PRACTICE QUESTIONS

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INDIAN ACCOUNTING STANDARD 115: REVENUE FROM CONTRACTS WITH CUSTOMERS

Questions

1. A manufacturer enters into a contract to sell goods to a retailer for ₹ 1,000. The manufacturer also offers price protection, whereby it will reimburse the retailer for any difference between the sale price and the lowest price offered to any customer during the following six months. This clause is consistent with other price protection clauses offered in the past, and the manufacturer believes that it has experience which is predictive for this contract.

   Management expects that it will offer a price decrease of 5% during the price protection period. Management concludes that it is highly probable that a significant reversal of cumulative revenue will not occur if estimates change.

   How should the manufacturer determine the transaction price?

2. Electronics Manufacturer M sells 1,000 televisions to Retailer R for ₹ 50,00,000 (₹ 5,000 per television). M provides price protection to R by agreeing to reimburse R for the difference between this price and the lowest price that it offers for that television during the following six months. Based on M's extensive experience with similar arrangements, it estimates the following outcomes.

Price reduction in next six months (₹)	Probability
0	70%
₹ 500	20%
₹ 1,000	10%

   Determine the transaction price.

3. Construction Company C enters into a contract with Customer E to build an asset. Depending on when the asset is completed, C will receive either ₹ 1,10,000 or ₹ 1,30,000.

Outcome	Consideration (₹)	Probability
Project completes on time	1,30,000	90%
Project is delayed	1,10,000	10%

   Determine the transaction price.

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4. Franchisor Y Ltd. licenses the right to operate a store in a specified location to Franchisee F. The store bears Y Ltd.'s trade name and F will have a right to sell Y Ltd.'s products for 10 years. F pays an up-front fixed fee. The franchise contract also requires Y Ltd. to maintain the brand through product improvements, marketing campaigns etc. Determine the nature of license.

5. KK Ltd. runs a departmental store which awards 10 points for every purchase of ₹ 500 which can be discounted by the customers for further shopping with the same merchant. Unutilised points will lapse on expiry of two years from the date of credit. Value of each point is ₹ 0.50. During the accounting period 20X1-20X2, the entity awarded 1,00,00,000 points to various customers of which 18,00,000 points remained undiscounted. The management expects only 80% of the total award points during the year will be discounted of which normally 60% - 70% are redeemed during the next year.

   The Company has approached your firm with the following queries and has asked you to suggest the accounting treatment (Journal Entries) under the applicable Ind AS for these award points:

   (a) How should the recognition be done for the sale of goods worth ₹ 10,00,000 on a particular day?

   (b) How should the redemption transaction be recorded in the year 20X1-20X2? The Company has requested you to present the sale of goods and redemption as independent transaction. Total sales of the entity is ₹ 5,000 lakhs.

   (c) How much of the deferred revenue should be recognised at the year-end (20X1-20X2) because of the estimation that only 80% of the outstanding points will be redeemed?

   (d) In the next year 20X2-20X3, 60% of the expected outstanding points were discounted Balance 40% of the outstanding points of 20X1-20X2 still remained outstanding. How much of the deferred revenue should the merchant recognize in the year 20X2-20X3 and what will be the amount of balance deferred revenue?

   (e) How much revenue will the merchant recognized in the year 20X3-20X4, if 3,00,000 points are redeemed in the year 20X3-20X4?

6. A property sale contract includes the following:

   (a) Common areas

   (b) Construction services and building material

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(c) Property management services

(d) Golf membership

(e) Car park

(f) Land entitlement

Analyse whether the above items can be considered as separate performance obligations as per the requirements of Ind AS 115?

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

Software S – ₹ 50,000

Hardware H – ₹ 1,00,000 and

Accessory A – ₹ 20,000.

Since the demand for Hardware H and Accessory A is low, Prime Ltd. sells H and A together at ₹ 100,000. Prime Ltd. enters into a contract with Zeta Ltd. to sell all the three items for a consideration of ₹ 1,50,000.

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

8. On 1st April, 20X1, S Limited enters into a contract with Corp Limited to construct heavy-duty equipment for a promised consideration of ₹ 20,00,000 with a bonus of ₹ 2,50,000 if the equipment is completed within 24 months. At the inception of the contract, S Limited correctly accounts for the promised bundle of goods and services as a single performance obligation in accordance with Ind AS 115. At the inception of the contract, the Company expects the costs to be ₹ 11,00,000 and concludes that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will occur. Completion of the heavy-duty equipment is highly susceptible to factors outside of the Company's influence, mainly due to difficulties with the supply of components.

At 31st March, 20X2, S Limited has satisfied 65% of its performance obligation on the basis of costs incurred to date and concludes that the variable consideration is still constrained in accordance with Ind AS 115. However, on 4 June 20X2, the contract is modified with the result that the fixed consideration and expected costs increase by

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₹ 1,50,000 and ₹ 80,000 respectively. The time allowable for achieving the bonus is extended by six months with the result that S Limited concludes that it is highly probable that the bonus will be achieved and that the contract remains a single performance obligation.

S Limited wants your opinion on the accounting treatment of contract with Corp Limited in light of Ind AS 115, for the year 20X1-20X2 and 20X2-20X3.

9. A Ltd. owns 20 resorts across India. Every customer who stays in any of the resorts owned by A Ltd. is entitled to get points on the basis of total amount paid by him. Under this scheme, 1 point is granted for every ₹ 100 spent for stay in the resort. As per the past experience of A Ltd., the likelihood of exercise of the points is 100% and the standalone price of each such point is ₹ 5. Customer X spends ₹ 10,000 in one of the resorts of A Ltd. What is the accounting treatment for the points granted by A Ltd.?

10. On 1st April, 20X1, Entity X enters into a contract with Entity Y to sell mobile chargers for ₹ 100 per charger. As per the terms of the contract, if Entity Y purchases more than 1,000 chargers till March 20X2, the price per charger will be retrospectively reduced to ₹ 90 per unit. Till September 20X1, Entity X sold 95 chargers to Entity Y. Entity X estimates that Entity Y's purchases by March 20X2 will not exceed the required threshold of 1,000 chargers.

In October 20X1, Entity Y acquires another Entity C and from October 20X1 to December 20X1, Entity X sells an additional 600 chargers to Entity Y. Due to these developments, Entity X estimates that purchases of Entity Y will exceed the 1,000 chargers threshold for the period and therefore, it will be required to retrospectively reduce the price per charger to ₹ 90.

Analyse the above scenario in light of Ind AS 115 and state how the revenue should be recognised in such a situation.

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

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

Determine the transaction price.

12. A Ltd. enters into a contract with a customer for the exclusive supply of paint for a three-year period. A Ltd. makes a ₹ 50,000 upfront payment, which the customer will use to customize its paint sprayers for A Ltd.'s product. A Ltd. determines the upfront payment is not in respect of or for a distinct good or service.

A Ltd. estimates ₹ 10,00,000 in sales with the customer over the three-year period. Sales for Quarter 1 is ₹ 1,00,000 and for Quarter 2 is ₹ 1,25,000. However, A Ltd. updated its estimate of total sales over the contract to ₹ 15,00,000 during Quarter 2.

Determine the net revenue to be recognized in Quarter 1 and Quarter 2 by A Ltd.

13. X Ltd. agrees to produce 2,000 customized engines for use by Customer A in its products. X Ltd. concludes that the engines will transfer to Customer A over time because:

- they have no alternative use to X Ltd.; and
- Customer A is contractually obligated to pay X Ltd. for any finished or in-process engines, including a reasonable margin, if Customer A terminates the contract even when no fault of X Ltd.

X Ltd. already has the process in place to produce the engines and is given the design by Customer A, such that X Ltd. does not expect to incur any significant learning curve or design and development costs. X Ltd. uses a method of measuring progress toward complete satisfaction of its manufacturing contracts that takes into account work in progress and finished goods controlled by Customer A.

Require:

(i) State whether the 2000 engines are distinct in nature or not.

(ii) State whether 2000 engines is a single performance obligation or each engine is a separate performance obligation.

Answers

1. The transaction price is ₹ 950, because the expected reimbursement is ₹ 50. The expected payment to the retailer is reflected in the transaction price at contract inception, as that is

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the amount of consideration to which the manufacturer expects to be entitled after the price protection. The manufacturer will recognize a liability for the difference between the invoice price and the transaction price, as this represents the cash that it expects to refund to the retailer. The manufacturer will update its estimate of expected reimbursement at each reporting date until the uncertainty is resolved.

2. After considering all relevant facts and circumstances, M determines that the expected value method provides the best prediction of the amount of consideration to which it will be entitled. As a result, it estimates the transaction price to be ₹ 4,800 per television – i.e. (₹ 5,000 x 70%) + (₹ 4,500 x 20%) + (₹ 4,000 x 10%).

3. Because there are only two possible outcomes under the contract, C determines that using the most likely amount provides the best prediction of the amount of consideration to which it will be entitled. C estimates the transaction price to be ₹ 1,30,000, which is the single most likely amount.

4. The licence provides F access to the IP as it exists at any point in time in the licence period. This is because:

– Y Ltd. is required to maintain the brand, which will significantly affect the IP by affecting F's ability to obtain benefit from the brand;

– any action by Y Ltd. may have a direct positive or negative effect on F; and

– these activities do not transfer a goods or service to F.

Therefore, Y Ltd. recognizes the up-front fee over the 10-year franchise period.

5. **(a)** Points earned on ₹ 10,00,000 @ 10 points on every ₹ 500 = [(10,00,000/500) x 10] = 20,000 points.

It is expected that 80% of the award points will only be redeemed. Hence, considering the likelihood of the variable consideration,

Value of points = 20,000 points x ₹ 0.5 each point x 80% = ₹ 8,000

Revenue recognized for sale of goods	₹ 9,92,063	[10,00,000 x (10,00,000/10,08,000)]
Revenue for points deferred	₹ 7,937	[10,00,000 x (8,000/10,08,000)]

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Journal Entry

		₹	₹
Bank A/c	Dr.	10,00,000	
To Sales A/c			9,92,063
To Liability under Customer Loyalty programme			7,937

(b) Points earned on ₹ 50,00,00,000 @ 10 points on every ₹ 500

= [(50,00,00,000/500) x 10] = 1,00,00,000 points.

Value of points considering future likelihood

= 1,00,00,000 points x ₹ 0.5 each point x 80% = ₹ 40,00,000

Revenue recognized for sale of goods

= ₹ 49,60,31,746 [50,00,00,000 x (50,00,00,000 / 50,40,00,000)]

Revenue for points = ₹ 39,68,254 [50,00,00,000x (40,00,000 / 50,40,00,000)]

Journal Entry in the year 20X1

		₹	₹
Bank A/c	Dr.	50,00,00,000	
To Sales A/c			49,60,31,746
To Liability under Customer Loyalty programme			39,68,254
(On sale of Goods)			
Liability under Customer Loyalty programme	Dr.	32,53,968	
To Sales A/c			32,53,968
(On redemption of [(100 lakhs -18 lakhs) x 80% points]			

Revenue for points to be recognized

Undiscounted points estimated to be recognized next year 18,00,000 x 80%

= 14,40,000 points

Total expected points to be redeemed within 2 years

= 1,00,00,000 x 80% - 80,00,000

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Points redeemed in the previous year = (1,00,00,000 – 18,00,000) x 80%

= 65,60,000

Revenue to be recognised with respect to discounted point

= 39,68,254 x (65,60,000/80,00,000) = 32,53,968

(c) Revenue to be deferred with respect to undiscounted point in 20X1-20X2

= 39,68,254 – 32,53,968= 7,14,286

(d) In 20X2-20X3, KK Ltd. would recognize revenue for discounting of 60% of expected outstanding points as follows:

Outstanding points = 18,00,000 x 80% x 60% = 8,64,000 points

Total points discounted till date = 65,60,000 + 8,64,000 = 74,24,000 points

Revenue to be recognized in the year 20X2-20X3 = [{39,68,254 x (74,24,000 / 80,00,000)} – 32,53,968] = ₹ 4,28,572.

