

PRACTICE QUESTIONS

CHAPTER-6 UNIT 1: IND AS 19: EMPLOYEE BENEFITS

Questions

1. SA Pvt Ltd is engaged in the business of retail having 100 retail outlets across Northern and Southern India. The company's head office is located at Chennai.

SA Pvt Ltd is a subsidiary of SAG Ltd. SAG Ltd is listed on the National Stock Exchange in India.

Following information is available for SA Pvt Ltd:

Plan Assets

At 1st April, 20X1, the fair value of plan assets was ₹ 10,000.

Contribution to the plan assets done on 31st March, 20X2 – ₹ 3,000

Amount paid on 31st March, 20X2 – ₹ 300

At 31st March, 20X2, the fair value of plan assets was ₹ 14,700

Actual return on plan assets – ₹ 2,000

Defined Benefit Obligation

At 1st April, 20X1, present value of the defined benefit obligation was ₹ 12,000.

At 31st March, 20X2, present value of the defined benefit obligation was ₹ 15,500.

Actuarial losses on the obligation for the year ended 31st March, 20X2 were ₹ 100.

Current Service Cost – ₹ 2,500

Benefit paid – ₹ 300

Discount rate used to calculate defined benefit liability - 10%.

Suggest if there is any amount based on the above-mentioned information that would be taken to other comprehensive income (with workings). Also compute net interest on the net defined benefit liability (asset).

2. A Ltd. prepares its financial statements to 31st March each year. It operates a defined retirement benefits plan on behalf of current and former employees. A Ltd. receives advice from actuaries regarding contribution levels and overall liabilities of the plan to pay

benefits. On 1st April, 20X1, the actuaries advised that the present value of the defined benefit obligation was ₹ 6,00,00,000. On the same date, the fair value of the assets of the defined benefit plan was ₹ 5,20,00,000. On 1st April, 20X1, the annual market yield on government bonds was 5%. During the year ended 31st March, 20X2, A Ltd. made contributions of ₹ 70,00,000 into the plan and the plan paid out benefits of ₹ 42,00,000 to retired members. Both these payments were made on 31st March, 20X2.

The actuaries advised that the current service cost for the year ended 31st March, 20X2 was ₹ 62,00,000. On 28th February, 20X2, the rules of the plan were amended with retrospective effect. These amendments meant that the present value of the defined benefit obligation was increased by ₹ 15,00,000 from that date.

During the year ended 31st March, 20X2, A Ltd. was in negotiation with employee representatives regarding planned redundancies. The negotiations were completed shortly before the year end and redundancy packages were agreed. The impact of these redundancies was to reduce the present value of the defined benefit obligation by ₹ 80,00,000. Before 31st March, 20X2, A Ltd. made payments of ₹ 75,00,000 to the employees affected by the redundancies in compensation for the curtailment of their benefits. These payments were made out of the assets of the retirement benefits plan.

On 31st March, 20X2, the actuaries advised that the present value of the defined benefit obligation was ₹ 6,80,00,000. On the same date, the fair value of the assets of the defined benefit plan were ₹ 5,60,00,000.

Examine and present how the above event would be reported in the financial statements of A Ltd. for the year ended 31st March, 20X2 as per Ind AS. Finance cost is to be computed on the opening balances.

3. On 1st April 20X1, the fair value of the assets of XYZ Ltd.'s defined benefit plan were valued at ₹ 20,40,000 and the present value of the defined obligation was ₹ 21,25,000. On 31st March, 20X2 the plan received contributions from XYZ Ltd amounting to ₹ 4,25,000 and paid out benefits of ₹ 2,55,000. The current service cost for the financial year ending 31st March 20X2 is ₹ 5,10,000. An interest rate of 5% is to be applied to the plan assets and obligations. The fair value of the plan assets at 31st March 20X2 was ₹ 23,80,000, and the present value of the defined benefit obligation was ₹ 27,20,000.

Provide a reconciliation from the opening balance to the closing balance for plan assets and defined benefit obligation. Also show how much amount should be recognised in the statement of profit and loss, other comprehensive income and balance sheet?

4. At 1st April, 20X0, the fair value of the Plan Assets was ₹ 10,00,000. The Plan paid benefits of ₹ 1,90,000 and received contributions of ₹ 4,90,000 on 30th September, 20X0. The company computes the Fair Value of Plan Assets to be ₹ 15,00,000 as on 31st March, 20X1 and the Present Value of the Defined Benefit Obligation amount to ₹ 14,79,200 on the same date. Actuarial losses on defined benefit obligation were ₹ 6,000.

Compounding happens half-yearly. The normal interest rate for 6 months period is 10%, while the effective interest rate for 12 months period is based on the following data:

At 1st April, 20X0, the company made the following estimates based on market prices at that date:

Particulars	%
Interest and Dividend Income, after tax payable by the fund	9.25
Add: Realized and Unrealized Gains on Plan Assets (after tax)	2.00
Less: Administration Costs	(1.00)
Expected Rate of Return	<u>10.25</u>

Determine actual return and expected return on plan asset. Also compute amount to be recognized in 'Other Comprehensive Income' in this case.

5. From the following particulars, compute the net defined benefit liability and expense to be recognized in Profit and Loss account. (₹ in lakhs)

Particulars	Defined benefit obligation		Plan Assets	
	31 st Dec. 20X2	31 st Dec. 20X1	31 st Dec. 20X2	31 st Dec. 20X1
Balance at the beginning of the year	63.25	47.08	21.80	14.65
Current service cost	5.84	4.97	-	-
Interest cost	4.27	3.56	-	-
Changes in demographic assumptions	0.62	1.86	-	-
Changes in financial assumptions	3.58	1.93	-	-
Experience variance	(2.49)	4.46	-	-
Benefits paid	-	(0.61)	-	(0.61)
Investment income	-	-	1.47	1.12
Employers' contribution	-	-	8.00	7.00
Return on plan assets	-	-	2.12	(0.35)

6. Arunachalam Ltd. operates a Defined Retirement Benefits Plan for its current and former employees. Given the large size of the company, it engaged a firm of Actuaries for advice on the Contribution Levels and overall Liabilities of the Plan to pay benefits. Following details are given:
- (a) On 1st April, 20X1, the actuarial valuation of the present value of the defined benefit obligation was ₹ 15 crores. On the same date, the fair value of the assets of the Defined Benefit Plan was ₹ 13 crores. On 1st April, 20X1, the annual market yield based on Government Bonds was 5%.
 - (b) During the year ended 31st March, 20X2, Arunachalam made contributions of ₹ 1.75 crore into the Plan and the Plan paid out benefits of ₹ 1.05 crore to retired members. Assume that both these payments were made on 31st March, 20X2.
 - (c) The Actuarial Firm estimated that the current service cost for the year ended 31st March, 20X2 would be ₹ 1.55 crores. On 28th February, 20X2, the rules of the Plan were amended with retrospective effect which led to an increase in the present value of the defined benefit obligation by ₹ 37.5 lakhs from that date.
 - (d) During the year ended 31st March, 20X2, Arunachalam was in negotiation with employee representatives regarding planned redundancies. These negotiations were completed shortly before the year end and the redundancy packages were agreed. The impact of these redundancies was to reduce the present value of the defined benefit obligation by ₹ 2 crores. Before 31st March, 20X2, Arunachalam made payments of ₹ 1.875 crores to the employees affected by the redundancies in compensation for a curtailment of their benefits. These payments were made from the assets of the Retirement Benefits Plan.
 - (e) On 31st March, 20X2, the present value of the defined benefit obligation was ₹ 17 crores and the fair value of the assets of the Defined Benefit Plan was ₹ 14 crores.

Discuss how the above will be accounted for in the books of Arunachalam Ltd. for the year 20X1-20X2. Also give the extracts of financial statements affected due to the above transactions.

Answers

1. As per Ind AS 19, net remeasurement of ₹ 900 would be recognized in other comprehensive income.

Computation of Net remeasurement

= Remeasurement – Actuarial loss

= ₹ 1000 (Refer WN - 1) – ₹ 100 (Given in the question) = ₹ 900.

Computation of net interest expense

Particulars	Amount in ₹
Defined benefit liability as at 1 st April 20X1 (A) (Given in the question)	12,000
Fair value of plan asset as at 1 st April 20X1 (B) (Given in the question)	(10,000)
Net defined benefit liability (A - B)	<u>2,000</u>
Net interest expense (as it is net liability) (Refer note given below)	200

Note:

Net interest expense would be computed on net defined benefit liability using discount rate of 10% given in the question-

= Net defined benefit liability x Discount rate

= 2,000 x 10%

= ₹ 200.

Working Note:

Computation of amount of remeasurement

Particulars	₹
Actual return on plan asset for the year ended 31 st March 20X2 (C) (Given in the question)	2,000
Less: Interest income on ₹ 10,000 held for 12 months at 10% (D)	(1,000)
Remeasurement (E = C - D)	<u>1,000</u>

2. All figures are ₹ in '000.

On 31st March, 20X2, A Ltd. will report a net pension liability in the statement of financial position. The amount of the liability will be 12,000 (68,000 – 56,000).

For the year ended 31st March, 20X2, A Ltd. will report the current service cost as an operating cost in the statement of profit or loss. The amount reported will be 6,200. The same treatment applies to the past service cost of 1,500.

For the year ended 31st March, 20X2, A Ltd. will report a finance cost in profit or loss based on the net pension liability at the start of the year of 8,000 (60,000 – 52,000). The amount of the finance cost will be 400 (8,000 x 5%).

The redundancy programme represents the partial settlement of the curtailment of a defined benefit obligation. The gain on settlement of 500 (8,000 – 7,500) will be reported in the statement of profit or loss.

Other movements in the net pension liability will be reported as remeasurement gains or losses in other comprehensive income.

For the year ended 31st March, 20X2, the remeasurement loss will be 3,400 (Refer W. N.).

