₹5,00,000. As per the terms of contract, X Metals Ltd. would have to pay ₹60,000 to exit the said contract. X Metals Ltd. has discontinued manufacturing the product that would use the said raw material. For that X Metals Ltd. has identified a third party to whom it can sell the said raw material at ₹45 per unit.

How should X Metals Ltd. account for this transaction in its books of account in respect of the above contract?

Solution

These circumstances do indicate an onerous contract. The only benefit to be derived from the purchase contract costing ₹5,00,000 are the proceeds from the sale contract, which are ₹ 4,50,000. Therefore, a provision should be made for the onerous element of ₹50,000, being the lower of cost of fulfilling the contract and the penal cost of cancellation of ₹60,000.

INDIAN ACCOUNTING STANDARD 38: INTANGIBLE ASSETS

1).

Mercury Ltd is preparing its accounts for the year ended 31 March 20X2 and is unsure about how to treat the following items.

1. The company completed a grand marketing and advertising campaign costing ₹4.8 Lakh. The finance director had authorised this campaign on the basis that it would create ₹8 lakh of additional profits over the next three years.
2. A new product was developed during the year. The expenditure totalled ₹3 lakh of which ₹1.5 lakh was incurred prior to 30 September 20X1, the date on which it became clear that the product was technically viable. The new product will be launched in the next four months and its recoverable amount is estimated at ₹1.4 lakh.
3. Staff participated in a training programme which cost the company ₹5 lakh. The training organisation had made a presentation to the directors of the company outlining that incremental profits to the business over the next twelve months would be ₹7 lakh.

What amounts should appear as intangible assets in accordance with Ind AS 38 in Mercury's balance sheet as on 31 March 20X2?

Solution

The treatment in Mercury's financials as at 31 March 20X2 will be as follows:

1. Marketing and advertising campaign: no intangible asset will be recognised, because it is not possible to identify future economic benefits that are attributable only due to this campaign. All of the expenditure should be expensed in the statement of profit and loss.
2. New product: development expenditure appearing in the balance sheet will be valued at ₹1.5 lakh. The expenditure prior to the date on which the product becomes technically feasible is recognised in the statement of profit and loss. However the impairment loss of 0.10 shall be provided.
3. Training programme: no asset will be recognised, because there is no control of the company over the staff and when staff leaves the benefits of the training, whatever they may be, also departs.

2).

Separate Acquisition

Venus India Private Ltd acquired a software for its internal use costing ₹10,00,000. The amount payable for the software was ₹600,000 immediately and ₹400,000 in one year time. The other expenditure incurred were:-

Purchase tax : ₹1,00,000

Entry Tax : 10% (recoverable later from tax department)

Legal fees: ₹87,000

Consultancy fees for implementation : ₹1,20,000 cost of capital of the company is 10%.

Calculate the cost of the software on initial recognition using the principles of Ind AS 38 Intangible Assets.

Solution

Particulars	Amount
Cash paid	600,000
Deferred consideration (₹400,000/1.1)	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	1,20,000
Total Cost to be capitalized	12,70,636

3).

X Limited engaged in the business of manufacturing fertilizers entered into a technical collaboration agreement with a foreign company Y Limited. As a result, Y Limited would provide the technical know-how enabling X Limited to manufacture fertilizer in a more efficient way. X Limited paid ₹10,00,00,000 for the use of know-how for a period of 5 years. X Limited estimates the production of fertilizer as follows:

Year	(in metric tons)
1	50,000
2	70,000
3	1,00,000
4	1,20,000
5	1,10,000

At the end of the 1st 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.

How will X Limited 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 2nd year, as per revised estimate the total number of units to be produced are 4,20,000 MT.

The amortization for second year will be $65,000/4,20,000$, and so on for remaining years unless the estimates are again revised.

The difference in amortization for first year due to revision in estimates would also be provided in 2nd year. The actual amortization provided for the 1st year is ₹1,11,11,111. The amortization that would have provided on revised estimates is $50,000/4,20,000$ on ₹10,00,00,000 = ₹1,19,04,762.

So, difference of ₹7,93,651 (₹1,19,04,762 – ₹1,11,11,111) would also be provided in 2nd year.

4).

Desire Limited acquired a patent at a cost of ₹288 lakh for a period of six years and the product life cycle is also six years. The company capitalized the cost and started amortizing at ₹48 lakh per annum. After three years, it was found that the product life-cycle may continue for another 5 years from then. The net cash flows from the product during these five years are expected to be ₹96 lakh, ₹144 lakh, ₹120 lakh, ₹112 lakh and ₹104 lakh respectively. You are required to find out amortization cost of the patent for each of the years, as per Ind AS 38.