Liability under Customer Loyalty programme	Dr.	4,28,572	
To Sales A/c			4,28,572
(On redemption of further 8,64,000 points)			

The Liability under Customer Loyalty programme at the end of the year 20X2-20X3 will be ₹ 7,14,286 – 4,28,572 = 2,85,714.

(e) In the year 20X3-20X4, the merchant will recognized the balance revenue of ₹ 1,84,873 irrespective of the points redeemed as this is the last year for redeeming the points. Journal entry will be as follows:

Liability under Customer Loyalty programme	Dr.	2,85,714	
To Sales A/c			2,85,714
(On redemption of further 5,76,000 points)			

6. Paragraph 22 of Ind AS 115 provides that at contract inception, an entity evaluates the promised goods or services to determine which goods or services (or bundle of goods or services) are distinct and therefore constitute a performance obligation.

A performance obligation is a promise in a contract to transfer to the customer either:

- a good or service (or a bundle of goods or services) that is distinct; and

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- series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer.

As per paragraph 27 of Ind AS 115, a good or service that is promised to a customer is distinct if both of the following criteria are met:

(a) the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (i.e. the good or service is capable of being distinct); and

(b) the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (i.e. the promise to transfer the good or service is distinct within the context of the contract).

Each performance obligation is required to be accounted for separately.

Based on the above guidance, the following table discusses whether the common goods and services in property sale contract should be considered as separate performance obligation or not:

Goods / Service	**Whether a separate Performance obligation (PO) or not**	**Reason**
Common areas	Unlikely to be separate PO	Common areas are unlikely to be a separate performance obligation because the interests received in common areas are typically undivided interests that are not separable from the property itself. However, if the common areas were sold separately by the developer, then they could be considered as a separate performance obligation provided that it is distinct in the context of the contract.
Construction services and building material	Unlikely to be separate PO	Construction services and building materials can meet the first criterion as they are items that can be used in conjunction with other readily available goods or services. However, the developer would be

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		considered to be providing a significant integration service as it is bringing together all the separate elements to deliver a complete building.
Property management services and Golf membership	Likely to be separate PO	Property management services and golf membership are likely to be separate performance obligations as they may be used in isolation or with the property already acquired, i.e., management services can be used with the property. These types of services are not significantly customised, integrated with, or dependent on the property. This is because there is no change in their function with or without the property. Also, a property management service could be undertaken by a third party.
Car park and Land entitlement	Analysis required	Items such as car parks and land entitlements generally meet the first criterion – i.e., capable of being distinct – as the buyer benefits from them on their own. Whether the second criterion is met depends on the facts and circumstances. For example, if the land entitlement can be sold separately or pledged as security as a separate item, it may indicate that it is not highly dependent on, or integrated with, other rights received in the contract. In an apartment scenario, the customer can receive an undivided interest in the land on which the apartment block sits. This type of right is generally considered as highly inter-related with the apartment itself.*

*However, if title to the land is transferred to the buyer separately – for example in a single party development – then the separately identifiable criterion may be met.

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Other facts and circumstances of each contract should also be carefully examined to determine performance obligations.

7. Paragraph 82 of Ind AS 115 states that an entity shall allocate a discount entirely to one or more, but not all, performance obligations in the contract if all of the following criteria are met:

(a) the entity regularly sells each distinct good or service (or each bundle of distinct goods or services) in the contract on a stand-alone basis;

(b) the entity also regularly sells on a stand-alone basis a bundle (or bundles) of some of those distinct goods or services at a discount to the stand-alone selling prices of the goods or services in each bundle; and

(c) the discount attributable to each bundle of goods or services described in paragraph 82(b) is substantially the same as the discount in the contract and an analysis of the goods or services in each bundle provides observable evidence of the performance obligation (or performance obligations) to which the entire discount in the contract belongs.

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

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

Product	Allocated transaction price (₹)
Hardware H	83,333 (1,00,000/ 120,000 x 100,000)
Accessory A	16,667 (20,000/120,000 x 100,000)
Total	1,00,000

However, if Prime Ltd. would have transferred the control of Hardware H and Accessory A at the same point in time, then the Prime Ltd. could, as a practical matter, account for the

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transfer of those products as a single performance obligation. That is, Prime Ltd. could allocate ₹ 1,00,000 of the transaction price to the single performance obligation and recognise revenue of ₹ 1,00,000 when Hardware H and Accessory A simultaneously transfer to Zeta Ltd.

8. **For the year 20X1-20X2**

S Limited accounts for the promised bundle of goods and services as a single performance obligation satisfied over time in accordance with Ind AS 115. At the inception of the contract, S Limited expects the following:

Transaction price	– ₹ 20,00,000
Expected costs	– ₹ 11,00,000
Expected profit (45%)	– ₹ 9,00,000

At contract inception, S Limited excludes the ₹ 2,50,000 bonus from the transaction price because it cannot be concluded that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. Completion of the heavy-duty equipment is highly susceptible to factors outside the entity's influence.

By the end of the first year, the entity has satisfied 65% of its performance obligation on the basis of costs incurred to date. Costs incurred to date are therefore ₹ 7,15,000 and S Limited reassesses the variable consideration and concludes that the amount is still constrained. Therefore at 31st March, 20X2, the following would be recognised:

Revenue	(A)	– ₹ 13,00,000	(₹ 20,00,000 x 65%)
Costs	(B)	– ₹ 7,15,000	(₹ 11,00,000 x 65%)
Gross profit	(C) i.e.(A-B)	– ₹ 5,85,000	

For the year 20X2-20X3

On 4th June, 20X2, the contract is modified. As a result, the fixed consideration and expected costs increase by ₹ 1,50,000 and ₹ 80,000, respectively.

The total potential consideration after the modification is ₹ 24,00,000 which is ₹ 21,50,000 fixed consideration + ₹ 2,50,000 completion bonus. In addition, the allowable time for achieving the bonus is extended by six months with the result that S Limited concludes that it is highly probable that including the bonus in the transaction price will not result in a significant reversal in the amount of cumulative revenue recognised in accordance with Ind AS 115. Therefore, the bonus of ₹ 2,50,000 can be included in the transaction price.

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S Limited also concludes that the contract remains a single performance obligation. Thus, S Limited accounts for the contract modification as if it were part of the original contract. Therefore, S Limited updates its estimates of costs and revenue as follows:

S Limited has satisfied 60.60% of its performance obligation (₹ 7,15,000 actual costs incurred compared to ₹ 11,80,000 total expected costs). The entity recognises additional revenue of ₹ 1,54,400 [(60.60% of ₹ 24,00,000) – ₹ 13,00,000 revenue recognised to date] at the date of modification i.e. on 4th June, 20X2 as a cumulative catch-up adjustment.

9. Paragraph B40 of Ind AS 115, inter alia, states that, "if in a contract, an entity grants a customer the option to acquire additional goods or services, that option gives rise to a separate performance obligation only if the option provides a material right to the customer that it would not receive without entering into that contract".

Further, paragraph B41 states that if a customer has the option to acquire an additional good or service at a price that would reflect the stand-alone selling price for that good or service, that option does not provide the customer with a material right even if the option can be exercised only by entering into a previous contract. In those cases, the entity has made a marketing offer that it shall account for in accordance with this Standard only when the customer exercises the option to purchase the additional goods or services.

In the given case, the customer does get a material right by way of a discount of ₹ 500 for every 100 points that he would not receive without the previous stay in that resort. Thus, the customer in effect pays the entity in advance for future goods and the entity recognises revenue when the goods are transferred.

According to paragraph B42, paragraph 74 requires an entity to allocate the transaction price to performance obligations on a relative stand-alone selling price basis. If the standalone selling price for a customer's option to acquire additional goods or services is not directly observable, an entity shall estimate it on the basis of percentage discount the customer may obtain upon exercising the option and the likelihood of the option getting exercised.

In accordance with above, an entity shall account for award credit as a separate performance obligation of the sales transactions in which they are initially granted. The value of the consideration the entity expects to be entitled in respect of the initial sale shall be allocated between the award credits and the other components of the sale.

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In the current case, the standalone selling price of the 100 points is ₹ 500. A Ltd. should allocate the fair value of the consideration (i.e. ₹ 10,000) between the points and the other components of the sale as ₹ 476 (500/10,500 x 10,000) and ₹ 9,524 (10,000/10,500 x 10,000) respectively in proportion of their standalone selling price. Since A Ltd. supplies the awards itself (i.e. it acts as a principal), it should recognise ₹ 476 as revenue when points are redeemed.

10. Paragraph 56 of Ind AS 115 states that an entity shall include in the transaction price some or all of an amount of variable consideration estimated in accordance with paragraph 53 only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

Further, paragraph 57 of Ind AS 115 state that in assessing whether it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur once the uncertainty related to the variable consideration is subsequently resolved, an entity shall consider both the likelihood and the magnitude of the revenue reversal. Factors that could increase the likelihood or the magnitude of a revenue reversal include, but are not limited to, any of the following:

(a) the amount of consideration is highly susceptible to factors outside the entity's influence. Those factors may include volatility in a market, the judgement or actions of third parties, weather conditions and a high risk of obsolescence of the promised good or service.

(b) the uncertainty about the amount of consideration is not expected to be resolved for a long period of time.

(c) the entity's experience (or other evidence) with similar types of contracts is limited, or that experience (or other evidence) has limited predictive value.

(d) the entity has a practice of either offering a broad range of price concessions or changing the payment terms and conditions of similar contracts in similar circumstances.

(e) the contract has a large number and broad range of possible consideration amounts.

Entity X estimates that the consideration in the above contract is variable. Therefore, in accordance with paragraphs 56 and 57 of Ind AS 115, Entity X is required to consider the constraints in estimating variable consideration. Entity X determines that it has significant experience with this product and with the purchasing pattern of Entity Y. Thus, if Entity X concludes that it is highly probable that a significant reversal in the cumulative amount of revenue recognised (i.e. ₹ 100 per unit) will not occur when the uncertainty is

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resolved (i.e. when the total amount of purchases is known), then the Entity X will recognise revenue of ₹ 9,500 (95 chargers x ₹ 100 per charger) for the half year ended 30th September, 20X1.

Further, paragraphs 87 and 88 of Ind AS 115 that after contract inception, the transaction price can change for various reasons, including the resolution of uncertain events or other changes in circumstances that change the amount of consideration to which an entity expects to be entitled in exchange for the promised goods or services.

An entity shall allocate to the performance obligations in the contract any subsequent changes in the transaction price on the same basis as at contract inception. Consequently, an entity shall not reallocate the transaction price to reflect changes in stand-alone selling prices after contract inception. Amounts allocated to a satisfied performance obligation shall be recognised as revenue, or as a reduction of revenue, in the period in which the transaction price changes."

In accordance with the above, in the month of October 20X1, due to change in circumstances on account of Entity Y acquiring Entity C and consequential increase in sale of chargers to Entity Y, Entity X estimates that Entity Y's purchases will exceed the 1,000 chargers threshold till March 20X2 for the period and therefore, it will be required to retrospectively reduce the price per charger to ₹ 90.