Working Note:

Remeasurement of gain or loss

	₹ in '000
Liability at the start of the year (60,000 – 52,000)	8,000
Current service cost	6,200
Past service cost	1,500
Net finance cost	400
Gain on settlement	(500)
Contributions to plan	(7,000)
Remeasurement loss (balancing figure)	<u>3,400</u>
Liability at the end of the year (68,000 – 56,000)	<u>12,000</u>

3. Reconciliation of Plan assets and Defined benefit obligation

	Plan Assets ₹	Defined benefit obligation ₹
Fair value/present value as at 1 st April 20X1	20,40,000	21,25,000
Interest @ 5%	1,02,000	1,06,250
Current service cost		5,10,000

Contributions received	4,25,000	-
Benefits paid	(2,55,000)	(2,55,000)
Return on plan assets (gain) (assets) (balancing figure)	68,000	-
Actuarial Loss (balancing figure)	-	2,33,750
Closing balance as at 31 st March, 20X2	23,80,000	27,20,000

In the Statement of Profit and loss, the following will be recognised: ₹

Current service cost	5,10,000
Net interest on net defined liability (₹ 1,06,250 – ₹ 1,02,000)	4,250

Defined benefit re-measurements recognised in Other Comprehensive Income: ₹

Loss on defined benefit obligation	(2,33,750)
Gain on plan assets	<u>68,000</u>
	<u>(1,65,750)</u>

In the Balance sheet, the following will be recognised: ₹

Net defined benefit liability (₹ 27,20,000 – ₹ 23,80,000)	3,40,000
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4. Computation of Expected Return on Plan Assets

Particulars	₹
Return on ₹ 10,00,000 for 20X0-20X1 at 10.25% = ₹ 10,00,000 x 10.25%	1,02,500
Add: Return on ₹ 3,00,000 for 6 months at 10% Normal Rate = [3,00,000 (Inflow ₹ 4,90,000 less Payments ₹ 1,90,000) x 10% x 6/12]	<u>15,000</u>
Expected Return on Plan Assets	<u>1,17,500</u>

Computation of Actual Return on Plan Assets

Particulars	₹
Fair Value of Plan Assets at the year-end – 31 March 20X1	15,00,000
Less: Fair Value of Plan Assets at the beginning – 1 April 20X0	(10,00,000)
Less: Contributions received during the year 20X0-20X1	(4,90,000)
Add: Benefits paid during the year 20X0-20X1	<u>1,90,000</u>
Actual Return on Plan Assets	<u>2,00,000</u>

Computation of Net Actuarial Gain

Particulars	₹
Actual Return on Plan Assets	2,00,000
Less: Expected Return on Plan Assets	<u>(1,17,500)</u>
Actuarial Gain on Plan Assets	82,500
Less: Actuarial Loss on Defined Benefit Obligation (given)	<u>(6,000)</u>
Net Actuarial Gain to be recognized in 'OCI'	<u>76,500</u>

5. Computation of defined benefit liability and expenses to be charged to Statement of Profit and Loss:

	Defined benefit obligation (₹ in lakhs)		Plan Assets (₹ in lakhs)	
	31 st Dec 20X2	31 st Dec 20X1	31 st Dec 20X2	31 st Dec 20X1
Balance at the beginning of year	63.25	47.08	21.80*	14.65
Current service cost	5.84	4.97	-	-
Interest cost	4.27	3.56	-	-
Changes in demographic assumptions	0.62	1.86	-	-
Changes in financial assumptions	3.58	1.93	-	-
Experience variance	(2.49)	4.46	-	-
Benefits paid	-	(0.61)	-	(0.61)
Investment income	-	-	1.47	1.12
Employers' contribution	-	-	8.00	7.00
Return on plan assets	<u>-</u>	<u>-</u>	<u>2.12</u>	<u>(0.35)</u>
Balance at the end of year	<u>75.07</u>	<u>63.25</u>	<u>33.39</u>	<u>21.81*</u>

*Difference is due to approximation.

In the BALANCE SHEET, the following will be recognised:

Net defined liability to be recognised for the period ending 31st December, 20X1:

= ₹ 41.44 lakhs (₹ 63.25 lakhs - ₹ 21.81 lakhs)

Net defined liability to be recognised for the period ending 31st December, 20X2:

$$= ₹ 41.68 \text{ lakhs } (₹ 75.07 \text{ lakhs} - ₹ 33.39 \text{ lakhs})$$

In the **STATEMENT OF PROFIT AND LOSS**, the following will be recognised:

	Defined benefit obligation (₹ in lakhs)		Plan Assets (₹ in lakhs)	
	31 st Dec., 20X2	31 st Dec., 20X1	31 st Dec., 20X2	31 st Dec., 20X1
Current service cost	5.84	4.97	-	-
Interest cost	4.27	3.56	-	-
Investment income	<u>-</u>	<u>-</u>	(1.47)	(1.12)
Total	<u>10.11</u>	<u>8.53</u>	<u>(1.47)</u>	<u>(1.12)</u>

Expense to be recognised in the Statement of Profit and Loss for the period ending 31st December, 20X1 = ₹ 7.41 lakhs (₹ 8.53 lakhs - ₹ 1.12 lakhs)

Expense to be recognised in the Statement of Profit and Loss for the period ending 31st December, 20X2 = ₹ 8.64 lakhs (₹ 10.11 lakhs - ₹ 1.47 lakhs).

6. 1. **Extract of Balance Sheet (Net Amount in the Balance Sheet)** (₹ in lakhs)

	31.3.20X2	1.4.20X1
PV of Defined Benefit Obligation (given)	(1,700.00)	(1,500.00)
FV of Plan Assets (given)	<u>1,400.00</u>	<u>1,300.00</u>
Net Defined Benefit Liability (under Long-term Provision)	<u>(300.00)</u>	<u>(200.00)</u>

2. **Extract of Statement of Profit and Loss**

	(₹ in lakhs)
Current service cost (given)	155.00
Past service cost (given)	37.50
Gain on settlement (₹ 200 lakhs – ₹ 187.50 lakhs)	(12.50)
Net interest on net defined benefit liability [₹ 75 lakhs-₹ 65 lakhs]	<u>10.00</u>
Total to Statement of Profit and Loss	<u>190.00</u>

3. Extract of Other Comprehensive Income (Remeasurements)

	(₹ in lakhs)
Actuarial loss on defined benefit obligation (W.N.1)	(237.50)
Return on plan assets other than expected return (W.N.2)	<u>152.50</u>
Total	<u>(85.00)</u>

Working Notes:

1. Defined Benefit Obligation Account

Particulars	₹ in lakhs	Particulars	₹ in lakhs
To Plan Assets (benefits paid)	105.00	By Balance b/f (given) [balance as on 1.4.20X1]	1,500.00
To Curtailment and Settlement	200.00	By Current Service Cost	155.00
		By Interest Cost [5% on Opening balance]	75.00
To Balance c/d (given) [balance as on 31.3.20X2]	<u>1,700.00</u>	By Past service cost	37.50
	<u>2,005.00</u>	By Actuarial Loss (balancing figure)	237.50
			<u>2,005.00</u>

2. Plan Assets Account

Particulars	₹ in lakhs	Particulars	₹ in lakhs
To Balance b/f (given) [balance as on 1.4.20X1]	1,300.00	By Defined Benefit Obligation [benefits paid]	105.00
To Expected Return [5% on Opening balance]	65.00	By Payments on curtailment and settlement	187.50
To Bank (contributions paid)	175.00	By Balance c/d (given) [balance as on 31.3.20X2]	1,400.00
To Actuarial Gain (balancing figure)	<u>152.50</u>		
	<u>1,692.50</u>		<u>1,692.50</u>

The above Defined Benefit Obligation Account and Plan Assets Account can alternatively be presented in a statement form as follows:

Defined Benefit Obligation		Plan Assets	
Particulars	₹ in lakhs	Particulars	₹ in lakhs
PV of Obligation b/f.	1,500.00	FV of Plan Assets b/f.	1,300.00
Interest Cost [₹ 1,500 x 5%]	75.00	Interest Income [₹ 1,300 x 5%]	65.00
Current Service Cost	155.00	Contribution during 20X1-20X2	175.00
Benefits paid during 20X1-20X2	(105.00)	Benefits paid during 20X1-20X2	(105.00)
Plan Curtailment and Settlement	(200.00)	Payment towards settlement	(187.50)
Past Service Cost	37.50	Remeasurement Gain	
Remeasurement Loss			
(balancing figure)	<u>237.50</u>	(balancing figure)	<u>152.50</u>
PV of Obligation c/f.	<u>1,700.00</u>	FV of Plan Assets c/f.	<u>1,400.00</u>

UNIT 2: IND AS 37: PROVISIONS, CONTINGENT LIABILITIES AND CONTINGENT ASSETS

Questions

1. Marico has an obligation to restore environmental damage in the area surrounding its factory. Expert advice indicates that the restoration will be carried out in two distinct phases; the first phase requiring expenditure of ₹ 2 million to remove the contaminated soil from the area and the second phase, commencing three years later from the end of first phase, to replant the area with suitable trees and vegetation. The estimated cost of replanting is ₹ 3.5 million. Marico uses a cost of capital (before taxation) of 10% and the expenditure, when incurred, will attract tax relief at the company's marginal tax rate of 30%. Marico has not recognised any provision for such costs in the past and today's date is 31st March 20X2. The first phase of the clean-up will commence in a few months time and will be completed on 31st March 20X3 when the first payment of ₹ 2 million will be made. Phase 2 costs will be paid three years later from the end of first phase.

Calculate the amount to be provided at 31st March 20X2 for the restoration costs.

2. A manufacturer gives warranties to the purchasers of its goods. Under the terms of the warranty, the manufacturer undertakes to make good, by repair or replacement, manufacturing defects that become apparent within three years from the date of sale to the purchasers.

On 30th April 20X1, a manufacturing defect was detected in the goods manufactured by the entity between 1st March 20X1 and 30th April 20X1.

At 31st March 20X1 (the entity's reporting date), the entity held approximately one week's sales in inventories.

The entity's financial statements for the year ended 31st March 20X1 have not yet been finalised.

Three separate categories of goods require separate consideration:

Category 1—defective goods sold on or before 31st March 20X1

Category 2—defective goods held on 31st March 20X1

Category 3—defective goods manufactured in 20X1-20X2

State the accounting treatment of the above categories in accordance with relevant Ind AS.

3. XYZ Ltd. offers a six-month warranty on its small to medium-sized equipment, which can be put to use by the customer with no installation support. The warranty comes with the equipment and the customer cannot purchase it separately. This equipment is typically sold at a gross margin of 40%. XYZ Ltd. has made a provision of ₹ 30,000 during the year ended 31st March, 20X2, which is approximately 1% of its gross margin on the sale of these equipment. Based on past experience, it is expected that 1% of equipment sold have been returned as faulty within the warranty period. Faulty equipment returned to XYZ Ltd. during the warranty period are scrapped and the sale value is fully refunded to the customer.

Assuming that sales occurred evenly during the year, how should XYZ Ltd. evaluate whether any additional warranty provision is required on equipment sold in the past as at 31st March, 20X2? Had the warranty period been 2 years instead of six months, what additional criteria would XYZ Ltd. need to consider?

4. HVCL manufactures heavy equipment for construction industry. An order for supply of 90 equipment was received from ABIL. The unit price of the equipment was agreed at ₹ 190 lakhs each. 64 equipment was supplied during the year 20X1-20X2 and balance quantity remaining to be supplied as on 31.3.20X2. HVCL has 5 equipment in its inventory as on 31.3.20X2. HVCL considered that the contract was an onerous contract and therefore, the net realisable value of inventory has been taken as value of inventory as on 31.3.20X2.

The management of HVCL contends that costs incurred towards administrative overheads, finance charges, R & D expenses, sales overhead, head quarter expenditure etc., are considered as period cost and hence not considered for creation of provision. Hence, the same have not been included in the computation of unavoidable cost.

The management of HVCL has submitted the details of costs that have been considered for creation of provision towards onerous contract:

- Material cost - includes cost of material procured, cost of freight & insurance incurred for material procurement and handling, loading and unloading charges incurred.
- Labour cost/ Factory Overheads - includes salaries and other expenses of direct production department, and also expenses allocated from indirect departments to direct department.
- Material Overheads - Includes salaries and other expenses (including expenses allocated from other departments) booked under departments linked with materials like purchases, stores and quality control.