Solution

Desire Limited amortized ₹48,00,000 per annum for the first 3 years i.e. ₹1,44,00,000. The remaining carrying cost can be amortized during next 5 years starting from 4th year onwards, on the basis of net cash flows (i.e. future economic benefits) arising from the sale of the product. The amortization may be found as follows:

Year	Net cash flows ₹	Amortization Ratio	Amortization Amount ₹
I	-	(48/288) 0.167	48,00,000
II	-	(48/288) 0.167	48,00,000
III	-	(48/288) <u>0.167</u>	<u>48,00,000</u>
			1,44,00,000
IV	96,00,000	0.167	24,04,800
V	1,44,00,000	0.250	36,00,000
VI	1,20,00,000	0.208	29,95,200
VII	1,12,00,000	0.194	27,93,600
VIII	<u>1,04,00,000</u>	<u>0.181</u>	<u>26,06,400</u>
Total	<u>5,76,00,000</u>	<u>1.000</u>	<u>2,88,00,000</u>

Note: The answer has been given on the assumption that the patent is renewable and Desire Ltd. go it renewed after expiry of six years.

INDIAN ACCOUNTING STANDARD 40 : INVESTMENT PROPERTY

1).

X Limited purchased a land worth of ₹1,00,00,000. It has option either to pay full amount at the time of purchases or pay for it over two years for a total cost of ₹1,20,00,000. What should be the cost of the building under both the payments method?

Solution

Using either payment method, the cost will be ₹1,00,00,00. If the second payment option is used, ₹20,00,000 will be treated as interest expenses over the period of credit i.e., 2 years.

2).

Moon Ltd has purchased a building on 1st April 20X1 at a cost of ₹10 million. The building was used as a factory by the Moon Ltd and was measured under cost model. The expected useful life of the building is estimated to be 10 years. Due to decline in demand of the product, the Company does not need the factory anymore and has rented out the building to a third party from 1st April 20X5. On this date the fair value of the building is ₹8 million. Moon Ltd uses cost model for accounting of its investment property.

Solution

	(₹Million)
Carrying amount of the building after depreciation of 4 years (10-10/10*4).	6

Building initially recognised as Investment Property (Cost model Ind AS 40)	6

INDIAN ACCOUNTING STANDARD 105: NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

1).

S Ltd purchased a property for ₹6,00,000 on 1 April 20X1. The useful life of the property is 15 years. On 31 March 20X3 S Ltd classify the property as held for sale. The impairment testing provides the estimated recoverable amount of ₹4,70,000.

The fair value less cost to sell on 31 March 20X3 was ₹4,60,000. On 31 March 20X4 management change the plan as property no longer met the criteria of held for sale. The recoverable amount as at 31 March 20X4 is ₹5,00,000.

Value the property at the end of 20X3 and 20X4.

Solution

(a) Value of property immediately before the classification as held for sale as per Ind AS 16 as on 31 March

20X3	₹	
Purchase Price	6,00,000	
Less: Accumulated Depreciation	80,000	(for two years)
Less: Impairment loss	50,000	(5,20,000-4,70,000)
Carrying amount	4,70,000	

On initial classification as held for sale on 31 March 20X3, the value will be lower of:

Carrying amount	₹4,70,000
Fair Value less Cost to sell	₹4,60,000

On 31 March 20X3 Non-current classified as held for sale will be recorded at ₹4,60,000.

Depreciation of ₹40,000 and Impairment Loss of ₹60,000 (50,000 +10,000) is charged in profit or loss for the year ended 31 March 20X3.

(b) On 31 March 20X4 held for sale property is reclassified as criteria doesn't met. The value will be lower of:

Carrying amount had the asset is not classified as held for sale	₹4,33,846
Carrying amount immediately before classification on 31 March 20X3	₹4,70,000
Less Depreciation based on 13 years balance life	₹36,154
Recoverable Amount	₹5,00,000

Property will be valued at ₹4,33,846 on 31 March 20X4

Adjustment to the carrying amount of ₹26,154 (₹4,60,000 - 4,33,846) is charged to the profit

INDIAN ACCOUNTING STANDARD 108: OPERATING SEGMENTS

1).

X Ltd. is engaged in the business of manufacturing and selling papers. Varieties of paper like adhesive paper, anti-rust paper, antique paper, art paper etc., are manufactured and sold by X Ltd. Should X Ltd. classify these papers into different segments?

Solution

Two or more operating segments may be aggregated into a single operating segment if the segments have similar economic characteristics, and the segments are similar with respect to various factors like nature of the product and production process, type of customers, method of distribution and regulatory requirement.

In case of X Ltd., so far as varieties of paper concerned, if all factors such as nature of the product and production process, type of customers, method of distribution and regulatory requirement are common, there is no need to create different segments for each type of paper.