Consequently, the Entity X will recognise revenue of ₹ 53,050 for the quarter ended December 20X1 which is calculated as follows:

Particulars	Amount in ₹
Sale of 600 chargers (600 chargers x ₹ 90 per charger)	54,000
Less: Change in transaction price (95 chargers x ₹ 10 price reduction) for the reduction of revenue relating to units sold till September 20X1.	(950)
Revenue recognised for the quarter ended December 20X1	53,050

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

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

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

12. Treatment of upfront payment of ₹ 50,000

Upfront payment of ₹ 50,000 would be accounted for as a reduction of the transaction price. It would be deferred and recognised as a reduction of revenue (in proportion to estimated sales) over the contract term.

Accounting for Quarter 1 and Quarter 2 is as follows:

For the first quarter

- Quarter 1 sales = ₹ 1,00,000
- Entity estimates ₹ 10,00,000 sales over the three-year period
- Percentage of Quarter 1 sale to total estimated sale

  = (₹ 1,00,000 / ₹ 10,00,000) x 100 = 10%
- Share of upfront payment to be recognised in Quarter 1

  = 10% x ₹ 50,000 = ₹ 5,000

Hence, in Quarter 1, A Ltd. recognizes revenue of ₹ 95,000 (₹ 1,00,000 actual sales – ₹ 5,000 consideration paid to the customer)

For the second quarter

- Quarter 2 sales = ₹ 1,25,000
- A Ltd. updates its estimate of total sales over the contract to ₹ 15,00,000
- Total sales to date till Quarter 2

  = ₹ 1,00,000 +₹ 1,25,000 = ₹ 2,25,000
- Percentage of sale till Quarter 2 to total estimated sale

  = (₹ 2,25,000 / ₹ 15,00,000) x 100 = 15%
- Share of upfront payment to be recognised in Quarter 2

  = (15% x ₹ 50,000 upfront payment) – Upfront payment recognized in Quarter 1

  = ₹ 7,500 – ₹ 5,000 = ₹ 2,500

Hence, A Ltd. would recognize revenue of ₹ 1,22,500 for Quarter 2 (₹ 1,25,000 actual sales – ₹ 2,500 upfront payment made to the customer).

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13. **(i)** X Ltd. concludes that each of the 2,000 engines is distinct, because:

- Customer A can use each engine on its own; and
- each engine is separately identifiable from the others because one does not significantly affect, modify or customize another.

(ii) Despite the fact that each engine is distinct, X Ltd. concludes that the 2,000 units are a single performance obligation because:

- each engine will transfer to Customer A over time; and
- X Ltd. uses the same method to measure progress toward complete satisfaction of the obligation to transfer each engine to Customer A.

Consequently, the transaction price for all 2,000 engines is recognized over time using an appropriate measure of progress. This outcome may be different from the outcome of allocating a fixed amount to each engine if each one was a performance obligation.

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INDIAN ACCOUNTING STANDARD 41: AGRICULTURE

Questions

1. ABC Ltd. is in the business of manufacturing an apple beverage and requires large quantity of apples to manufacture such beverage. In order to satisfy its requirement of apples, it enters into 3 years lease contracts with owners of apple orchards. The lease contracts are mainly of two types:

   (1) **Contract 1:** The owner of the apple orchard (i.e. the lessor) raises the apple trees to produce apples. ABC Ltd. (i.e. lessee) makes a fixed annual payment to the owner of the apple orchard who is required to cultivate the produce as per the specifications of ABC Ltd. ABC Ltd. harvests the apples itself for fulfilling its requirement of apples.

   (2) **Contract 2:** ABC Ltd. obtains the apple orchard from owner (i.e. the lessor) to raise the apple trees for subsequent harvest of the apples to ensure that the apples are as per the requirements of ABC Ltd. ABC Ltd. makes a fixed annual payment to the owner of the apple orchards (i.e. the lessor).

   Explain whether ABC Ltd. is engaged in agricultural activity as per Ind AS 41 in both of the cases?

2. Fisheries Ltd. practices pisciculture in sweet waters (ponds, tanks and dams). The fishing activity of Fisheries Ltd. in such sweet waters consists only of catching the fish. Comment whether such fishing activity will be covered within the scope of Ind AS 41?

3. M. Chinnaswamy & Brothers Ltd. is a company that is engaged in growing and maintaining coconut palms and selling their output in various forms. The company has a farmland having 2,00,000 coconut palms in the coastal area of Karnataka near Mangalore.

   The fair value of each coconut palm is derived based on the average realisable price of ₹ 30 per nut (fruit). Each coconut palm grows 80 nuts per annum on an average basis. Each coconut palm can generate revenue for as long as 80 years and the current palms are only 20-year-old. The management thinks that considering the risk factors in business, the valuation of each palm can be considered at 5 times its annual revenue.

   During August, 20X5, the Ooty Hotels Association (OHA) chairman and his team visited the corporate office of the company at Mangalore. The deal was to supply tender coconuts to Ooty Hotels at an agreed price throughout the year. The agreement came into effect from

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1st September, 20X5 whereby the company shall reserve 15,000 coconut palms (out of 2,00,000 coconut palms) for OHA and will charge a concessional rate of ₹ 15 only per nut supplied to OHA. OHA will in turn supply the tender coconuts to each Ooty Hotel at the same price. This contract price is applicable irrespective of the ownership of palm trees (it is not an entity-specific restriction). All tender coconuts of these 15,000 coconut palms were used by OHA irrespective of the agreement being effective from 1st September, 20X5.

What will be the valuation of 2,00,000 coconut palms in the company's farm for the quarter ended 30th September, 20X5?

4. Entity A purchased cattle at an auction on 30th June 20X1

Purchase price at 30th June 20X1	₹ 1,00,000
Costs of transporting the cattle back to the entity's farm	₹ 1,000
Sales price of the cattle at 31st March, 20X2	₹ 1,10,000

The company would have to incur similar transportation costs if it were to sell the cattle at auction, in addition to an auctioneer's fee of 2% of sales price. The auctioneer charges 2% of the selling price, from both, the buyer as well as the seller.

Calculate the amount at which cattle is to be recognised in books on initial recognition and at year end 31st March, 20X2.

5. A Ltd. purchased 100 goats at an auction for ₹ 1,00,000 on 30th September, 20X7. Subsequent transportation costs were ₹ 1,000. A Ltd. would have to incur the same transportation costs if it had sold its goats in this auction. In addition, there would be a 2% auctioneer's fee on the market price of the goats payable by the seller. A Ltd. so incurred ₹ 500 on veterinary expenses.

On 31st March 20X8, the market value of the goats in the most relevant market increases to ₹ 1,10,000. Transportation costs of ₹ 1,000 would have to be incurred by the seller to get the goats to the relevant market. An auctioneer's fee of 2% on the market price of the goats would be payable by the seller.

On 1st June 20X8, the entity sold 18 goats at auction for ₹ 20,000 and incurred transportation charges of ₹ 150. In addition, there was a 2% auctioneer's fee on the market price of the goats paid by the seller.

On 15th September, 20X8, the fair value of the 82 goats was ₹ 82,820. 42 goats were slaughtered on that day, with a total slaughter cost of ₹ 4,200. The total market price of

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the carcasses on that day was ₹ 48,300, and the estimated transportation cost to sell the carcasses is ₹ 420. No other selling costs are expected.

On 30th September, 20X8, the market price of the remaining 40 goats was ₹ 44,800. The estimated transportation cost is ₹ 400. In addition, there would be a 2% auctioneer's fee on the market price of the goats payable by the seller.

A Ltd. adopts the fair value model to recognize biological assets, as required by the standard, and reports on 30th September and 31st March each year and determines fair value on these dates.

Pass Journal Entries for the above transactions.

Answers

1. Paragraph 5 of Ind AS 41, Agriculture defines agricultural activity and biological transformation as follows:

"Agricultural activity is the management by an entity of the biological transformation and harvest of biological assets for sale or for conversion into agricultural produce or into additional biological assets."

"Biological transformation comprises the processes of growth, degeneration, production, and procreation that cause qualitative or quantitative changes in a biological asset."

Contract 1:

As per contract 1, during the 3 years of the contract, ABC Ltd. only harvests apples from the apple orchards whereas biological transformation is managed by the owners of the apple orchards (i.e. the lessor). Since ABC Ltd. is not involved in the biological transformation of the apple orchards and is only harvesting biological assets , it cannot be said to be an agricultural activity as per Ind AS 41. Hence, ABC Ltd. is not engaged in agricultural activity as per Ind AS 41.

Contract 2:

As per contract 2, ABC Ltd. obtains the apple orchards and is actively involved in the raising of apple trees in order to ensure that the apples are as per its requirements. Since, it is actively managing the biological transformation and harvest of biological asset, Hence, ABC Ltd. is engaged in agricultural activity as per Ind AS 41.

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2. Paragraph 5 of Ind AS 41, defines agricultural activity as follows:

"Agricultural activity is the management by an entity of the biological transformation and harvest of biological assets for sale or for conversion into agricultural produce or into additional biological assets."

For fishing to qualify as agricultural activity, it must satisfy both of the below mentioned conditions:

a) management of biological transformation of a biological asset; **and**

b) harvesting of biological assets for sale or for conversion into agricultural produce or into additional biological assets.

Therefore, when fishing involves managed activity to grow and procreate fish in designated areas, such fishing is an agricultural activity as per the above definition. Managing the growth of fish for subsequent sale is an agricultural activity as per Ind AS 41.

In the aforementioned scenario, only fish harvesting is managed by Fisheries Ltd. Therefore, mere fish harvesting without management of biological transformation cannot be termed as an agricultural activity as per Ind AS 41.

Hence, fishing in sweet waters (pond, tanks and dams) where only fishing (harvesting) is carried out without any management of biological transformation is outside the scope of Ind AS 41.

3. Para 16 of Ind AS 41 says that entities often enter into contracts to sell their biological assets or agricultural produce at a future date. Contract prices are not necessarily relevant in measuring fair value, because fair value reflects the current market conditions in which buyers and sellers would enter into a transaction. As a result, the fair value of a biological asset or agricultural produce is not adjusted because of the existence of a contract.

Moreover, the OHA contract represents just 7.5% [(15,000 / 2,00,000) x 100] of the total number of palms in the farm. Hence, the contract price can't be considered for fair valuation of the entire inventory of bearer plants.

The valuation in this case would be as follows:

Adding the fair value for 15,000 coconut palm (15,000 palm x 80 nuts x ₹ 15 x 5 times) and 1,85,000 coconut palm (1,85,000 palm x 80 nuts x ₹ 30 x 5 times), we get total valuation of 2,00,000 coconut palm as ₹ 231 crore.

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4. Initial recognition of cattle

	₹
Fair value less costs to sell (₹ 1,00,000 – ₹ 1,000 - ₹ 2,000)	97,000
Cash outflow (₹ 1,00,000 + ₹ 1,000 + ₹ 2,000)	1,03,000
Loss on initial recognition	6,000
Cattle Measurement at year end	
Fair value less costs to sell (₹ 1,10,000 – 1,000 – (2% x 1,10,000))	1,06,800

At 31st March, 20X2, the cattle is measured at fair value of ₹ 1,09,000 less the estimated auctioneer's fee of ₹ 2,200). The estimated transportation costs of getting the cattle to the auction of ₹ 1,000 are deducted from the sales price in determining fair value.