Accordingly, provision has been made considering the above costs only. The value of provision created for 21 remaining equipment to be produced is as per the working shown below:

Particulars	Value (₹ in lakh)
(i) Cost of production (which includes material cost, labour cost/factory overhead and material overhead)	199.00
(ii) Selling price	<u>(190.00)</u>
(iii) Differential cost per equipment	<u>9.00</u>
(iv) Differential cost of ₹ 9 Lakh per equipment for 21 equipment	189.00

Whether the company's accounting treatment of cost for creation of provision towards onerous contracts is in line with the provisions of Ind AS 37?

5. On 1st January, 20X2, the directors of Johansen Ltd. decided to terminate production at one of the company's divisions. This decision was publicly announced on 31st January, 20X2. The activities of the division were gradually reduced from 1st April, 20X2 and closure is expected to be complete by 30th September, 20X2.

At 31st January, 20X2, the directors prepared the following estimates of the financial implications of the closure:

- (i) Redundancy costs were initially estimated at ₹ 2 million. Further expenditure of ₹ 8,00,000 will be necessary to retrain employees who will be affected by the closure but remained with Johansen Ltd. in different divisions. This retraining will begin in early July 20X2. Latest estimates are that redundancy costs will be ₹ 1.9 million, with retraining costs of ₹ 8,50,000.
- (ii) Plant and equipment having an expected carrying value at 31st March, 20X2 of ₹ 8 million will have a recoverable amount ₹ 1.5 million. These estimates remain valid.
- (iii) The division is under contract to supply goods to a customer for the next three years at a pre-determined price. It will be necessary to pay compensation of ₹ 6,00,000 to this customer. The compensation actually paid, on 31st May, 20X2, was ₹ 5,50,000.
- (iv) The division will make operating losses of ₹ 3,00,000 per month in the first three months of 20X2-20X3 and ₹ 2,00,000 per month in the next three months of 20X2-20X3. This estimate proved accurate for April, 20X2 and May, 20X2.

- (v) The division operates from a leasehold premise. The lease is a non-cancellable operating lease with an unexpired term of five years from 31st March, 20X2. The annual lease rentals (payable on 31st March in arrears) are ₹ 1.5 million. The landlord is not prepared to discuss an early termination payment.

Following the closure of the division it is estimated that Johansen Ltd. would be able to sub-let the property from 1st October, 20X2.

Johansen Ltd. could expect to receive a rental of ₹ 3,00,000 for the six-month period from 1st October, 20X2 to 31st March, 20X3 and then annual rentals of ₹ 5,00,000 for each period ending 31st March, 20X4 to 31st March, 20X7. All rentals will be received in arrears.

Any discounting calculations should be performed using a discount rate of 5% per annum. You are given the following data for discounting at 5% per annum:

Present value of ₹ 1 received at the end of year 1 = ₹ 0.95

Present value of ₹ 1 received at the end of year 1–2 inclusive = ₹ 1.86

Present value of ₹ 1 received at the end of year 1–3 inclusive = ₹ 2.72

Present value of ₹ 1 received at the end of year 1–4 inclusive = ₹ 3.54

Present value of ₹ 1 received at the end of year 1–5 inclusive = ₹ 4.32

Compute the amounts that will be included in the Statement of Profit and Loss for the year ended 31st March, 20X2 in respect of the decision to close the division of Johansen Ltd.

Answers

1.

Year	Cash Flow	10% Discount factor	Present Value
20X2-20X3	20,00,000	0.909	18,18,000
20X5-20X6	35,00,000	0.683	<u>23,90,500</u>
Provision required at 31 st March 20X2			<u>42,08,500</u>

The provision is calculated using the pre-tax costs and a pre-tax cost of capital. The fact that the eventual payment will attract tax relief will be reflected in the recognition of a deferred tax asset for the deductible temporary difference (assuming that the recognition criteria for deferred tax assets are met.)

2. Category 1—defective goods sold on or before 31st March 20X1

If customer has the option to purchase warranty separately, the warranty is a distinct service because the entity promises to provide the service to the customer in addition to the product that has the functionality described in the contract. In that case, entity shall account for the promised warranty as a performance obligation and allocate a portion of the transaction price to that performance obligation.

If a customer does not have the option to purchase a warranty separately, an entity shall account for the warranty in accordance with Ind AS 37, *Provisions, Contingent Liabilities and Contingent Assets*, unless it provides the customer with a service in addition to the assurance that the product complies with agreed-upon specifications. If that is the case, then, the promised service is a performance obligation. Entity shall allocate the transaction price to the product and the service.

If an entity promises both an assurance-type warranty and a service-type warranty but cannot reasonably account for them separately, the entity shall account for both of the warranties together as a single performance obligation.

A law that requires an entity to pay compensation if its products cause harm or damage does not give rise to a performance obligation. The entity shall account for such obligations in accordance with Ind AS 37.

Category 2—defective goods held on 31st March 20X1

At 31st March 20X1 the entity did not have a present obligation to make good the unsold defective goods that it held in inventories. Accordingly, at 31st March 20X1 the entity should not recognise a provision in respect of the defective inventories. However, the entity should test the inventories for impairment in accordance with Ind AS 36, *Impairment of Assets*.

For this category, the detection of the manufacturing defect in April 20X1 is an adjusting event after the end of the reporting period as per Ind AS 10, *Events after the End of the Reporting Period*. It provides evidence of a manufacturing defect in inventories held at 31st March 20X1.

Category 3—defective goods manufactured in 20X1-20X2

At 31st March 20X1 the entity did not have a present obligation to make good any defective goods that it might manufacture in the future. Accordingly, at 31st March 20X1

the entity should not recognise a provision in respect of the defective goods manufactured in 20X1-20X2.

For this category, the detection of the manufacturing defect in April 20X1 is a non-adjusting event after the end of the reporting period as per Ind AS 10, *Events After the End of the Reporting Period*.

3. Calculation of additional warranty provisions:

Warranty claim covers 1% of gross margin, whereas customers are refunded the full selling price. As the goods are scrapped it is assumed XYZ Ltd has no potential for reimbursement from its supplier regarding the faulty goods.

A calculation of warranty provision is set out below:

1% of annual gross margin is ₹ 30,000 therefore 100% of annual gross margin must be ₹ 30,00,000. Since gross margin is 40%, sales should be ₹ 75,00,000. As provided in the question that the sales are evenly spread during the year and given the six month warranty, half of the sales occurred in the second half of the year is still covered within the warranty period as follows.

	% age	Annual sales ₹	Product under warranty at 31 st March, 20X2 ₹	Percentage expected to be returned ₹	Warranty provision ₹
Gross margin	40%	30,00,000			
Selling price	100%	75,00,000	37,50,000	1%	37,500

The warranty provision should therefore be increased by ₹ 7,500 (₹ 37,500 – ₹ 30,000). As the provision is expected to be used in the next 6 months no discounting is required.

If the warranty period is 2 years:

Since the outstanding period of warranties is 6 months (i.e. less than a year), no discounting is required. However, if a longer warranty period is to be given, the entity will have to take into account the effect of the time value of money. The amount of provision shall be the present value of the expenditure expected to be required to settle the warranty obligation. (Refer Para 45 of Ind AS 37)

The discount rate shall be a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The discount rate shall not reflect the risks for which future cash flow estimates have been adjusted. (Refer Para 47 of Ind AS 37)

	% age	Annual sales ₹	Product under warranty at 31 st March, 20X2 ₹	Percentage expected to be returned ₹	Warranty provision ₹
Gross margin	40%	30,00,000			
Selling price	100%	75,00,000	75,00,000	1%	75,000

The warranty provision should therefore be increased by ₹ 45,000 (₹ 75,000 – ₹ 30,000). Further discounting of provision would be required.

4. As per para 68 of Ind AS 37, onerous contract is a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable cost under a contract reflects the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation for penalties arising from failure to fulfilling it.

Ind AS 37 provides that the amount recognised shall be the best estimate of the expenditure required to settle the present obligation, which is the amount that an entity would rationally pay to settle the obligation at the end of the reporting period or to transfer it to a third party at that time. In case of onerous contracts, an amount that an entity would rationally pay to settle the obligation would be the lower of the compensation or penalties arising from failure to fulfil the contracts and excess of unavoidable cost of meeting the obligations under the contract from the economic benefits expected to be received under it.

As per para 68 of Ind AS 37, the cost of fulfilling a contract comprises the costs that relate directly to the contract. Costs that relate directly to a contract consist of both-

- (a) the incremental costs of fulfilling that contract—for example, direct labour and materials; and
- (b) an allocation of other costs that relate directly to fulfilling contracts—for example, an allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling that contract among others.

The unavoidable costs of meeting the obligations under the contract are only costs that:

- are directly variable with the contract and therefore incremental to the performance of the contract;

- do not include allocated or shared costs that will be incurred regardless of whether the entity fulfils the contract or not; and
- cannot be avoided by the entity's future actions.

Accordingly, HVCL has correctly measured the cost for creation of provision for onerous contracts by considering material cost, labour cost (to the extent it relates directly to production) and material overheads (to the extent it relates directly to production).

Further, HVCL is correct that the period cost will not be considered for measurement of cost for the purpose of creation of provision on onerous contracts as they do not relate directly to fulfilling the contracts.

5. As per *Ind AS 37 'Provisions, Contingent Liabilities and Contingent Assets'*, closure of a division is a restructuring exercise. *Ind AS 37* states that a constructive obligation to proceed with the restructuring arises when at the reporting date the entity has:
- Commenced activities connected with the restructuring; or
 - Made a public announcement of the main features of the restructuring to those affected by it. In this case a public announcement has been made and so a provision will be necessary at 31st March, 20X2.

This will result in the following charges to the Statement of Profit and Loss:

- (i) Estimate of redundancy costs of ₹ 1.9 million is the best estimate of the expenditure at the date the financial statements are authorized for issue. Changes in estimates after the reporting date are taken into account for this purpose as an adjusting event after the reporting date. No charge is necessary for the retraining costs as these are not incurred in 20X1-20X2 and cannot form part of a restructuring provision as they are related to the ongoing activities of the entity.
- (ii) Impairment of plant and equipment of ₹ 6.5 million is although not strictly part of the restructuring provision the decision to restructure before the year-end means that related assets need to be reviewed for impairment. In this case the recoverable amount of the plant and equipment is only ₹ 1.5 million. As per *Ind AS 36 'Impairment of Assets'*, property, plant and equipment should be written down to this amount, resulting in a charge of ₹ 6.5 million to the income statement.
- (iii) For compensation for breach of contract of ₹ 0.55 million, same principle applies here as applied to the redundancy costs.
- (iv) No charge is recognized in 20X1-20X2 with respect to future operating losses of 20X2-20X3. Future operating losses relate to future events and provisions are made only for the consequences of past events.