5. Journal Entries

		₹	₹
Initial recognition of goats at 30th September, 20X7			
Biological asset (goats)	Dr.	97,000	
Loss on initial recognition	Dr.	4,000	
To Cash (purchase and transport to farm)			101,000
(Initial recognition of the goats at fair value less costs to sell)			
Veterinary expenses	Dr.	500	
To Cash			500
Recognition of veterinary expenses at 30th September, 20X7 (such expenses do not, in themselves, affect the fair value)			
Biological asset (goats)	Dr.	9,800	
To Gain on change in fair value less costs to sell (1,06,800-97,000)			9,800
(Subsequent measurement of biological assets at fair value less costs to sell at 31st March, 20X7 reporting date)			
Sale of goats on 1st June, 20X8			
Cash	Dr.	19,450	
Selling expenses (150+400)	Dr.	550	
To Revenue			20,000
(Recognition of the revenue from the sale of goats)			

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Transfer of biological assets to inventory on 15th September, 20X8			
Inventory (Carcasses)	Dr.	47,880	
Fair value loss on goats	Dr.	1,176	
To Biological asset (goats) (the proportion of goats sold using the fair value at the previous reporting period, 31st March, 20X8) (1,06,800 x 42/100)			44,856
To Cash			4,200
(Transfer of goats slaughtered to inventory)			
Subsequent measurement of goats at 30th September, 20X8			
Loss on change in fair value less costs to sell	Dr.	18,440	
To Biological asset (goats) (fair value of goats at last reporting date less transfer to inventory) (43,504-(1,06,800-44,856))			18,440
(Subsequent measurement of biological assets at fair value less costs to sell at 30th September, 20X8 reporting date)			

Working Notes:

1.	**The fair value less costs to sell at initial recognition**	**₹**
	Fair value in the most relevant market	1,00,000
	Transport costs	(1,000)
	Auctioneer's fee	(2,000)
		97,000
2.	**The fair value less costs to sell at 31st March, 20X8 and gain thereupon**	
	Fair value in the most relevant market	1,10,000
	Transport costs	(1,000)
	Auctioneer's fee	(2,200)
		1,06,800
	Less: Original cost recorded	(97,000)
		9,800

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3.	**The fair value less estimated costs to sell of the carcasses on 15th September, 20X8**	
	Market value of carcasses	48,300
	Transport costs	(420)
		47,880
	Initial cost of the carcasses at the date of transfer to inventory is measured at the fair value less costs to sell of the carcasses. [Ind AS 41.13]	
4.	**The fair value less costs to sell at 30th September, 20X8**	
	Fair value in most relevant market	44,800
	Transport costs	(400)
	Auctioneer's fee	(896)
		43,504

The reduction in the herd due to the sale of goats at 1st June, 20X8 is included in the fair value adjustment at 30th September, 20X8. An alternative to the above presentation is to remeasure the goats to fair value just prior to the point at which they are sold and record a cost of sales figure separately with a corresponding reduction in the value of the biological assets. This will result in the same net profit for the period, but the presentation of cost of sales and net fair value re-measurements on biological assets will be different.

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INDIAN ACCOUNTING STANDARD 20: ACCOUNTING FOR GOVERNMENT GRANTS AND DISCLOSURE OF GOVERNMENT ASSISTANCE

Questions

1. A company receives a cash grant of ₹ 30,000 on 31st March 20X1. The grant is towards the cost of training young apprentices. Training programme is expected to last for 18 months starting from 1st April 20X1. Actual costs of the training incurred in 20X1-20X2 was ₹ 50,000 and in 20X2-20X3 ₹ 25,000.

   State, how this grant should be accounted for.

2. Entity A is awarded a government grant of ₹ 60,000 receivable over three years (₹ 40,000 in year 1 and ₹ 10,000 in each of years 2 and 3), contingent on creating 10 new jobs and maintaining them for three years. The employees are recruited at a total cost of ₹ 30,000, and the wage bill for the first year is ₹ 1,00,000, rising by ₹ 10,000 in each of the subsequent years.

   Calculate the grant income and deferred income to be accounted for in the books for the years 1, 2 and 3 under the following two situations:

   (a) There is reasonable assurance that the entity will comply with the conditions attaching to them and the grant will be received

   (b) There is no reasonable assurance that the grant will be received.

3. A Ltd. has been conducting its business activities in backward areas of the country and due to higher operating costs in such regions, it has collectively incurred huge losses in previous years. As per a scheme of government announced in March 20X1, the company will be partially compensated for the losses incurred by it to the extent of ₹ 10,00,00,000, which will be received in October 20X1. The compensation being paid by the government meets the definition of government grant as per Ind AS 20. Assume that no other conditions are to be fulfilled by the company to receive the compensation.

   When should the grant be recognised in the statement of profit and loss? Discuss in light of relevant Ind AS.

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4. A Limited is engaged in the manufacturing of certain specialized chemicals. During the manufacturing process, certain wastewater is produced which is released by A Limited in the nearby river. To reduce pollution of the rivers, the state government has introduced a scheme with the following salient features:

   - If a manufacturer installs certain pre-approved wastewater treatment plant, the government will provide an interest free loan equal to 50% of the cost of the plant;
   - Such loan will be repayable to the government in 5 years from the date of disbursal;
   - The manufacturer availing the benefit of this scheme must treat the wastewater of its factory using the specified plant before releasing it to the river. If this condition is violated, the entire loan shall become immediately repayable to the government along with a penalty of ₹ 10 lakh.

   Cost of the wastewater treatment plant to be installed to avail the benefit of the scheme is ₹ 50 lakh. A Limited decided to utilise this scheme because, if it were to obtain the similar loan from a bank, it would be available at a market interest rate of 12% per annum. Accordingly, A Limited applied for and obtained the government loan of ₹ 25 lakh on 1st April, 20X1. A Limited purchased and installed the plant such that it became ready for use on the same date.

   A Limited has an accounting policy of recognising government grant in relation to depreciable assets in the proportion of depreciation expense. It has determined that the plant will be depreciated over a period of 5 years using straight-line method. In the month of March, 20X3, government officials conducted a surprise audit, and it was found that A Limited was not using the wastewater treatment plant as prescribed. Accordingly, on 31st March, 20X3, the government ordered A Limited to repay the entire loan along with penalty. A Limited repaid the loan with interest and penalty as per the order on 31st March, 20X3.

   Measure the amount of government grant as on 1st April, 20X1. Determine the nature of the government grant and its accounting treatment (principally) for the year ended 31st March, 20X2. Also determine the impact on profit or loss if any, on account of revocation of government grant as on 31st March, 20X3.

5. To encourage entities to expand their operations in a specified development zone, the government provides interest-free loans to fund the purchase of manufacturing equipment.

   In accordance with the development scheme, an entity receives an interest-free loan of ₹ 5,00,000 from the government for a period of three years. The market rate of interest for similar loans for 3 years is 5% per year.

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There are no future performance conditions attached to the interest-free loan.

Discuss how to account for the above loan. Pass necessary journal entries in the entity's books of accounts from year 1 to year 3, as per relevant Ind AS.

6. A Ltd. has acquired equipment for ₹ 100 lakhs. The estimated useful life of the equipment is 10 years. Residual value at the end of useful life is Nil. Depreciation is recognised on a straight-line basis.

To encourage the acquisition of the assets, the Government will give a grant to A Ltd. towards the purchase of the equipment as follow:

- If specified employment targets are achieved by the end of the 3rd year, A Ltd. will receive a grant of ₹ 10 lakhs.
- In all other cases, A Ltd. will receive a grant of ₹ 5 lakhs.

On the date of acquisition as well as at the end of year 1, A Ltd. expects to receive a grant of ₹ 10 lakhs.

At the beginning of year 2, A Ltd. has revised the assessment in light of development and now expects that it will only receive a grant of ₹ 5 lakhs.

There were no errors in the estimation of grants in the prior period.

A Ltd. has assessed and concluded that the grant is in nature of grants related to assets.

A Ltd. presents government grants related to assets in the balance sheet by deducting the grant in calculating the carrying amount of the asset.

Required

How is the change in the amount of grant-related assets is accounted for in the books of A Ltd.?

Answers

1. As at 31st March 20X1 the grant would be recognised as a liability (deferred income) and presented in the balance sheet as a split between current and non-current amounts.

₹ 20,000 [(12 months / 18 months) x 30,000] is current which would be recognised in the statement of profit and loss for the year ended 31st March, 20X2. The balance amount of ₹ 10,000 will be shown as non-current.

At the end of year 20X1-20X2, there would be a current balance of 10,000 (being the non-current balance at the end of year 20X1-20X1 reclassified as current) in the balance sheet. This would be recognised in profit in the year 20X2-20X3.

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Extracts from the financial statements are as follows:

Balance Sheet (extracts)

	31 March 20X1	31 March 20X2	31 March 20X3
Current liabilities			
Deferred income	20,000	10,000	-
Non-current liabilities			
Deferred income	10,000	-	-

Statement of profit and loss (extracts)

	31 March 20X2	31 March 20X3
Method 1		
Other Income - Government grant received	20,000	10,000
Training costs	(50,000)	(25,000)
Method 2		
Training costs (50,000 – 20,000)	30,000	
Training costs (25,000 – 10,000)		15,000

2. (a) When there is reasonable assurance

The grant of ₹ 60,000 should be recognised at the beginning of the first year as receivable and will be compensated for the related costs over three years.

The initial journal entry would be:

Grant Receivable Ac Dr. ₹ 60,000

To Deferred Income A/c ₹ 60,000

Calculation of grant income and deferred income:

Year	Labour Cost	Grant Income	Computation of Grant Income	Deferred Income at the end of the year	Computation of deferred income at the end of the year
	₹	₹		₹	
1	1,30,000	21,667	60,000 x (130/360)	38,333	(60,000 – 21,667)
2	1,10,000	18,333	60,000 x (110/360)	20,000	(38,333 – 18,333)
3	1,20,000	20,000	60,000 x (120/360)	-	(20,000 – 20,000)
	3,60,000	60,000			

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Therefore, grant income to be recognised in the Statement of Profit and Loss for the years 1, 2 and 3 would be ₹ 21,667, ₹ 18,333 and ₹ 20,000 respectively.

The amount of grant that has not yet been credited to the statement of profit and loss i.e. deferred income is to be shown in the balance sheet. Hence deferred income balance as at end of year 1, 2 and 3 are ₹ 38,333, ₹ 20,000 and Nil respectively.

(b) When reasonable assurance is not there

The grant of ₹ 60,000 should be recognised over three years to compensate for the related costs.

The journal entry on receipt of grant at year 1 would be:

Grant Receivable Ac	Dr.	₹ 40,000	
To Deferred Income A/c			₹ 40,000

Calculation of Grant Income and Deferred Income:

Year	Labour Cost	Grant Income wrt 1st receipt of 40,000	Grant Income wrt 2nd receipt of 10,000	Grant Income wrt 3rd receipt of 10,000	Deferred Income at the end of the year	Computation of deferred income at the end of the year
	₹	₹			₹	
1	1,30,000	14,445	NA	NA	25,555	(40,000 – 14,445)
2	1,10,000	12,222	4,783	NA	18,550	(50,000 – 14,445 – 12,222 – 4,783)
3	1,20,000	13,333	5,217	10,000	-	(60,000 – 14,445 – 12,222 – 4,783 – 13,333 – 5,217 – 10,000)
	3,60,000	40,000*	10,000**	10,000***		

*40,000 bifurcated into three years in the ratio of 130:110:120

**10,000 bifurcated into two years in the ratio of 110:120

***10,000 credited entirely in the third year

Therefore, Grant income to be recognised in the statement of Profit and Loss for the years 1, 2 and 3 would be ₹ 21,667, ₹ 18,333 and ₹ 20,000 respectively.

Amount of grant that has not yet been credited to the statement of profit and loss i.e; deferred income is to be shown in the balance sheet. Hence, deferred income balance as at the end of year 1, 2 and 3 are ₹ 18,333, ₹ 10,000 and Nil respectively.

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3. Paragraph 7 of Ind AS 20 states that, Government grants, including non-monetary grants at fair value, shall not be recognised until there is reasonable assurance that:

(a) the entity will comply with the conditions attaching to them; and

(b) the grants will be received.

Further, paragraphs 20 and 22 of Ind AS 20 state as follows:

"A government grant that becomes receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the entity with no future related costs shall be recognised in profit or loss of the period in which it becomes receivable".

"A government grant may become receivable by an entity as compensation for expenses or losses incurred in a previous period. Such a grant is recognised in profit or loss of the period in which it becomes receivable, with disclosure to ensure that its effect is clearly understood."

In accordance with the above, in the given case, as at March 20X1, A Ltd. is entitled to receive government grant in the form of compensation for losses already incurred by it in the previous years. Therefore, even though the compensation will be received in the month of October 20X1, A Ltd. should recognise the compensation receivable by it as a government grant in the profit or loss for the period in which it became receivable, i.e., for the financial year 20X0-20X1 with disclosure to ensure that its effect is clearly understood.

4. As per the principles of Ind AS 20 "Accounting for Government Grants and Disclosure of Government Assistance", the benefits of a government loan at a below market rate of interest is treated as a government grant. The loan shall be recognized and measured in accordance with Ind AS 109 "Financial Instruments". The benefit of the below market rate of interest shall be measured as the difference between the initial carrying value of the loan determined in accordance with Ind AS 109 and the proceeds received. The benefit is accounted for in accordance with Ind AS 20. As per Ind AS 109, the loan should be initially measured at its fair value.

Initial recognition of grant as on 1st April, 20X1

Fair value of loan = ₹ 25,00,000 x 0.567 (PVF @ 12%, 5th year) = ₹ 14,17,500

A Limited will recognize ₹ 10,82,500 (25,00,000 – 14,17,500) as the government grant and will make the following entry on receipt of loan:

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Date	Particulars	Dr. (₹)	Cr. (₹)
1.4.20X1	Bank account Dr.	25,00,000	
	To Deferred Grant Income		10,82,500
	To Loan account		14,17,500
	(Being grant initially recorded at fair value)		

Accounting treatment for year ending 31st March, 20X2

As per para 3 of Ind AS 20, grants related to assets are government grants whose primary condition is that an entity qualifying for them should purchase, construct or otherwise acquire long-term assets.

As per para 24-27 of Ind AS 20, Government grants related to assets, including non-monetary grants at fair value, shall be presented in the balance sheet either by setting up the grant as deferred income or by deducting the grant in arriving at the carrying amount of the asset.

One method recognises the grant as deferred income that is recognised in profit or loss on a systematic basis over the useful life of the asset.

The other method deducts the grant in calculating the carrying amount of the asset. The grant is recognised in profit or loss over the life of a depreciable asset as a reduced depreciation expense.

A Ltd. has adopted first method of recognising the grant as deferred income that is recognised in profit or loss on a systematic basis over the useful life of the asset. Here, deferred income is recognised in profit or loss in the proportion in which depreciation expense on the asset is recognised.

Depreciation for the year (20X1-20X2) = ₹ 50,00,000 / 5 years = ₹ 10,00,000

As the loan is to finance a depreciable asset, ₹ 10,82,500 will be recognized in Profit or Loss on the same basis as depreciation.

Since the depreciation is provided on straight line basis by A Limited, it will credit ₹ 2,16,500 (10,82,500 / 5) equally to its statement of profit and loss over the 5 years.

Journal Entries

Date	Particulars	Dr. (₹)	Cr. (₹)
31.3.20X2	Depreciation (Profit or Loss A/c) Dr.	10,00,000	
	To Property, Plant & Equipment		10,00,000
	(Being depreciation provided for the year)		
	Deferred grant income Dr.	2,16,500	
	To Profit or Loss		2,16,500
	(Being deferred income adjusted)		

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Impact on profit or loss due to revocation of government grant as on 31st March 20X3

As per para 32 of Ind AS 20, a government grant that becomes repayable shall be accounted for as a change in accounting estimate. Repayment of a grant related to income shall be applied first against any unamortised deferred credit recognised in respect of the grant. To the extent that the repayment exceeds any such deferred credit, or when no deferred credit exists, the repayment shall be recognised immediately in profit or loss.

Amount payable to Government on account of principal loan = ₹ 25,00,000

Amount payable to Government on account of penalty = ₹ 10,00,000

Journal Entries

Date	Particulars		Dr. (₹)	Cr. (₹)
31.3.20X3	Deferred grant income	Dr.	2,16,500	
	To Profit or Loss			2,16,500
	(Being deferred income adjusted)			
	Loan account (W.N.1)	Dr.	17,78,112	
	Deferred grant income (W.N.2)	Dr.	6,49,500	
	Profit or Loss	Dr.	72,388	
	To Government grant payable			25,00,000
	(Being refund of government grant)			
	Profit or Loss	Dr.	10,00,000	
	To Government grant payable			10,00,000
	(Being penalty payable to government)			

Therefore, total impact on profit or loss on account of revocation of government grant as on 31st March, 20X3 will be ₹ 10,72,388 (10,00,000 + 72,388).

Circumstances giving rise to repayment of a grant related to an asset may require consideration to be given to the possible impairment of the new carrying amount of the asset.

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Working Notes:

1. Amortisation Schedule of Loan

Year	Opening balance of Loan	Interest @ 12%	Closing balance of Loan
31.03.20X2	14,17,500	1,70,100	15,87,600
31.03.20X3	15,87,600	1,90,512	17,78,112

2. Deferred Grant Income

Year	Opening balance	Adjustment	Closing balance
31.03.20X2	10,82,500	2,16,500	8,66,000
31.03.20X3	8,66,000	2,16,500	6,49,500

5. The entity measures the loan on initial recognition at ₹ 4,32,000, which is the present value of the loan (financial liability) — ₹ 5,00,000/$(1.05)^3$. ₹ 68,000, the difference between the loan proceeds received ₹ 5,00,000 (the loan's face value) and present value of the loan ₹ 4,32,000, is a government grant and is recognised immediately as there are no specified future performance conditions.

The amount recognised on day one will accrete to ₹ 5,00,000 over the three-year term using the effective interest method.

Journal Entries

On initial recognition:

		₹	₹
Cash/Bank (financial asset)	Dr.	5,00,000	
To Loan (financial liability)			4,32,000
To Income (profit or loss)			68,000
(Being interest-free loan recognised at fair value and the receipt of a government grant)			

At the end of

Year 1:

		₹	₹
Finance cost (profit or loss)	Dr.	21,600	
To Loan (financial liability)			21,600
(Being accretion of time value recognised on the financial liability)			

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Year 2

		₹	₹
Finance cost (profit or loss)	Dr.	22,680	
To Loan (financial liability)			22,680
(Being accretion of time value recognised on the financial liability)			

Year 3

		₹	₹
Finance cost (profit or loss)	Dr.	23,720	
To Loan (financial liability)			23,720
(Being accretion of time value recognised on the financial liability)			

Immediately after all the accretions are recognised, the carrying amount of the loan is equal to its face value of ₹ 5,00,000, which is also the amount payable to the government.

		₹	₹
Loan (financial liability)	Dr.	5,00,000	
To Cash/Bank			5,00,000
(Being loan repaid to the government)			

Working Note:

Calculation of Amortised Cost

Year	Opening balance (A)	Interest at 5% (B) = (A) x 5%	Cash flow (C)	Closing balance (A) + (B) – (C)
1	4,32,000	21,600	–	4,53,600
2	4,53,600	22,680	–	4,76,280
3	4,76,280	23,720*	(5,00,000)	–

* Difference is due to approximation.

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6. Para 32 of Ind AS 20 under the heading "Repayment of Government Grants" *inter alia* states that a Government grant that becomes repayable shall be accounted for as a change in accounting estimate as per Ind AS 8. Repayment of a grant related to an asset shall be recognised by increasing the carrying amount of the asset or reducing the deferred income balance by the amount repayable. The cumulative additional depreciation that would have been recognised in profit or loss to date in the absence of the grant shall be recognised immediately in profit or loss.

Further para 33 of the standard states that the circumstances giving rise to repayment of a grant related to an asset may require consideration to be given to the possible impairment of the new carrying amount of the asset.

Following the above guidance, below is depreciation computation for the first 2 years where the grant is deducted from the carrying amount of the assets: ₹ in lakhs

Particular	**Government grant received / receivable in case of**	
	₹ 10 lakhs	**₹ 5 lakhs**
Cost of equipment	100.00	100.00
Grant received	(10.00)	(5.00)
Cost of equipment (Net of Grant received)	90.00	95.00
Useful life (years)	10.00	10.00
Depreciation (per annum) for year 1	9.00	9.50
Written down value (WDV) of the equipment at the end of year 1	81.00	85.50
Depreciation for year 2	9.00	9.50
WDV of the equipment at the end of year 2	72.00	76.00
Total cumulative depreciation for years 1 and 2	18.00	19.00

Drawing an analogy from the accounting of the repayment of government grants, similar accounting may be applied for a change in the amount of government grant receivable.

The cumulative additional depreciation of ₹ 1 lakhs [i.e., ₹ 19 lakhs minus ₹ 18 lakhs], would have been recognized to date as an expense, had government grant receivable by entity from inception was ₹ 5 lakhs.

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Therefore, A Ltd. may pass the following journal entry to recognise change in the amount of grant received/receivable: **₹ in lakhs**

Particular	Dr.	Cr.	Remark
Equipment A/c Dr.	4		₹ 76 lakhs – ₹ 72 lakhs
Depreciation Dr.	1		Additional depreciation recognised in P&L
To Bank/Grant receivable		5	Payment of grant /adjustment to grant receivable

A Ltd. to carry out impairment assessment of assets, as per Ind AS requirement, which may trigger in view of an increase in carrying amount of the assets due to repayment of government grant received/ receivable.

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INDIAN ACCOUNTING STANDARD 102 : SHARE-BASED PAYMENT

Questions

1. P Ltd. granted 400 stock appreciation rights (SAR) each to 75 employees on 1st April 20X1 with a fair value ₹ 200. The terms of the award require the employee to provide service for four years in order to earn the award. The SARs are expected to be settled in cash & it is expected that 100% of the employees will exercise the options. The fair value of each SAR at each reporting date is as follows:

   31st March 20X2 ₹ 210

   31st March 20X3 ₹ 220

   31st March 20X4 ₹ 215

   31st March 20X5 ₹ 218

   Required

   (i) Pass Journal Entries for all 4 years for recognition of expenses.

   (ii) What would be the difference if at the end of the second year of service (i.e. at 31st March 20X3), P Ltd. modifies the terms of the award to require only three years of total service instead of 4 years?

2. QA Ltd. had on 1st April, 20X1 granted 1,000 share options each to 2,000 employees. The options are due to vest on 31st March, 20X4 provided the employee remains in employment till 31st March, 20X4.

   On 1st April, 20X1, the Directors of Company estimated that 1,800 employees would qualify for the option on 31st March, 20X4. This estimate was amended to 1,850 employees on 31st March, 20X2 and further amended to 1,840 employees on 31st March, 20X3.