- (v) Ind AS 37 states that an onerous contract is one for which the expected cost of fulfilling the contract exceeds the benefits expected from the contract. Provision is made for the lower of the expected net cost of fulfilling the contract and the cost of early termination (not available in this case).

The net cost of fulfilling the contract is ₹ 4.51 million [$₹ 1.5 \text{ million} \times 4.32 - ₹ 0.3 \text{ million} \times 0.95 - ₹ 0.5 \text{ million} \times (4.32 - 0.95)$].

CHAPTER-7 UNIT 1: IND AS 12 : INCOME TAXES**Questions**

1. PQR Ltd., a manufacturing company, prepares consolidated financial statements to 31st March each year. During the year ended 31st March, 20X2, the following events affected the tax position of the group:
- QPR Ltd., a wholly owned subsidiary of PQR Ltd., incurred a loss adjusted for tax purposes of ₹ 30,00,000. QPR Ltd. is unable to utilise this loss against previous tax liabilities. Income-tax Act does not allow QPR Ltd. to transfer the tax loss to other group companies. However, it allows QPR Ltd. to carry the loss forward and utilise it against company's future taxable profits. The directors of PQR Ltd. do not consider that QPR Ltd. will make taxable profits in the foreseeable future.
 - During the year ended 31st March, 20X2, PQR Ltd. capitalised development costs which satisfied the criteria as per Ind AS 38 'Intangible Assets'. The total amount capitalised was ₹ 16,00,000. The development project began to generate economic benefits for PQR Ltd. from 1st January, 20X2. The directors of PQR Ltd. estimated that the project would generate economic benefits for five years from that date. The development expenditure was fully deductible against taxable profits for the year ended 31st March, 20X2.
 - On 1st April, 20X1, PQR Ltd. borrowed ₹ 1,00,00,000. The cost to PQR Ltd. of arranging the borrowing was ₹ 2,00,000 and this cost qualified for a tax deduction on 1st April 20X1. The loan was for a three-year period. No interest was payable on the loan but the amount repayable on 31st March 20X4 will be ₹ 1,30,43,800. This equates to an effective annual interest rate of 10%. As per the Income-tax Act, a further tax deduction of ₹ 30,43,800 will be claimable when the loan is repaid on 31st March, 20X4.

Explain and show how each of these events would affect the deferred tax assets / liabilities in the consolidated balance sheet of PQR Ltd. group at 31st March, 20X2 as per Ind AS. The rate of corporate income tax is 30%.

2. An entity is finalising its financial statements for the year ended 31st March, 20X2. Before 31st March, 20X2, the government announced that the tax rate was to be amended from 40 per cent to 45 per cent of taxable profit from 30th June, 20X2.

The legislation to amend the tax rate has not yet been approved by the legislature. However, the government has a significant majority and it is usual, in the tax jurisdiction concerned, to regard an announcement of a change in the tax rate as having the substantive effect of actual enactment (i.e. it is substantively enacted).

After performing the income tax calculations at the rate of 40 per cent, the entity has the following deferred tax asset and deferred tax liability balances:

Deferred tax asset	₹ 80,000
Deferred tax liability	₹ 60,000

Of the deferred tax asset balance, ₹ 28,000 related to a temporary difference. This deferred tax asset had previously been recognised in OCI and accumulated in equity as a revaluation surplus.

The entity reviewed the carrying amount of the asset in accordance with para 56 of Ind AS 12 and determined that it was probable that sufficient taxable profit to allow utilisation of the deferred tax asset would be available in the future.

Show the revised amount of Deferred tax asset & Deferred tax liability and present the necessary journal entries.

3. On 1st January 20X2, entity H acquired 100% share capital of entity S for ₹ 15,00,000. The book values and the fair values of the identifiable assets and liabilities of entity S at the date of acquisition are set out below, together with their tax bases in entity S's tax jurisdictions. Any goodwill arising on the acquisition is not deductible for tax purposes. The tax rates in entity H's and entity S's jurisdictions are 30% and 40% respectively.

Acquisitions	Book values ₹'000	Tax base ₹'000	Fair values ₹'000
Land and buildings	600	500	700
Property, plant and equipment	250	200	270
Inventory	100	100	80
Accounts receivable	150	150	150
Cash and cash equivalents	130	130	130
Accounts payable	(160)	(160)	(160)
Retirement benefit obligations	(100)	-	(100)

You are required to calculate the deferred tax arising on acquisition of Entity S. Also calculate the Goodwill arising on acquisition.

4. The entity has an identifiable asset ASSOTA with a carrying amount of ₹ 10,00,000. Its recoverable amount is ₹ 6,50,000. The tax base of ASSOTA is ₹ 8,00,000 and the tax rate is 30%. Impairment losses are not tax deductible. Entity expects to continue to earn profits in future.

For the identifiable asset ASSOTA, what would be the impact on the deferred tax asset/liability at the end of the period?

5. Following is the summarized statement of profit and loss of EARTH Limited as per Ind AS for the year ended 31st March 20X1:

Particulars	₹ in Crore
Revenue from operations	1,160.00
Other income	56.00
Total Income (A)	1,216.00
Purchase of stock-in-trade	40.00
Changes in inventories of stock-in-trade	6.00
Employee benefits expense	116.00
Finance costs	130.00
Depreciation and amortization expense	30.00
Other expenses	300.00
Total Expenses (B)	622.00
Profit Before Tax (A-B)	594.00
Current tax	165.40
Deferred tax	1.50
Tax Expenses	166.90
Profit after Tax	427.10

Additional information:

- Corporate income tax rate applicable to EARTH Limited is 30%.
- Other income includes long-term capital gains of ₹ 10 crore which are taxable at the rate of 10%.
- Other expenses include the following items which are not deductible for income tax purposes:

Item	₹ in Crore
Penalties	1.00
Impairment of goodwill	44.00
Corporate Social Responsibility expense	6.00

- Other expenses include research and development (R & D) expenditure of ₹ 8 crore in respect of which a 200% weighted deduction is available under income tax laws.
- Other income includes dividends of ₹ 4 crore, which is exempt from tax.
- Profit before tax of ₹ 594 crore includes (i) agriculture income of ₹ 55 crore which is exempt from tax; and (ii) profit of ₹ 60 crore earned in the USA on which EARTH Limited is required to pay tax at the rate of 20%.
- Depreciation as per income tax laws is ₹ 25.0 crore.

During review of the financial statements of EARTH Limited, the CFO multiplied profit before tax by the income tax rate and arrived at ₹ 178.2 crore as the tax expense (₹ 594 crore x 30% = ₹ 178.2 crore). However, actual income tax expense appearing in the summarized statement of profit and loss is ₹ 166.9 crore.

The CFO has sought your help in reconciling the difference between the two tax expense amounts. Prepare a reconciliation containing the disclosure as required under the relevant Ind AS.

6. On 1st April, 20X1, an entity paying tax at 30% acquired a non-tax-deductible office building for ₹ 1,00,000 in circumstances in which Ind AS 12 prohibits recognition of the deferred tax liability associated with the temporary difference of ₹ 1,00,000. The building is depreciated over 10 years at ₹ 10,000 per year to a residual value of zero. The entity's financial year ends on 31st March.

On 1st April, 20X2, the carrying amount of the building is ₹ 90,000, and it is revalued upwards by ₹ 45,000 to its current market value of ₹ 1,35,000. There is no change to the estimated residual value of zero, or to the useful life of the building after revaluation.

Determine the carrying amount, depreciation for the year ended 31st March, 20X3 and defer tax thereafter till the useful life of the building. Further analyse the treatment and impact of defer tax since 31st March, 20X3 till the useful life of the building.

7. X Ltd., an Indian company owns a freehold land with carrying value of ₹ 10,00,000 which is not depreciated for tax purposes but is indexed for inflation. Indexed value and fair value

of such land is ₹ 15,00,000 and ₹ 22,00,000 respectively as of the reporting date. What will be the tax base for such freehold land for measurement of deferred tax if:

- (i) X Ltd. intends to sell it as a part of slump sale of business eventually after using it for business purpose
- (ii) X Ltd. intends to sell the land individually and not on a slump sale basis
- (iii) X Ltd. has classified such land as investment property and intends to sell it individually and not on a slump sale basis
- (iv) X Ltd. follows a revaluation model for freehold land and intends to sell it individually and not on a slump sale

As per the applicable tax laws in the jurisdiction, indexation benefit is not available if the freehold land is sold as a part of slump sale of business, but indexation benefit is available if freehold land is sold individually.

Answers

1. Impact on consolidated balance sheet of PQR Ltd. group at 31st March, 20X2

- The tax loss creates a potential deferred tax asset for the PQR Ltd. group since its carrying value is nil and its tax base is ₹ 30,00,000. However, no deferred tax asset can be recognised because there is no prospect of being able to reduce tax liabilities in the foreseeable future as no taxable profits are anticipated.
- The development costs have a carrying value of ₹ 15,20,000 (₹ 16,00,000 – (₹ 16,00,000 × 1/5 × 3/12)). The tax base of the development costs is nil since the relevant tax deduction has already been claimed. The deferred tax liability will be ₹ 4,56,000 (₹ 15,20,000 × 30%). All deferred tax liabilities are shown as non-current.
- The carrying value of the loan at 31st March, 20X2 is ₹ 1,07,80,000 (₹ 1,00,00,000 – ₹ 200,000 + (₹ 98,00,000 × 10%)). The tax base of the loan is 1,00,00,000. This creates a deductible temporary difference of ₹ 7,80,000 and a potential deferred tax asset of ₹ 2,34,000 (₹ 7,80,000 × 30%).

2. Calculation of Deductible temporary differences:

Deferred tax asset	=	₹ 80,000
Existing tax rate	=	40%

$$\begin{aligned} \text{Deductible temporary differences} &= 80,000/40\% \\ &= ₹ 2,00,000 \end{aligned}$$

Calculation of Taxable temporary differences:

$$\begin{aligned} \text{Deferred tax liability} &= ₹ 60,000 \\ \text{Existing tax rate} &= 40\% \\ \text{Deductible temporary differences} &= 60,000 / 40\% \\ &= ₹ 1,50,000 \end{aligned}$$

Of the total deferred tax asset balance of ₹ 80,000, ₹ 28,000 is recognized in OCI.

Hence, Deferred tax asset balance of Profit & Loss is ₹ 80,000 - ₹ 28,000 = ₹ 52,000

Deductible temporary difference recognized in Profit & Loss is ₹ 1,30,000 (52,000 / 40%)

Deductible temporary difference recognized in OCI is ₹ 70,000 (28,000 / 40%)

The adjusted balances of the deferred tax accounts under the new tax rate are:

Deferred tax asset		₹
Previously credited to OCI-equity	₹ 70,000 x 0.45	31,500
Previously recognised as Income	₹ 1,30,000 x 0.45	<u>58,500</u>
		<u>90,000</u>
Deferred tax liability		
Previously recognized as expense	₹ 1,50,000 x 0.45	67,500

The net adjustment to deferred tax expense is a reduction of ₹ 2,500. Of this amount, ₹ 3,500 is recognised in OCI and ₹ 1,000 is charged to P&L.