   On 1st April, 20X1, the fair value of an option was ₹ 1.20. The fair value increased to ₹ 1.30 as on 31st March, 20X2 but due to challenging business conditions, the fair value declined thereafter. In September, 20X2, when the fair value of an option was ₹ 0.90, the Directors repriced the option and this caused the fair value to increase to ₹ 1.05. Trading

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conditions improved in the second half of the year and by 31st March, 20X3 the fair value of an option was ₹ 1.25. QA Ltd. decided that additional cost incurred due to repricing of the options on 30th September, 20X2 should be spread over the remaining vesting period from 30th September, 20X2 to 31st March, 20X4.

Suggest the suitable accounting treatment for these transaction as on 31st March, 20X3.

3. A parent, Company P, grants 30 shares to 100 employees each of its subsidiary, Company S, on condition that the employees remain employed by Company S for three years. Assume that at the outset, and at the end of Years 1 and 2, it is expected that all the employees will remain employed for all the three years. At the end of Year 3, none of the employees has left. The fair value of the shares on grant date is ₹ 5 per share. Company S agrees to reimburse Company P over the term of the arrangement for 75% of the final expense recognised by Company S.

What would be the accounting treatment in the books of Company P and Company S?

4. An entity which follows its financial year as per the calendar year grants 1,000 share appreciation rights (SARs) to each of its 40 management employees as on 1st January 20X5. SARs provide the employees with the right to receive (at the date when the rights are exercised) cash equal to the appreciation in the entity's share price since the grant date. All of the rights vest on 31st December 20X6; and they can be exercised during 20X7 and 20X8. Management estimates that, at grant date, the fair value of each SAR is ₹ 11; and it estimates that overall 10% of the employees will leave during the two-year period. The fair values of the SARs at each year end are shown below:

Year	Fair value at year end
31 December 20X5	12
31 December 20X6	8
31 December 20X7	13
31 December 20X8	12

10% of employees left before the end of 20X6. On 31st December 20X7 (when the intrinsic value of each SAR was ₹ 10), six employees exercised their options; and the remaining 30 employees exercised their options at the end of 20X8 (when the intrinsic value of each SAR was equal to the fair value of ₹ 12).

How much expense and liability is to be recognized at the end of each year? Pass the Journal entries.

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5. New Age Technology Limited has entered into following Share Based payment transactions:

(i) On 1st April, 20X1, New Age Technology Limited decided to grant share options to its employees. The scheme was approved by the employees on 30th June, 20X1. New Age Technology Limited determined the fair value of the share options to be the value of the equity shares on 1st April, 20X1.

(ii) On 1st April, 20X1, New Age Technology Limited entered into a contract to purchase IT equipment from Bombay Software Limited and agreed that the contract will be settled by issuing equity instruments of New Age Technology Limited. New Age Technology Limited received the IT equipment on 30th July, 20X1. The share-based payment transaction was measured based on the fair value of the equity instruments as on 1st April, 20X1.

(iii) On 1st April, 20X1, New Age Technology Limited decided to grant the share options to its employees. The scheme was approved by the employees on 30th June, 20X1. The issue of the share options was however subject to the same being approved by the shareholders in a general meeting. The scheme was approved in the general meeting held on 30th September, 20X1. The fair value of the equity instruments for measuring the share-based payment transaction was taken on 30th September, 20X1.

Identify the grant date and measurement date in all the 3 cases of Share based payment transactions entered into by New Age Technology Limited, supported by appropriate rationale for the determination?

6. The following particulars in respect of stock options granted by a company are available:

No. of Employees covered	400	Nominal Value per share	₹ 100
No. of options per Employee	60	Exercise price per share	₹ 125

Shares offered were put in three groups. Group 1 was for 20% of shares offered with vesting period one-year. Group II was for 40% of shares offered with vesting period two-years. Group III was for 40% of shares offered with vesting period three-years. Fair value of option per share on grant date was ₹ 10 for Group I, ₹ 12.50 for Group II and ₹ 14 for Group III.

Position on 1st Year	Position on 2nd Year	Position on 3rd Year
- No. of employees left = 40	- Employees left = 35	- Employees left = 28
- Estimate of employees to leave in Year 2 = 36	- Estimate of employees to leave in Year 3 = 30	- Employees exercising Options in Group III = 295

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- Estimate of employees to leave in Year 3 = 34 - Employees exercising Options in Group I = 350	- Employees exercising Options in Group II = 319	

Options not exercised immediately on vesting, were forfeited. Compute expenses to recognise in each year and show important accounts in the books of the company.

7. Entity A runs a copper-mining business. Entity A has a year-end of 31st March. Dividends declared on the shares accrue to the employees during the three-year period. If the condition is met, the employees will receive the shares together with the dividends that have been declared on those shares during the three years upto 31st March, 20X3.

The entity estimates that on 1st April, 20X0 its shares are valued at ₹ 10 each. The grant date fair amount of each share is ₹ 10.

Entity A prepares annual financial statements for the year ended 31st March and:

- on 1st April, 20X0 it estimates that 800 shares will vest;
- at the end of the first year (31st March, 20X1) it has revised this estimate to 780;
- at 31st March, 20X2 it has further revised this estimate to 750; and
- 750 shares vest on 31st March, 20X3 based on the number of employees still employed on that date.

On 1st April, 20X0 as part of a long-term incentive scheme, Entity A provisionally awards its sales employees 1,000 Entity A's shares receivable on 31st March, 20X3. Explain the accounting treatment for the above share-based awards based on satisfaction of the condition that the sales employees must remain in employment until 31st March, 20X3. The requirement to remain in employment is a service condition and would not be reflected in the fair value of the share awards.

8. Fashion India Ltd. (FIL) entered into an agreement with RFD Ltd. on 10th August, 20X2 for purchasing a machinery. The agreement has a clause that FIL will have to settle the consideration of machinery purchased by issuing its equity shares. FIL agreed to the clause and the order was confirmed. Machinery was supplied vide invoice dated 25th October, 20X2 and delivered on 1st November, 20X2. The agreed purchase consideration was ₹ 150 Lakhs and the fair value of the machinery supplied was estimated to be ₹ 160 Lakhs. As agreed, FIL issued 1,00,000 equity shares of face value ₹ 100 each to RFD Ltd.

As per Ind AS 102 'Share Based Payment', what should be the price and the date for recording the machinery purchased from RFD Ltd.?

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9. At 1st April, 20X1 an entity enters into a share-based payment arrangement with its employees. The terms of the award are as follows:

   1. Employees are required to work for the entity for five years; after that they will receive a cash payment equal to the value of the entity's shares.
   2. If the entity achieves a successful IPO during the five -year period, the employees will receive free shares rather than a cash payment. So, employees might receive free shares at the time of IPO or a cash payment at the end of 5th year, but not both.
   3. No employees are expected to leave the entity over the next five years.
   4. At the date of the award and till the end of second year, it was not probable that a successful IPO would occur before year 5.
   5. At the end of year 3, a successful IPO becomes probable; and management expects it to occur in year 4.
   6. At the end of year 4, a successful IPO occurs; and employees receive free shares.
   7. The fair value of the equity-settled award alternative is ₹ 1,000 at the grant date. The fair value of the cash-settled alternative, ignoring the probability that an IPO will happen within the five years, is as follows:
      - ₹ 50 at the end of year 1;
      - ₹ 500 at the end of year 2;
      - ₹ 100 at the end of year 3; and
      - ₹ 50 at the end of year 4.

   Required:

   How would the entity account for this transaction?

10. Max Ltd. enters into a share-based payment arrangement with its employees on the following terms:

    1. Each employee will receive 500 shares if they remain employed for a period of five years.
    2. It is expected that no employees are expected to leave during the five year period.
    3. The grant date fair value of the award is ₹ 4,000.

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4. If an employee leaves Max Ltd. after the five -year period, but before its shares are listed, the entity has an option to purchase the shares for fair value from the employee.

5. On grant date, Max Ltd. expects to list in the list in the next 3-5 years. This is the first share-based plan and Max Ltd. has no past practice or stated policy of buying back shares from employees when the employees leave. Neither does Max Ltd. expect that it will settle the awards in cash.

6. At the end of year 2, Max Ltd. on longer expects to list; and the employees are informed of this fact. Max Ltd. announces to employees that if it is not listed after the five years and employees leave, Max Ltd. will repurchase the shares. The fair value of the shares is ₹ 6,000 on this date.

7. At the end of year 3, the fair value of the liability has increased to ₹ 9,000

Required

(1) Determine the accounting for years 1-3.

(ii) What would be the treatment of the awards, if at the end of year 2, Max Ltd. does not inform employees that it will repurchase the shares after a five-year period, and a listing of the entity's shares is still achievable. But at the end of year 6, Max Ltd. has not yet listed and two of the employees leave. Max Ltd. exercises its settlement choice and buys the leaving employee's shares at fair value.

11. H Ltd. is a parent company and has a subsidiary S Ltd. H Ltd. and S Ltd. are unlisted entities. Following arrangements with respect to ESOP scheme took place between them:

1. Original ESOP scheme by H Ltd. (Parent ESOP scheme)

At the beginning of year 1, H Ltd. granted 1,500 options in its own shares to its own employees as well as S Ltd.'s employees (i.e. 1,000 to H Ltd.'s employees and 500 to S Ltd.'s employees) with a fair value of ₹ 15 per options, conditional upon the completion of 3 years' service. H Ltd. will settle in its own equity shares. All the options are expected to vest. H Ltd. doesn't recharge to S Ltd. for ESOP expenses.

2. New ESOP scheme by S Ltd. (Subsidiary ESOP scheme)

H Ltd. and S Ltd. are unlisted entities. However, at the end of Year 1, S Ltd. gets listed.

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At the beginning of year 2, S Ltd. offers 1,500 options in its own shares to H Ltd.'s employees and its own employees (i.e. 1,000 to H Ltd.'s employees and 500 to S Ltd.'s employees), conditional upon H Ltd. and S Ltd.'s employees surrendering the right over parent ESOP scheme.

Remaining vesting period is same as H Ltd.'s ESOP scheme i.e. conditional upon the completion of remaining 2 years' service.

Incremental fair value of new ESOP scheme is ₹ 6. All the options are expected be vest. All H Ltd. and S Ltd.'s employees have opted for new ESOP scheme.

S Ltd. doesn't recharge to H Ltd. for ESOP expenses.

Analyze the above arrangements from the perspective of Consolidated Financial Statements and Individual Financial Statements of both parent and subsidiary. Also show the accounting treatment of the above arrangements in the Consolidated Financial Statements and Individual Financial Statements of both parent and subsidiary.