The amounts are calculated as follows:

	Carrying amount at 45%	Carrying amount at 40%	Increase (decrease) in deferred tax expense
Deferred tax assets			
Previously credited to OCI-equity	31,500	28,000	(3,500)
Previously recognised as Income	<u>58,500</u>	<u>52,000</u>	<u>(6,500)</u>
	90,000	80,000	(10,000)

Deferred tax liability			
Previously recognized as expense	67,500	60,000	<u>7,500</u>
Net adjustment			<u>(2,500)</u>

An alternative method of calculation is:		₹
DTA shown in OCI	₹ 70,000 x (0.45 - 0.40)	3,500
DTA shown in Profit or Loss	₹ 1,30,000 x (0.45-0.40)	6,500
DTL shown in Profit or Loss	₹ 1,50,000 x (0.45 -0.40)	7,500

Journal Entries

		₹	₹
Deferred tax asset	Dr.	3,500	
OCI –revaluation surplus			3,500
Deferred tax asset	Dr.	6,500	
Deferred tax expense			6,500
Deferred tax expense	Dr.	7,500	
Deferred tax liability			7,500

Alternatively, a combined journal entry may be passed as follows:

		₹	₹
Deferred tax asset	Dr.	10,000	
Deferred tax expense	Dr.	1,000	
To OCI –revaluation surplus			3,500
To Deferred tax liability			7,500

3. Calculation of Net assets acquired (excluding the effect of deferred tax liability):

Net assets acquired	Tax base ₹'000	Fair values ₹'000
Land and buildings	500	700
Property, plant and equipment	200	270
Inventory	100	80
Accounts receivable	150	150
Cash and cash equivalents	130	130

Total assets	1,080	1,330
Accounts payable	(160)	(160)
Retirement benefit obligations	-	(100)
Net assets before deferred tax liability	920	1,070

Calculation of deferred tax arising on acquisition of entity S and goodwill

	₹ '000	₹ '000
Fair values of S's identifiable assets and liabilities (excluding deferred tax)		1,070
Less: Tax base		(920)
Temporary difference arising on acquisition		150
Net deferred tax liability arising on acquisition of entity S (₹ 1,50,000 @ 40%)		60
Purchase consideration		1,500
Less: Fair values of entity S's identifiable assets and liabilities (excluding deferred tax)	1,070	
Deferred tax liability	(60)	(1,010)
Goodwill arising on acquisition		490

Note: Since, the tax base of the goodwill is nil, taxable temporary difference of ₹ 4,90,000 arises on goodwill. However, no deferred tax is recognised on the goodwill. The deferred tax on other temporary differences arising on acquisition is provided at 40% and not 30%, because taxes will be payable or recoverable in entity S's tax jurisdictions when the temporary differences will be reversed.

4. As per Ind AS 36, the revised carrying amount of asset ASSOTA would be ₹ 6,50,000.

The tax base of asset ASSOTA is given as ₹ 8,00,000.

Carrying base of asset = ₹ 6,50,000

Tax base of asset = ₹ 8,00,000

Since tax base is greater than carrying base of asset, so deferred tax asset would be created on the temporary difference of ₹ 1,50,000 (₹ 8,00,000 – ₹ 6,50,000) at the given tax rate of 30%.

Hence, Deferred tax asset for the asset ASSOTA would be ₹ 1,50,000 x 30% = ₹ 45,000.

5. Reconciliation of income tax expense and current tax as per accounting profit

for the year ended 31st March, 20X1

Particulars		₹ in crore
Accounting profit		<u>594.00</u>
Tax at the applicable tax rate of 30%		178.20
Tax effect of expenses that are not deductible in determining taxable profits:		
Penalties (1.00 x 30%)	0.30	
Impairment of goodwill (44.00 x 30%)	13.20	
Corporate social responsibility expense (6.00 x 30%)	<u>1.80</u>	15.30
Tax effect of expenses that are deductible in determining taxable profits:		
Research and development expenses (8.00 x 30%)		(2.40)
Tax effect of income that are exempted in determining taxable profits:		
Dividend income (Exempt) (4.00 x 30%)	1.20	
Agriculture income (Exempt) (55.00 x 30%)	<u>16.50</u>	(17.70)
Tax effect of income on which different tax rates are used for determining taxable profits:		
Differential income tax on long term capital gain [10.00 x (30% - 10%)]	2.00	
Foreign income in USA [60.00 x (30%-20%)]	<u>6.00</u>	<u>(8.00)</u>
Income tax expense (Current) reported in the Statement of Profit and Loss for the current year		<u>165.40</u>

Reconciliation of deferred tax:

Particulars	₹ in crore
Deferred tax in relation to depreciation and amortization [(30 – 25) x 30%]	1.50
Tax expense (deferred) reported in the Statement of Profit or Loss for the current year	1.50

6. Since there is no change to the estimated residual value of zero, or to the useful life of the building after revaluation, at the end of the 2nd year i.e. 31st March 20X3, the building will be depreciated over the next 9 years at ₹ 15,000 per year.

Following the revaluation, the temporary difference associated with the building is ₹ 1,35,000. Of this amount, only ₹ 90,000 arose on initial recognition, since ₹ 10,000 of the original temporary difference of ₹ 1,00,000 arising on initial recognition of the asset has been eliminated through depreciation of the asset. The carrying amount (which equals the temporary difference, since the tax base is zero) and depreciation during the year ended 31st March, 20X3 and thereafter may then be analysed as follows:

	Carrying amount a	Tax base b	Gross temporary difference (c= a-b)	Unrecognised temporary difference d	Recognised temporary difference (e=c-d)	Deferred tax liability f = e @ 30%
0	1,00,000	-	1,00,000	1,00,000	-	-
1	90,000	-	90,000	90,000	-	-
Reval	1,35,000	-	1,35,000	90,000	45,000	13,500
2	1,20,000	-	1,20,000	80,000	40,000	12,000
3	1,05,000	-	1,05,000	70,000	35,000	10,500
4	90,000	-	90,000	60,000	30,000	9,000
5	75,000	-	75,000	50,000	25,000	7,500
6	60,000	-	60,000	40,000	20,000	6,000
7	45,000	-	45,000	30,000	15,000	4,500
8	30,000	-	30,000	20,000	10,000	3,000
9	15,000	-	15,000	10,000	5,000	1,500
10	-	-	-	-	-	-

Note: The depreciation is allocated *pro rata* to the cost element and revalued element of the total carrying amount.

On 31st March, 20X3, the entity recognises a deferred tax liability based on the temporary difference of ₹ 45,000 arising on the revaluation (i.e., after initial recognition) giving a deferred tax expense of ₹ 13,500 (₹ 45,000 @ 30%) recognised in Other Comprehensive Income (OCI).

This has the result that the effective tax rate shown in the financial statements for the revaluation is 30% (₹ 45,000 gain with deferred tax expense of ₹ 13,500).

As can be seen from the table above, as at 31st March, 20X4 (year 3), ₹ 40,000 of the total temporary difference arose after initial recognition. The entity, therefore, provides for deferred tax of ₹ 12,000 (₹ 40,000 @ 30%), and a deferred tax credit of ₹ 1,500 (the reduction in the liability from ₹ 13,500 to ₹ 12,000) is recognised in profit or loss.

The deferred tax credit can be explained as the tax effect at 30% of the additional ₹ 5,000 depreciation relating to the revalued element of the building.

7. Paragraphs 51 and 51A of Ind AS 12, state that the measurement of deferred tax liabilities and deferred tax assets shall reflect the tax consequences that would follow from the manner in which the entity expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

In some jurisdictions, the manner in which an entity recovers (settles) the carrying amount of an asset (liability) may affect either or both of:

- (a) the tax rate applicable when the entity recovers (settles) the carrying amount of the asset (liability); and
- (b) the tax base of the asset (liability).

In such cases, an entity measures deferred tax liabilities and deferred tax assets using the tax rate and the tax base that are consistent with the expected manner of recovery or settlement.

The expectation of the entity at the end of the reporting period with regard to the manner of recovery or settlement of its assets and liabilities will require exercise of judgement based on evaluation of facts and circumstances in each case. It may be relevant to consider that there is substance to management's expectation of the entity being able to recover the asset through slump sale or otherwise.

Depending on the facts and circumstances, it is generally assumed that the Company will act in the most economically advantageous way.

If a non-depreciable asset is measured using the revaluation model, then an entity is required to measure the DTA / DTL considering the tax consequences of recovering the carrying amount through sale.

Accordingly, based on assumption around supporting facts and circumstances to support management expectation around recovery or settlement, following will be the tax base for computing the deferred tax assets/ liability, in the given case:

- (i) **X Ltd. intends to sell it as slump sale eventually after using it for business purpose**

If it is concluded based on evaluation of facts that the freehold land will be sold through slump sale, then the tax base of the land will be the same as the carrying

amount of the land, as indexation benefit is not available in case of slump sale and hence there will not be any temporary difference.

(ii) X Ltd. intends to sell the land individually and not on a slump sale basis

In the given scenario, the company intends to sell the land individually and not on a slump sale such that the company would get indexation benefit.

Thus, book base of land, i.e. carrying amount of freehold land in the balance sheet is ₹ 10,00,000. As per paragraph 51A of Ind AS 12, the tax base (amount that will be deductible for tax purposes against any taxable economic benefits that will flow to the entity when it recovers the carrying amount of the asset) is the indexed valued of ₹ 15,00,000 since the company intends to sell the land individually and not on slump sale and thus get indexation benefit. Deferred tax assets will be set up, subject to recoverability, on a deductible tax difference of ₹ 5,00,000.

(iii) X Ltd. has classified such land as investment property and intends to sell it individually and not on a slump sale

Paragraph 56 of Ind AS 40, *Investment property*, requires that after initial recognition, an entity shall measure all of its investment properties in accordance with the requirement for cost model as per Ind AS 16, other than those that meet the criteria to be classified as held for sale in accordance with Ind AS 105, *Non-current Assets Held for Sale and Discontinued Operations*. Ind AS 40 does not allow fair value model. Accordingly, freehold land classified as investment property will be measured at cost.

Thus, book base of land, i.e. carrying amount of freehold land in the balance sheet is ₹ 10,00,000. The Company intends to sell the land individually and not on a slump sale and thus get indexation benefit. Hence, as per paragraph 51A of Ind AS 12, the tax base (amount that will be deductible for tax purposes against any taxable economic benefits that will flow to the entity when it recovers the carrying amount of the asset) is the indexed valued of ₹ 15,00,000. Accordingly, deferred tax assets will be set up, subject to recoverability, on deductible tax difference of ₹ 5,00,000.

(iv) X Ltd. follows a revaluation model for freehold land and intends to sell it individually and not on a slump sale. If X Ltd. follows a revaluation model, carrying amount of freehold land in the balance sheet would be ₹ 22,00,000. Thus, book base of land is ₹ 22,00,000.

The Company intends to sell the land individually and not on a slump sale and thus get indexation benefit. Hence, as per paragraph 51A of Ind AS 12, the tax base (amount that will be deductible for tax purposes against any taxable economic benefits that will flow to the entity when it recovers the carrying amount of the asset) is the indexed value of ₹ 15,00,000. Accordingly, deferred tax liability will be set up on taxable temporary difference of ₹ 7,00,000.