Answers

1. Journal entries in the books of P Ltd (without modification of service period of stock appreciation rights) **(₹ in lakhs)**

Date	Particulars	Debit	Credit
31.03.20X2	Profit and Loss account Dr. To Liability against SARs (Being expenses liability for stock appreciation rights recognised)	15.75	15.75
31.03.20X3	Profit and Loss account Dr. To Liability for SARs (Being expenses liability for stock appreciation rights recognised)	17.25	17.25
31.03.20X4	Profit and Loss account Dr. To Liability for SARs (Being expenses liability for stock appreciation rights recognised)	15.38	15.38
31.03.20X5	Profit and Loss account Dr. To Liability for SARs (Being expenses liability for stock appreciation rights recognised)	17.02	17.02

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Journal entries in the books of P Ltd (with modification of service period of stock appreciation rights) **(₹ in lakhs)**

Date	Particulars	Debit	Credit
31.03.20X2	Profit and Loss account Dr. To Liability for SARs (Being expenses liability for stock appreciation rights recognised)	15.75	15.75
31.03.20X3	Profit and Loss account Dr. To Liability for SARs (Being expenses liability for stock appreciation rights recognised)	28.25	28.25
31.03.20X4	Profit and Loss account Dr. To Liability for SARs (Being expenses liability for stock appreciation rights recognised)	20.50	20.50

Working Notes:

Calculation of expenses for issue of stock appreciation rights without modification of service period

For the year ended 31st March 20X2

= ₹ 210 x 400 awards x 75 employees x 1 year /4 years of service = ₹ 15,75,000

For the year ended 31st March 20X3

= ₹ 220 x 400 awards x 75 employees x 2 years /4 years of service - ₹ 15,75,000 previous recognised

= ₹ 33,00,000 - ₹ 15,75,000 = ₹ 17,25,000

For the year ended 31st March 20X4

= ₹ 215 x 400 awards x 75 employees x 3 years/4 years of service - ₹ 33,00,000 previously recognised

= ₹ 48,37,500 - ₹ 33,00,000 = ₹ 15,37,500

For the year ended 31st March, 20X5

= ₹ 218 x 400 awards x 75 employees x 4 years / 4 years of service – ₹ 48,37,500 previously recognised

= ₹ 65,40,000 – ₹ 48,37,500 = ₹ 17,02,500

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Calculation of expenses for issue of stock appreciation rights with modification of service period

For the year ended 31st March 20X2

= ₹ 210 x 400 awards x 75 employees x 1 year / 4 years of service = ₹ 15,75,000

For the year ended 31st March 20X3

= ₹ 220 x 400 awards x 75 employees x 2 years / 3 years of service - ₹ 15,75,000 previous recognised

= ₹ 44,00,000 - ₹ 15,75,000 = ₹ 28,25,000

For the year ended 31st March 20X4

= ₹ 215 x 400 awards x 75 employees x 3 years/ 3 years of service - ₹ 44,00,000 previous recognised

= ₹ 64,50,000 - ₹ 44,00,000 = ₹ 20,50,000.

2. Paragraph 27 of Ind AS 102 requires the entity to recognise the effects of repricing that increase the total fair value of the share-based payment arrangement or are otherwise beneficial to the employee.

If the repricing increases the fair value of the equity instruments granted paragraph B43(a) of Appendix B requires the entity to include the incremental fair value granted (i.e. the difference between the fair value of the repriced equity instrument and that of the original equity instrument, both estimated as at the date of the modification) in the measurement of the amount recognised for services received as consideration for the equity instruments granted.

If the repricing occurs during the vesting period, the incremental fair value granted is included in the measurement of the amount recognised for services received over the period from the repricing date until the date when the repriced equity instruments vest, in addition to the amount based on the grant date fair value of the original equity instruments, which is recognised over the remainder of the original vesting period.

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Accordingly, the amounts recognised in years 1 and 2 are as follows:

Year	Calculation	Compensation expense for period	Cumulative compensation expense
		₹	₹
1	[1,850 employees x 1,000 options x ₹ 1.20] x $^1/_3$	7,40,000	7,40,000
2	(1,840 employees x 1,000 options x [(₹ 1.20 x $^2/_3$) + {(₹ 1.05 - 0.90) x 0.5/1.5}] – 7,40,000	8,24,000	15,64,000

Note: Year 3 calculations have not been provided as it was not required in the question.

3. Company S expects to recognise an expense totalling ₹ 15,000 (30 shares x 100 employees x ₹ 5 per share) and, therefore, expects the total reimbursement to be ₹ 11,250 (₹ 15,000 x 75%). Company S therefore reimburses Company P ₹ 3,750 (₹ 11,250 x 1/3) each year.

Accounting by Company S

In each of Years 1 to 3, Company S recognises an expense in profit or loss, the cash paid to Company P, and the balance of the capital contribution it has received from Company P.

Journal Entry		₹	
Employee benefits expenses	Dr.	5,000	
To Cash/Bank			3,750
To Equity (Contribution from the parent)			1,250
(To recognise the share-based payment expense and partial reimbursement to parent)			

Accounting by Company P

In each of Years 1 to 3, Company P recognises an increase in equity for the instruments being granted, the cash reimbursed by Company S, and the balance as investment for the capital contribution it has made to Company S.

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Journal Entry		₹	₹
Investment in Company S	Dr.	1,250	
Cash/Bank	Dr.	3,750	
To Equity			5,000
(To recognise the grant of equity instruments to employees of subsidiary less partial reimbursement from subsidiary)			

4. The amount recognized as an expense in each year and as a liability at each year-end) is as follows:

Year	*Expense* ₹	*Liability* ₹	Calculation of Liability
31 December 20X5	2,16,000	2,16,000	= 36 x 1,000 x 12 x ½
31 December 20X6	72,000	2,88,000	= 36 x 1,000 x 8
31 December 20X7	1,62,000*	3,90,000	= 30 x 1,000 x 13
31 December 20X8	(30,000)**	0	Liability extinguished

* Expense comprises an increase in the liability of ₹ 102,000 and cash paid to those exercising their SARs of ₹ 60,000 (6 x 1,000 x 10).

** Difference of opening liability (₹ 3,90,000) and actual liability paid [₹ 3,60,000 (30 x 1,000 x 12)] is recognised to Profit and loss ie ₹ 30,000.

Journal Entries

31 December 20X5			
Employee benefits expenses	Dr.	2,16,000	
To Share-based payment liability			2,16,000
(Fair value of the SAR recognized)			
31 December 20X6			
Employee benefits expenses	Dr.	72,000	
To Share-based payment liability			72,000
(Fair value of the SAR re-measured)			

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31 December 20X7			
Employee benefits expenses	Dr.	1,62,000	
To Share-based payment liability			1,62,000
(Fair value of the SAR recognized)			
Share-based payment liability	Dr.	60,000	
To Cash			60,000
(Settlement of SAR)			
31 December 20X8			
Share-based payment liability	Dr.	30,000	
To Employee benefits expenses			30,000
(Fair value of the SAR recognized)			
Share-based payment liability	Dr.	3,60,000	
To Cash			3,60,000
(Settlement of SAR)			

Note: Last two entries can be combined.

5. Ind AS 102 defines grant date and measurement dates as follows:

(a) **Grant date:** The date at which the entity and another party (including an employee) agree to a share-based payment arrangement, being when the entity and the counterparty have a shared understanding of the terms and conditions of the arrangement. At grant date the entity confers on the counterparty the right to cash, other assets, or equity instruments of the entity, provided the specified vesting conditions, if any, are met. If that agreement is subject to an approval process (for example, by shareholders), grant date is the date when that approval is obtained.

(b) **Measurement date:** The date at which the fair value of the equity instruments granted is measured for the purposes of this Ind AS. For transactions with employees and others providing similar services, the measurement date is grant date. For transactions with parties other than employees (and those providing similar services), the measurement date is the date the entity obtains the goods or the counterparty renders service.

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Applying the above definitions in the given scenarios following would be the conclusion based on the assumption that the approvals have been received prospectively:

Scenario	Grant date	Measurement date	Base for grant date	Base for measurement date
(i)	30th June, 20X1	30th June, 20X1	The date on which the scheme was approved by the employees	For employees, the measurement date is grant date
(ii)	1st April, 20X1	30th July, 20X1	The date when the entity and the counterparty entered a contract and agreed for settlement by equity instruments	The date when the entity obtains the goods from the counterparty
(iii)	30th September, 20X1	30th September, 20X1	The date when the approval by shareholders was obtained	For employees, the measurement date is grant date

6. Total number of Options per employee = 60

Group I - 20% vesting in Year 1	Group II - 40% vesting in Year 2	Group III - 40% vesting in Yr. 3
= 12 options, Vesting period = 1 Yr.	= 24 options, Vesting period = 2 Yrs.	= 24 options, Vesting pd. = 3 Yrs.

Computation of Expenses for all the years

Group = No. of Options	Group I = 12 Options	Group II = 24 Options		Group III = 24 Options		
	Year 1	Year 1	Year 2	Year 1	Year 2	Year 3
(a) Employees at year end = [Opening No. of Employees - Forfeiture]	400 - 40 = 360	400 - 40 = 360	360 - 35 = 325	400 - 40 = 360	360 - 35 = 325	325 - 28 = 297

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(b)	Expected to leave in future	NA	36	NA	36 + 34 = 70	30	NA
(c)	No. of employees eligible (a - b)	360	324	325	290	295	297
(d)	Options expected to Vest = [(c) x No. of Shares]	(360 x 12 sh.) 4,320	(324 x 24 sh.) 7,776	(325 x 24 sh.) 7,800	(290 x 24 sh.) 6,960	(295 x 24 sh.) 7,080	(297 x 24 sh.) 7,128
(e)	FV per option =	₹ 10	₹ 12.50	₹ 12.50	₹ 14	₹ 14	₹ 14
(f)	Value of Total Options = [d x e]	₹ 43,200	₹ 97,200	₹ 97,500	₹97,440	₹99,120	₹ 99,792
(g)	Total Cumulative Cost of Options = [(f) x Completed Yrs/ Total Yrs)	₹ 43,200	[(f) x 1/2] ₹ 48,600	[(f) x 2/2] ₹ 97,500	[(f) x 1/3] ₹32,480	[(f) x 2/3] ₹66,080	[(f) x 3/3] ₹ 99,792
(h)	Less: Recognized in last years	0	0	₹ 48,600	0	₹32,480	₹ 66,080
(i)	Expenses to be recognized	₹ 43,200	₹ 48,600	₹ 48,900	₹32,480	₹33,600	₹ 33,712
(j)	Employees not exercising ESOP	10 Employees	325 - 319 = 6 Employees		297 - 295 = 2 Employees		
(k)	Total Expenses for-						
	Year 1	₹ 43,200 (Gr. 1) + ₹ 48,600 (Gr. 2) + ₹ 32,480 (Gr. 3) = ₹ 1,24,280					
	Year 2	₹ 48,900 (Gr. 2) + ₹ 33,600 (Gr. 3) = ₹ 82,500					
	Year 3	₹ 33,712 (Gr. 3 only)					

Employees Benefit Expenses A/c			
Year 1			
	₹		₹
To Share-based Payment Reserve A/c	1,24,280	By Profit and Loss A/c	1,24,280
	1,24,280		1,24,280

Year 2			
To Share-based Payment Reserve A/c	82,500	By Profit and Loss A/c	82,500
	82,500		82,500

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Year 3			
To Share-based Payment Reserve A/c	33,712	By Profit and Loss A/c	33,712
	33,712		33,712

Share-based Payment Reserve A/c

Year 1			
	₹		₹
To Retained Earnings [(360 - 350) Emp x 12 Options x ₹ 10]	1,200	By Employees Benefit Expenses A/c	1,24,280
To Share Capital (350 Emp x 12 Options x ₹ 100)	4,20,000	By Bank A/c. (350 Emp x 12 Options x ₹ 125)	5,25,000
To Securities Premium (350 Emp x 12 Options x ₹ 35)	1,47,000		
To balance c/d	81,080		
	6,49,280		6,49,280
Year 2			
To Retained Earnings [(325 - 319) Emp x 24 Options x ₹ 12.50]	1,800	By balance b/d.	81,080
		By Employees Benefit Expenses A/c	82,500
To Share Capital (319 Emp x 24 Options x ₹ 100)	7,65,600	By Bank A/c. (319 Emp x 24 Options x ₹ 125)	9,57,000
To Securities Premium (319 Emp x 24 Options x ₹ 37.50)	2,87,100		
To balance c/d	66,080		
	11,20,580		11,20,580
Year 3			
To Retained Earnings [(297 - 295) Emp x 24 Options x ₹ 14]	672	By Balance b/d	66,080
		By Employees Benefit Expenses A/c	33,712
To Share Capital (295 Emp x 24 Options x ₹ 100)	7,08,000	By Bank A/c. (295 Emp x 24 Options x ₹ 125)	8,85,000
To Securities Premium (295 Emp x 24 Options x ₹ 39)	2,76,120		
	9,84,792		9,84,792