As per paragraph 39 of Ind AS 16, if an asset's carrying amount is increased as a result of a revaluation, the increase shall be recognised in other comprehensive income and accumulated in equity under the heading of revaluation surplus. Accordingly, the effect of deferred tax liability should also be recognised in other comprehensive income as per paragraph 57 and 61A of Ind AS 12.

UNIT 2: IND AS 21: THE EFFECTS OF CHANGES IN FOREIGN EXCHANGE RATES

Questions

1. Supplier, A Ltd., enters into a contract with a customer, B Ltd., on 1st January, 20X2 to deliver goods in exchange for total consideration of USD 50 million and receives an upfront payment of USD 20 million on this date. The functional currency of the supplier is Rupees (₹). The goods are delivered and revenue is recognised on 31st March, 20X2. USD 30 million is received on 1st April, 20X2 in full and final settlement of the purchase consideration.

The exchange rates on 1st January, 20X2 and 31st March, 20X2 are ₹ 72 per USD and ₹ 75 per USD respectively.

State the date of transaction for advance consideration and recognition of revenue. Also state the amount of revenue in Rupees (₹) to be recognized on the date of recognition of revenue.

2. Global Limited, an Indian company acquired on 30th September, 20X1, 70% of the share capital of Mark Limited, an entity registered as company in Germany. The functional currency of Global Limited is Rupees and its financial year end is 31st March, 20X2.

- (i) The fair value of the net assets of Mark Limited was 23 million EURO and the purchase consideration paid is 17.5 million EURO on 30th September, 20X1.

The exchange rates as at 30th September, 20X1 was ₹ 82 / EURO and at 31st March, 20X2 was ₹ 84 / EURO.

Determine the value at which the goodwill has to be recognised in the financial statements of Global Limited as on 31st March, 20X2, when NCI is valued at proportionate share of fair value of net assets of Mark Limited.

- (ii) Mark Limited sold goods costing 2.4 million EURO to Global Limited for 4.2 million EURO during the year ended 31st March, 20X2. The exchange rate on the date of purchase by Global Limited was ₹ 83 / EURO and on 31st March, 20X2 was ₹ 84 / EURO. The entire goods purchased from Mark Limited are unsold as on 31st March, 20X2.

Determine the unrealised profit to be eliminated in the preparation of consolidated financial statements.

3. On 1st April, 20X1, Makers Ltd. raised a long term loan from foreign investors. The investors subscribed for 6 million Foreign Currency (FCY) loan notes at par. It incurred incremental issue costs of FCY 2,00,000. Interest of FCY 6,00,000 is payable annually on 31st March, starting from 31st March, 20X2. The loan is repayable in FCY on 31st March, 20X7 at a premium and the effective annual interest rate implicit in the loan is 12%. The appropriate measurement basis for this loan is amortised cost. Relevant exchange rates are as follows:

- 1st April, 20X1 - FCY 1 = ₹ 2.50.
- 31st March, 20X2 – FCY 1 = ₹ 2.75.
- Average rate for the year ended 31st March, 20X2 – FCY 1 = ₹ 2.42. The functional currency of the group is Indian Rupee.

Advise the appropriate accounting treatment for the foreign currency loan in the books of Makers Ltd. for the financial year 20X1-20X2. Also calculate the initial measurement amount for the loan, finance cost for the year, closing balance and exchange gain / loss.

4. Infotech Global Ltd. (a stand-alone entity) has a functional currency of USD and needs to translate its financial statements into the presentation currency (INR). The following is the draft financial statements of Infotech Global Ltd. prepared in accordance with its functional currency.

Balance Sheet

Particulars	31 st March, 20X3	31 st March, 20X2
	USD	USD
Property, plant and equipment	50,000	55,000
Trade Receivables	68,500	56,000
Inventory	8,000	5,000
Cash	<u>40,000</u>	<u>35,000</u>
Total assets	<u>1,66,500</u>	<u>1,51,000</u>
Share Capital	50,000	50,000
Retained earnings	<u>29,500</u>	<u>18,000</u>
Total Equity	<u>79,500</u>	<u>68,000</u>
Trade payables	40,000	38,000
Loan	<u>47,000</u>	<u>45,000</u>
Total liabilities	<u>87,000</u>	<u>83,000</u>
Total equity and liabilities	<u>1,66,500</u>	<u>1,51,000</u>

Statement of Profit and Loss

Particulars	USD
Revenue	1,77,214
Cost of sales	<u>1,13,100</u>
Gross Profit	64,114
Distribution costs	2,400
Administrative expenses	18,000
Other expenses	11,000
Finance costs	<u>12,000</u>
Profit before tax	20,714
Income tax expense	<u>6,214</u>
Profit for the year	<u>14,500</u>

Extracts from Statement of Changes in Equity

Particulars	31 st March, 20X3 (USD)
Retained earnings at the beginning of the year	18,000
Profit for the year	14,500
Dividends	<u>(3,000)</u>
Retained earnings at the end of the year	<u>29,500</u>

- Share capital was issued when the exchange rate was USD 1 = INR 70.
- Retained earnings on 1st April, 20X1 was INR 4,00,000.
- At 31st March, 20X2, a cumulative gain of INR 4,92,000 has been recognised in the foreign exchange reserve, which is due to translation of entity's financial statements into INR in the previous years.
- Entity paid a dividend of USD 3,000 when the rate of exchange was USD 1 = INR 73.5
- Profit for the year 20X1-20X2 of USD 8,000, translated in INR at INR 5,72,000.
- Profit for the year 20X2-20X3 of USD 14,500, translated in INR at INR 10,72,985.

For the sake of simplicity, items of income and expense are translated at weighted average monthly rate as there has been no significant exchange rate fluctuation during the entire year and the business of the entity is not cyclical in nature.

Relevant exchange rates are as follows:

- Rate at 31st March, 20X2 USD 1= INR 73
- Rate at 31st March, 20X3 USD 1= INR 75

Prepare financial statements of Infotech Global Ltd. translated from functional currency (USD) to presentation currency (INR).

Answers

1. This is the case of Revenue recognised at a single point in time with multiple payments. As per the guidance given in Appendix B to Ind AS 21:

A Ltd. will recognise a non-monetary contract liability amounting ₹ 1,440 million, by translating USD 20 million at the exchange rate on 1st January, 20X2 ie ₹ 72 per USD.

A Ltd. will recognise revenue at 31st March, 20X2 (that is, the date on which it transfers the goods to the customer).

A Ltd. determines that the date of the transaction for the revenue relating to the advance consideration of USD 20 million is 1st January, 20X2. Applying paragraph 22 of Ind AS 21, A Ltd. determines that the date of the transaction for the remainder of the revenue as 31st March, 20X2.

On 31st March, 20X2, A Ltd. will:

- derecognise the non-monetary contract liability of USD 20 million and recognise USD 20 million of revenue using the exchange rate as at 1st January, 20X2 ie ₹ 72 per USD; and
 - recognise revenue and a receivable for the remaining USD 30 million, using the exchange rate on 31st March, 20X2 ie ₹ 75 per USD.
 - the receivable of USD 30 million is a monetary item, so it should be translated using the closing rate until the receivable is settled.
2. (i) Para 47 of Ind AS 21 requires that goodwill arose on business combination shall be expressed in the functional currency of the foreign operation and shall be translated at the closing rate in accordance with paragraphs 39 and 42. In this case the amount

of goodwill in EURO will be as follows:

Net identifiable asset	Dr.	23 million	
Goodwill (bal. fig.)	Dr.	1.4 million	
	To Bank		17.5 million
	To NCI (23 x 30%)		6.9 million

Thus, goodwill on reporting date would be 1.4 million EURO x ₹ 84 = ₹ 117.6 million

(ii)

Particulars	EURO in million
Sale price of Inventory	4.20
Unrealised Profit [a]	1.80

Exchange rate as on date of purchase of Inventory [b]` 83 / Euro

Unrealized profit to be eliminated [a x b]` 149.40 million

As per para 39 of Ind AS 21 "income and expenses for each statement of profit and loss presented (ie including comparatives) shall be translated at exchange rates at the dates of the transactions".

In the given case, purchase of inventory is an expense item shown in the statement profit and loss. Hence, the exchange rate on the date of purchase of inventory is taken for calculation of unrealized profit which is to be eliminated while preparation of financial statements.

3. Initial carrying amount of loan in books

Loan amount received	=	60,00,000 FCY
Less: Incremental issue costs	=	<u>2,00,000 FCY</u>
		<u>58,00,000 FCY</u>

Ind AS 21, "The Effect of Changes in Foreign Exchange Rates" states that foreign currency transactions are initially recorded at the rate of exchange in force when the transaction was first recognized.

Loan to be converted in Rupees (₹) = 58,00,000 FCY x ₹ 2.50/FCY = ₹ 1,45,00,000

Therefore, the loan would initially be recorded at ₹ 1,45,00,000.

Calculation of amortized cost of loan (in FCY) at the year end:

Period	Opening Financial Liability (FCY) A	Interest @ 12% (FCY) B	Cash Flow (FCY) C	Closing Financial Liability (FCY) A+B-C
20X1-20X2	58,00,000	6,96,000	6,00,000	58,96,000

The finance cost in FCY is 6,96,000

The finance cost would be recorded at an average rate for the period since it accrues over a period of time.

Hence, the finance cost for financial year 20X1-20X2 in Rupees (₹) is ₹ 16,84,320 (6,96,000 FCY x ₹ 2.42 / FCY)

The actual payment of interest would be recorded at 6,00,000 x 2.75 = ₹ 16,50,000

The loan balance is a monetary item, so it is translated at the rate of exchange at the reporting date.

So, the closing loan balance in Rupees (₹) is 58,96,000 FCY x ₹ 2.75 / FCY = ₹ 1,62,14,000

The exchange differences that are created by this treatment are recognized in profit and loss.

In this case, the exchange difference is

₹ [1,62,14,000 - (1,45,00,000 + 16,84,320 - 16,50,000)] = ₹ 16,79,680.

This exchange difference is taken to profit and loss.

4. As per paragraph 39 of Ind AS 21, all assets and liabilities are translated at the closing exchange rate, which is USD 1 = INR 73 on 31st March, 20X2 and USD 1 = INR 75 on 31st March, 20X3.

In the given case, share capital is translated at the historical rate USD 1 = INR 70. The share capital will not be restated at each year end. It will remain unchanged.

Accordingly, the translated financial statements will be as follows:

Note 1: Retained earnings at 31st March, 20X3 and 31st March, 20X2:

Particulars	31 st March, 20X3 INR	31 st March, 20X2 INR
Opening retained earnings	9,72,000	4,00,000
Profit for the year	10,72,985	5,72,000

Dividends paid (USD 3,000 x INR 73.5)	<u>(2,20,500)</u>	<u>-</u>
Closing retained earnings	<u>18,24,485</u>	<u>9,72,000</u>

Balance Sheet

Particulars	31 st March, 20X3			31 st March, 20X2		
	USD	Rate	INR	USD	Rate	INR
Property, plant and equipment	50,000	75	37,50,000	55,000	73	40,15,000
Trade Receivables	68,500	75	51,37,500	56,000	73	40,88,000
Inventory	8,000	75	6,00,000	5,000	73	3,65,000
Cash	<u>40,000</u>	75	<u>30,00,000</u>		73	<u>25,55,000</u>
				<u>35,000</u>		
Total assets	1,66,500		1,24,87,500	1,51,000		1,10,23,000
Share Capital	50,000	70	35,00,000	50,000	70	35,00,000
Retained earnings (Refer note 1)	29,500		18,24,485	18,000		9,72,000
Foreign Exchange reserve (Balancing figure)	<u> </u>		<u>6,38,015</u>	<u>-</u>		<u>4,92,000</u>
Total Equity	<u>79,500</u>		<u>59,62,500</u>	<u>68,000</u>		<u>49,64,000</u>
Trade payables	40,000	75	30,00,000	38,000	73	27,74,000
Loan	<u>47,000</u>	75	<u>35,25,000</u>	<u>45,000</u>	73	<u>32,85,000</u>
Total liabilities	<u>87,000</u>		<u>65,25,000</u>	<u>83,000</u>		<u>60,59,000</u>
Total equity and liabilities	<u>1,66,500</u>		<u>1,24,87,500</u>	<u>1,51,000</u>		<u>1,10,23,000</u>

The foreign exchange reserve is the exchange difference resulting from translating income and expense at the average exchange rate and assets and liabilities at the closing rate.

Other Comprehensive Income

Exchange differences on translating from USD to INR (6,38,015 - 4,92,000)	INR 1,46,015
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Statement of Changes in Equity (INR)

Particulars	Share capital	Retained Earnings	Foreign exchange reserve	Total
Balance at 1 st April, 20X2	35,00,000	9,72,000	4,92,000	49,64,000
Dividends	-	(2,20,500)	-	(2,20,500)
Profit for the year	-	10,72,985	-	10,72,985
Exchange difference (transferred to OCI)	-	-	1,46,015	1,46,015
Balance at 31 st March, 20X3	<u>35,00,000</u>	<u>18,24,485</u>	<u>6,38,015</u>	<u>59,62,500</u>

CHAPTER-8 UNIT 1: IND AS 24: RELATED PARTY DISCLOSURES

Questions

1. Uttar Pradesh State Government holds 60% shares in PQR Limited and 55% shares in ABC Limited. PQR Limited has two subsidiaries namely P Limited and Q Limited. ABC Limited has two subsidiaries namely A Limited and B Limited. Mr. KM is one of the Key management personnel in PQR Limited.
 - (a) Determine the entity to whom exemption from disclosure of related party transactions is to be given. Also examine the transactions and with whom such exemption applies.
 - (b) What are the disclosure requirements for the entity which has availed the exemption?

2. S Ltd., a wholly owned subsidiary of P Ltd is the sole distributor of electricity to consumers in a specified geographical area. A manufacturing facility of P Ltd is located in the said geographical area and, accordingly, P Ltd is also a consumer of electricity supplied by S Ltd. The electricity tariffs for the geographical area are determined by an independent rate-setting authority and are applicable to all consumers of S Ltd, including P Ltd.

Whether the above transaction is required to be disclosed as a related party transaction as per Ind AS 24 in the financial statements of S Ltd.? What should be the disclosures in this regard?

3. Entity A owns 30% of the share capital of entity B and has the ability to exercise significant influence over it.

Entity B holds the following investments:

- 70% of the share capital of its subsidiary, entity C; and
- 30% of the share capital of entity D, with the ability to exercise significant influence.

Entity A transacts with entities C and D. Should entity A disclose these transactions as related party transactions in its separate financial statements? Also explain the disclosure of such transactions in the financial statements of C and D as related party transaction.

Answers

1. (a) As per para 18 of Ind AS 24, 'Related Party Disclosures', if an entity had related party transactions during the periods covered by the financial statements, it shall disclose the nature of the related party relationship as well as information about those transactions and outstanding balances, including commitments, necessary for users to understand the potential effect of the relationship on the financial statements.

However, as per para 25 of the standard a reporting entity is exempt from the disclosure requirements in relation to related party transactions and outstanding balances, including commitments, with:

- (i) a government that has control or joint control of, or significant influence over, the reporting entity; and
- (ii) another entity that is a related party because the same government has control or joint control of, or significant influence over, both the reporting entity and the other entity

According to the above paras, for Entity P's financial statements, the exemption in paragraph 25 applies to:

- (i) transactions with Government Uttar Pradesh State Government; and
- (ii) transactions with Entities PQR and ABC and Entities Q, A and B.

Similar exemptions are available to Entities PQR, ABC, Q, A and B, with the transactions with UP State Government and other entities controlled directly or indirectly by UP State Government. However, that exemption does not apply to transactions with Mr. KM. Hence, the transactions with Mr. KM needs to be disclosed under related party transactions.

- (b) It shall disclose the following about the transactions and related outstanding balances referred to in paragraph 25:
- (a) the name of the government and the nature of its relationship with the reporting entity (ie control, joint control or significant influence);
 - (b) the following information in sufficient detail to enable users of the entity's financial statements to understand the effect of related party transactions on its financial statements:

- (i) the nature and amount of each individually significant transaction; and
 - (ii) for other transactions that are collectively, but not individually, significant, a qualitative or quantitative indication of their extent.
2. As per paragraph 9(b)(i) of Ind AS 24, each parent, subsidiary and fellow subsidiary in a 'group' is related to the other members of the group. Thus, in the case under discussion, P Ltd is a related party of S Ltd from the perspective of financial statements of S Ltd.

Paragraph 11 of Ind AS 24 states as follows:

"In the context of this Standard, the following are not related parties:

- (a) two entities simply because they have a director or other member of management personnel in common or because a member of key management personnel of one entity has significant influence over the other entity.
- (b) two joint venturers simply because they share joint control of a joint venture.
- (c) (i) providers of finance, (ii) trade unions, (iii) public utilities, and (iv) departments and agencies of a government that does not control, jointly control or significantly influence the reporting entity, simply by virtue of their normal dealings with an entity (even though they may affect the freedom of action of an entity or participate in its decision-making process).
- (d) a customer, supplier, franchisor, distributor or general agent with whom an entity transacts a significant volume of business, simply by virtue of the resulting economic dependence."

Being engaged in distribution of electricity, S Ltd is a public utility. Had the only relationship between S Ltd and P Ltd been that of a supplier and a consumer of electricity, P Ltd would not have been regarded as a related party of S Ltd. However, as per the facts of the given case, this is not the only relationship between S Ltd and P Ltd. Apart from being a supplier of electricity to P Ltd., S Ltd is also a subsidiary of P Ltd; this is a relationship that is covered within the related party relationships to which the disclosure requirements of the standard apply. In view of the above, the supply of electricity by S Ltd to P Ltd is a related party transaction that attracts the disclosure requirements contained in paragraph 18 and other relevant requirements of the standard. This is notwithstanding the fact that P Ltd is charged the electricity tariffs determined by an independent rate-setting authority (i.e., the terms of supply to P Ltd are at par with those applicable to other consumers)

Ind AS 24 does not exempt an entity from disclosing related party transactions merely because they have been carried out on an arm's length basis.

3. Entity A should disclose its transactions with entity C in entity A's separate financial statements. Entity C is a related party of entity A, because entity C is the subsidiary of entity A's associate, entity B.

Entity A's management is not required to disclose entity A's transactions with entity D in its financial statements. Entity D is not a related party of entity A, because entity A has no ability to exercise control or significant influence over entity D.

Entity C is required to disclose its transactions with entity A in its financial statements, because entity A is a related party.

Entity D is not required to disclose transactions with entity A, because they are not related parties.

UNIT 2 : IND AS 33: EARNINGS PER SHARE

Questions

1. CAB Limited is in the process of preparation of the consolidated financial statements of the group for the year ending 31st March, 20X3 and the extract of the same is as follows:

Particulars	Attributable to CAB Limited	Non-controlling interest	Total (₹ in '000)
Profit for the year	39,000	3,000	42,000
Other Comprehensive Income	5,000	Nil	5,000
Total Comprehensive Income	44,000	3,000	47,000

The long-term finance of the company comprises of the following:

- (i) 20,00,00,000 equity shares at the beginning of the year and the company has issued 5,00,00,000 shares on 1st July, 20X2 at full market value.
- (ii) 8,00,00,000 irredeemable preference shares. These shares were in issue for the whole of the year ended 31st March, 20X3. The dividend on these preference shares is discretionary.
- (iii) ₹ 18 crores of 6% convertible debentures issued on 1st April, 20X1 and repayable on 31st March, 20X5 at par. Interest is payable annually. As an alternative to repayment at par, the holder on maturity can elect to exchange their convertible debentures for 10 crores ordinary shares in the company. On 1st April, 20X1, the prevailing market interest rate for four-year convertible debentures which had no right of conversion was 8%. Using an annual discount rate of 8%, the present value of ₹ 1 payable in four years is 0.74 and the cumulative present value of ₹ 1 payable at the end of years one to four is 3.31.

In the year ended 31st March, 20X3, CAB Limited declared an ordinary dividend of 0.10 paise per share and a dividend of 0.05 paise per share on the irredeemable preference shares.

Compute the following:

- the finance cost of convertible debentures and its closing balance as on 31st March, 20X3 to be presented in the consolidated financial statements.
- the basic and diluted earnings per share for the year ended 31st March, 20X3.

Assume that income tax is applicable to CAB Limited and its subsidiaries at 25%.

2. Following information pertains to an entity for the year ending 31st March 20X1:

Net profit for the year	₹ 12,00,000
Weighted average number of equity shares outstanding during the year	5,00,000 shares
Average market price per share during the year	₹ 20
Weighted average number of shares under option during the year	1,00,000 shares
Exercise price per share under option during the year	₹ 15

Calculate basic and diluted earnings per share.

3. Company S is a subsidiary of Company P.

Following facts are in respect of Company S:

- Company S has 10,000 ordinary shares and 1,000 options outstanding, of which Company P owns 9,000 shares and 500 options, respectively.
- The options have an exercise price of ₹ 40.
- The average market price of Company S's ordinary share was ₹ 50 in 20X1.
- In 20X1, Company S's profit was ₹ 30,000.

Following facts are in respect of Company P:

- Company P has 5,000 ordinary shares outstanding.
- In 20X1, Company P's profit (excluding any distributed and undistributed earnings of subsidiaries) was ₹ 7,000.
- The options outstanding are dilutive at P's level.

Determine the diluted EPS of Company P for the year 20X1. Ignore income tax.

4. Company P has both ordinary shares and equity-classified preference shares in issue. The reconciliation of the number of shares during Year 1 is set out below: *Number of shares*

Dates in Year 1	Transaction	Ordinary shares	Treasury shares	Preference shares
1 st April	Balance	30,00,000	(5,00,000)	5,00,000
15 th April	Bonus issue – 5% (no corresponding changes in resources)	1,50,000	(25,000)	-
1 st May	Repurchase of shares for cash	-	(2,00,000)	-
1 st November	Shares issued for cash	<u>4,00,000</u>	<u>-</u>	<u>-</u>
31 st March	Balance	<u>35,50,000</u>	<u>(7,25,000)</u>	<u>5,00,000</u>

The following additional information is relevant for Year 1.

- Company P's net profit for the year is ₹ 46,00,000.
- On 15th February, non-cumulative preference dividends of ₹ 1.20 per share were declared. The dividends were paid on 15th March. Preference shares do not participate in additional dividends with ordinary shares.
- Dividends on non-cumulative preference shares are deductible for tax purposes. The applicable income tax rate is 30%.

The financial year of Company P ends on 31st March.

Determine the Basic EPS of the Company P for Year 1. Use the number of months or part of months, rather than the number of days in the calculation of EPS.

Answers

1. Calculation of the liability and equity components on 6% Convertible debentures:

Present value of principal payable at the end of 4th year (₹ 1,80,000 thousand x 0.74)

= ₹ 1,33,200 thousand

Present value of interest payable annually for 4 years (₹ 1,80,000 thousand x 6% x 3.31)

= ₹ 35,748 thousand

Total liability component = ₹ 1,68,948 thousand

Therefore, equity component = ₹ 1,80,000 thousand – ₹ 1,68,948 thousand = ₹ 11,052 thousand

Calculation of finance cost and closing balance of 6% convertible debentures

Year	Opening balance ₹ in '000	Finance cost @ 8% ₹ in '000	Interest paid @ 6% ₹ in '000	Closing balance ₹ in '000
	a	b = a x 8%	c	d = a + b - c
31.3.20X2	1,68,948	13,515.84	10,800	1,71,663.84
31.3.20X3	1,71,663.84	13,733.11	10,800	1,74,596.95

Finance cost of convertible debentures for the year ended 31.3. 20X3 is ₹ **13,733.11 thousand** and closing balance as on 31.3. 20X3 is ₹ **1,74,596.95 thousand**.

Calculation of Basic EPS

₹ in '000

Profit for the year	39,000
Less: Dividend on preference shares (80,000 thousand x ₹ 0.05)	<u>(4,000)</u>
Profit attributable to equity shareholders	<u>35,000</u>

Weighted average number of shares = 20,00,00,000 + {5,00,00,000 x (9/12)}
= 23,75,00,000 shares or 2,37,500 thousand shares

Basic EPS = ₹ 35,000 thousand / 2,37,500 thousand shares
= ₹ 0.147

Calculation of Diluted EPS

₹ in '000

Profit for the year		39,000
Less: Dividend on preference shares (80,000 x 0.05)		<u>(4,000)</u>
		35,000
Add: Finance cost (as given in the above table)	13,733.11	
Less: Tax @ 25%	<u>(3,433.28)</u>	<u>10,299.83</u>
		<u>45,299.83</u>

Weighted average number of shares

$$= 20,00,00,000 + \{5,00,00,000 \times (9/12)\} + 10,00,00,000$$

$$= 33,75,00,000 \text{ shares or } 3,37,500 \text{ thousand shares}$$

Diluted EPS = ₹ 45,299.83 thousand / 3,37,500 thousand shares

$$= ₹ 0.134$$

2. Calculation of earnings per share

	<i>Earnings</i>	<i>Shares</i>	<i>Per share</i>
Profit attributable to equity holders	₹ 12,00,000		
Weighted average shares outstanding during year 20X1		5,00,000	
Basic earnings per share			₹ 2.40
Weighted average number of shares under option		100,000	
Weighted average number of shares that would have been issued at average market price: (1,00,000 × ₹15.00) ÷ ₹20.00	Refer Note	(75,000)	
Diluted earnings per share	₹ 1,200,000	525,000	₹ 2.29

Note: Earnings have not increased because the total number of shares has increased only by the number of shares (25,000) deemed to have been issued for no consideration.

3. To determine the diluted EPS of Company P, the diluted EPS of Company S has to be calculated first.

Calculation of Company S's diluted EPS:

Company S's earnings for the period	₹ 30,000
Weighted average ordinary shares	10,000
Incremental shares (refer W.N.)	200
Company S's diluted EPS	₹ 30,000 / (10,000 + 200)
	₹ 2.94

Calculation of Company P's diluted EPS:

Company P's earning for the period	₹ 7,000
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Company P's share of Company S's earning attributable to ordinary shares	₹ 26,460
[(9,000 /10,000) x (2.94 x 10,000)]	
Company P's share of Company S's earning attributable to options	₹ 294
[(500 /1,000) x (2.94 x 200)]	
Company P's weighted average ordinary shares outstanding	5,000
Company P's diluted EPS = (7,000 + 26,460 + 294) / 5,000	₹ 6.75

Working Note:**Computation of Incremental shares related to weighted average options outstanding:**

All options are dilutive because their exercise price is below the average market price of Company S's ordinary shares for the period.

The incremental shares are calculated as follows:

Shares issued on assumed exercise of options	1,000
Less: Shares that would be issued at average market Price [(40 x 1,000)/50]	<u>(800)</u>
Incremental shares	<u>200</u>

4. Determination of numerator for calculation of Basic EPS

The first step in the basic EPS calculation is to determine the profit or loss that is attributable to ordinary shareholders of Company P for the period.

Non-cumulative dividends paid on equity-classified preference shares are not deducted in arriving at net profit or loss for the period, but they are not returns to ordinary shareholders. Accordingly, these dividends are deducted from net profit or loss for the period in arriving at the numerator.

		(₹)
Net profit		46,00,000
Preference dividends (5,00,000 shares x 1.2)	(6,00,000)	
Related tax (₹ 6,00,000 x 30%)	<u>1,80,000</u>	<u>(4,20,000)</u>
Profit or loss attributable to P's ordinary shareholders		<u>41,80,000</u>
Accordingly, the numerator for calculation of Basic EPS is ₹ 41,80,000		

Determination of denominator for calculation of Basic EPS

The second step in the basic EPS calculation is to determine the weighted-average number of ordinary shares outstanding for the reporting period.

Number of shares	Time weighting	Weight	Weighted average number of shares
1 st April – opening balance (30,00,000 – 5,00,000)	25,00,000	1	
15 th April – bonus issue (1,50,000 – 25,000)	<u>1,25,000</u>		
1 st April to 30 th April	26,25,000	1/12	2,18,750
1 st May – repurchase of shares	<u>(2,00,000)</u>		
1 st May to 31 st October	24,25,000	6/12	12,12,500
1 st November – new shares issued	<u>4,00,000</u>		
1 st November to 31 st March	<u>28,25,000</u>	5/12	<u>11,77,083</u>
Weighted average number of shares for the year			<u>26,08,333</u>

The denominator for calculation of Basic EPS is 26,08,333 shares.

Basic EPS = ₹ 41,80,000 / 26,08,333 shares = ₹ 1.60 per share (approx.).

UNIT 3 IND AS 108: OPERATING SEGMENTS

Questions

1. ABC Limited has 5 operating segments namely A, B, C, D and E. The profit / loss of respective segments for the year ended 31st March, 20X1 are as follows:

Segment	Profit/(Loss) (₹ in crore)
A	780
B	1,500
C	(2,300)
D	(4,500)
E	<u>6,000</u>
Total	<u>1,480</u>

Based on the quantitative thresholds, state which of the above segments A to E would be considered as reportable segments for the year ending 31st March, 20X1.

2. XYZ Ltd. has eight segments namely A, B, C, D, E, F, G and H. The information regarding respective segments for the year ended 31st March, 20X1 is as follows:

Segments	A	B	C	D	E	F	G	H
External sales	0	255	15	10	15	50	25	35
Inter-segment sales	<u>100</u>	<u>60</u>	<u>30</u>	<u>5</u>	—	—	—	—
Total	<u>100</u>	<u>315</u>	<u>45</u>	<u>15</u>	<u>15</u>	<u>50</u>	<u>25</u>	<u>35</u>
Segment result Profit/(Loss)	5	(90)	15	(5)	8	(5)	5	7
Segment assets	15	47	5	11	3	5	5	9

Identify which of the above segments out of A to H would be considered as reportable segments of XYZ Ltd. for the year ending 31st March, 20X1?

Answers

1. With regard to quantitative thresholds to determine reportable segment relevant in context of instant case, paragraph 13(b) of Ind AS 108 may be noted which provides as follows:

“The absolute amount of its reported profit or loss is 10 per cent or more of the greater, in absolute amount, of (i) the combined reported profit of all operating segments that did not report a loss and (ii) the combined reported loss of all operating segments that reported a loss.”

In compliance with Ind AS 108, the segment profit/loss of respective segment will be compared with the greater of the following:

- (i) All segments in profit, i.e., A, B and E – Total profit ₹ 8,280 crores.
 (ii) All segments in loss, i.e., C and D – Total loss ₹ 6,800 crores.

Greater of the above – ₹ 8,280 crores.

Based on the above, reportable segments will be determined as follows:

Segment	Profit/(Loss) (₹ in crore)	As absolute % of ₹ 8,280 crore	Reportable segment
A	780	9%	No
B	1,500	18%	Yes
C	(2,300)	28%	Yes
D	(4,500)	54%	Yes
E	<u>6,000</u>	72%	Yes
Total	<u>1,480</u>		

Hence B, C, D, E are reportable segments.

2. An entity has eight segments and the relevant information is as follows:

Criterion 1: Segment revenue is 10% or more of total external + intersegment sales

Segments	A	B	C	D	E	F	G	H	Total
Total sales	100	315	45	15	15	50	25	35	600
% to total sales	16.7	52.5	7.5	2.5	2.5	8.3	4.2	5.8	
Reportable segments	A	B	-	-	-	-	-	-	

Criteria 2: 10% or more of segment result

Consider segment profit and loss separately in absolute terms

Segments	A	B	C	D	E	F	G	H	Total
Profit	5	-	15	-	8	-	5	7	40
Segments loss	-	90	-	5	-	5	-	-	100

Since segment loss is greater, we select 100 as evaluating the segment percentage

Segments	A	B	C	D	E	F	G	H	Total
% to segment loss	5	90	15	5	8	5	5	7	
Reportable segments	-	B	C	-	-	-	-	-	

Criteria 2: 10% or more of segment assets

Segments	A	B	C	D	E	F	G	H	Total
Assets	15	47	5	11	3	5	5	9	100
%	15	47	5	11	3	5	5	9	100
Reportable segments	A	B	-	D	-	-	-	-	

Based on the above 3 criteria, the Reportable Segments are A, B, C & D

However, 75% test for external sales should also be checked.

Reportable Segments	A	B	C	D	TOTAL
External sales	0	255	15	10	280
Total entity's sales (external)					405
% of reportable segments external sales to entity's sales					69.14%
Required percentage					75%

Hence, in the above scenario, additional operating segments need to be identified as reportable segments, till the 75% test is satisfied, even if those segments do not satisfy the quantitative threshold limits.