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Working Note:

Calculation of Securities Premium			
	Group I	Group II	Group III
	Year 1	Year 2	Year 3
Exercise Price received per share	125.00	125.00	125.00
Value of service received per share, being the FV of the Options	10.00	12.50	14.00
Total Consideration received per share	135.00	137.50	139.00
Less: Nominal Value per share	(100.00)	(100.00)	(100.00)
Securities Premium per share	35.00	37.50	39.00

7. The grant date fair value amount would be recognised as an expense over the three-year service period adjusted by the number of shares expected to vest. Consequently, for each period, Entity A estimates how many eligible employees are expected to be employed on 31st March, 20X3 and this forms the basis for that adjustment. The journal entries would be:

Year 1 (Year ended 31st March, 20X1)

Employee benefit expenses A/c	Dr.	₹ 2,600	
To Share-based payment reserve			₹ 2,600

(To recognise the receipt of employee services in exchange for shares)

Year 2 (Year ended 31st March, 20X2)

Employee benefit expenses A/c	Dr.	₹ 2,400	
To Share-based payment reserve			₹ 2,400

(To recognise the receipt of employee services in exchange for shares)

Year 3 (Year ended 31st March, 20X3)

Employee benefit expenses A/c	Dr.	₹ 2,500	
To Share-based payment reserve			₹ 2,500

(To recognise the receipt of employee services in exchange for shares)

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Working Notes:

1. Year 1

780 shares expected to vest x ₹ 10 grant date fair value of each share x 1/3 of vesting period elapsed = ₹ 2,600 recognised in Year 1.

2. Year 2

(750 shares expected to vest x ₹ 10 grant date fair value of each share x 2/3 of vesting period elapsed) less ₹ 2,600 recognised in Year 1 = ₹ 2,400 recognised in Year 2.

3. Year 3

(750 shares x ₹ 10 grant date fair value of each share) less ₹ 5,000 recognised in Years 1 and 2 = ₹ 2,500 recognised in Year 3.

8. As per para 10 of Ind AS 102, for equity settled share-based payment transactions, the entity shall measure the goods or services received, and the corresponding increase in equity, directly, at the fair value of the goods or services received, unless that fair value cannot be estimated reliably. If the entity cannot estimate reliably the fair value of the goods or services received, the entity shall measure their value, and the corresponding increase in equity, indirectly, by reference to the fair value of the equity instruments granted. Here, since the fair value of the asset received can be estimated reliably, the price for recording the machinery would be ₹ 160 lakhs.

Further, as per para 7 of Ind AS 102, the control is assumed to be transferred on the date the delivery is received which is 1st November, 20X2. Therefore, this will be the date for recognizing the machinery in the books.

Property, plant and equipment	Dr.	₹ 160 lakhs	
To Equity share capital			₹ 100 lakhs
To Securities premium			₹ 60 lakhs

9. At the end of first and second year, the entity would not record a charge for the equity-settled award; this is because the vesting conditions are not expected to be met (that is, a successful IPO is not probable).

Hence, a liability is recognised because cash settlement is probable until year 3. (Refer para 42 of Ind AS 102)

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		Dr. (₹)	Cr. (₹)
Year end 31st March, 20X2			
Employee benefits expense (₹ 50 / 5years)	Dr.	10	
To Share-based payment liability			10
(Cash settled award recognised over the vesting period)			
Year end 31st March, 20X3			
Employee benefits expense{(₹ 500 x 2/5)- ₹10}	Dr.	190	
To Share-based payment liability			190
(Cash -settled award recognised over the vesting period)			

At the end of year 3, a successful IPO becomes probable; so the entity would record a charge for an equity-settled award.

There should also be a reversal of the SBP liability, because this award is now deemed not probable.

Year end 31st March, 20X4		Dr.	Cr.
Share-based payment Liability	Dr.	200	
To Share-based Payment Reserve			200
(Reversal of cash -settled share-based payment, because IPO deemed probable)			
Employee benefits expense {(₹ 1,000 x ¾) - ₹ 200}	Dr.	550	
To Share-based Payment Reserve			550
(Equity -Settled award measured at grant date fair value of ₹ 550, because IPO is now deemed probable)			
Year end 31st March, 20X5			
Employee Benefits Expenses	Dr.	250	
To Share-based Payment Reserve			250
(Equity settled award recognised over the vesting period)			
Share-based Payment Reserves	Dr.	1,000	
To Equity share capital			1,000
(Settlement of share-based payment award through issuance of free shares)			

Equity - settled award measured at fair value of ₹ 1,000. All of the vesting conditions for this ward have been met in year 4; so the award has vested, and the remaining charge of ₹ 250 (₹ 1,000 – ₹ 750) is recognised in the Statement of profit and loss.

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10. **(i)** On the grant date, the employer accounts for the arrangement as an equity settled share-based payment because there is no present obligation to settle in cash.

Journal Entries

		₹	₹
Employee benefit expenses (4,000 x 1/5)	Dr.	800	
To Share-based payment reserve			800

At the end of year 2, Max Ltd. has created an obligation to settle in cash through a change in stated policy:

Employee benefit expenses (4,000 x 1/5)	Dr.	800	
To Share-based payment reserve			800

The above entry is to record ₹ 4,000 vesting over a period of five years which was the expectation until year end.

Share-based payment reserve	Dr.	2,400	
To Share-based payment liability (6,000 x 2/5)			2,400

In substance the reclassification represents the repurchase by Max Ltd. of its own shares, so no further expense is recognized. The subsequent measurement of the liability would follow the requirements for a cash settled share – based payment.

At the end of year 3, the award is accounted for on a cash – settled basis as follows:

Employee benefit expenses	Dr.	3,000	
To Share-based payment liability (9,000x3/5–2,400)			3,000

(ii) The settlement of the two employee's award may create a valid expectation in the minds of the remaining employees that they will also receive cash when they leave. However, judgement will be required to determine if an isolated transaction establishes past practice resulting in a cash settlement obligation for Max Ltd. Depending on any contrary facts, Max Ltd. should treat the remaining awards as cash settled, because it now revisits the classification of any similar grants that it has made and evaluate if it should reclassify them to cash-settled.

11. **Analysis of new ESOP scheme given on surrendering options under original ESOP scheme as replacement scheme**

The original ESOP scheme was issued by H Ltd. to its own employees as well as S Ltd.'s employees.

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S Ltd. has issued new ESOP scheme to its own and H Ltd.'s employees, conditional upon employees of S Ltd. and H Ltd. surrendering the right over original ESOP scheme.

Since obtaining the options under new ESOP scheme is conditional on surrendering the employee's entitlement under original ESOP scheme, the new scheme S Ltd. would be designated as replacement scheme for original scheme by S Ltd.

Accordingly, in the current fact pattern, the original ESOP scheme of H Ltd. has been replaced with the new ESOP scheme of S Ltd. Hence, according to para 28(c) of Ind AS 102, modification accounting would apply.

Classification of new ESOP scheme

(i) Consolidated Financial Statements (CFS):

The award is settled in equity shares of the group and therefore treated as an equity-settled share-based payment.

(ii) Individual (Stand-alone) Financial Statements (SFS) of H Ltd.:

From H Ltd.'s perspective, the award is treated as an equity-settled share-based payment. This is because H Ltd. does not have an obligation to settle the award.

(iii) Individual (Stand-alone) Financial Statements (SFS) of S Ltd.

ESOP will be settled against issue of S Ltd.'s own shares. Therefore, ESOP are classified as 'Equity settled'.

To the extent S Ltd. provides ESOP to H Ltd.'s employees, the same will be treated as dividend distribution to H Ltd.

Accounting for change in settlor from H Ltd. (parent) to S Ltd. (subsidiary)

(i) Consolidated Financial Statements (CFS) of H Ltd.:

(a) As on the date of new ESOP scheme by S Ltd., there is ESOP reserve standing in CFS. This ESOP reserves is classified as 'Equity' in CFS considering that under original scheme, equity shares of H Ltd. are given.

(b) ESOP reserve as per (a) above in CFS will continue even after new scheme. Since new scheme is accounted as modification of original scheme, grant date fair value as per original scheme plus incremental fair value as per new scheme is recognised as ESOP cost in CFS. Incremental fair value is accounted prospectively.

(c) ESOP reserve as per (a) above in CFS is reclassified from 'Equity' to "Non-controlling interest' (NCI) due to change in settlor from H Ltd. (Parent) to S Ltd. (Subsidiary). This is because the definition of NCI refers to the equity in a subsidiary not attributable, directly or indirectly to a Parent.

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(ii) Stand-alone financial statements (SFS) of parent H Ltd. and subsidiary S Ltd.:

(a) Ind AS 102 doesn't contain any specific guidance on accounting for change in settlor.

(b) Under original ESOP scheme, Parent H Ltd. was settlor. Therefore, on the date of new ESOP scheme, in the SFS of Parent H Ltd., there is 'ESOP reserves which would have been utilised in case Parent continued as settlor.

(c) However, under the new ESOP scheme, Subsidiary S Ltd. is settlor. 'ESOP reserves' standing in SFS of Parent H Ltd. is no longer required as H Ltd. has passed on its responsibility of settling ESOP scheme to S Ltd. Therefore, 'ESOP reserves' in SFS of Parent H Ltd. is reversed.

(d) Subsidiary S Ltd. under new ESOP scheme become settlor for an existing ESOP plan. However, in SFS of S Ltd. there is no 'ESOP reserves' standing. Therefore 'ESOP reserves' relating to period already elapsed under original ESOP scheme is to be recognised in SFS of Subsidiary S Ltd.

Journal Entries

<table>
<tr><th>Years</th><th>ESOP scheme references</th><th>Parent (H Ltd.) Standalone Financial Statement (P SFS)</th><th>Subsidiary (S Ltd.) Standalone Financial Statements (S SFS)</th></tr>
<tr><td>Year 1</td><td>Original ESOP scheme by Parent H Ltd.</td><td>
<table>
<tr><th>Particular</th><th>Debit</th><th>Credit</th></tr>
<tr><td>Employees expenses* Dr.</td><td>5,000</td><td></td></tr>
<tr><td>Investment in Subsidiary** Dr.</td><td>2,500</td><td></td></tr>
<tr><td>To Equity (ESOP reserves)</td><td></td><td>7.500</td></tr>
<tr><td colspan="3">(Recognition of employees expenses/ investment in subsidiary under ESOP scheme by Parent for Year 1)</td></tr>
</table>
[*Parent employees = 1,000 options x ₹ 15 x 1/3 = ₹ 5,000]
[**Subsidiary employees = 500 options x ₹ 15 x 1/3 = ₹ 2,500]</td><td>
<table>
<tr><th>Particular</th><th>Debit</th><th>Credit</th></tr>
<tr><td>Employees expenses# Dr.</td><td>2,500</td><td></td></tr>
<tr><td>To Equity (Capital Contribution from Parent)</td><td></td><td>2,500</td></tr>
<tr><td colspan="3">(Recognition of employees expenses under ESOP scheme by Parent for Year 1)</td></tr>
</table>
[#Subsidiary employees = 500 options x ₹ 2,500]</td></tr>
<tr><td>Year 2- Beginning</td><td>Accounting for change in settlor from Parent to Subsidiary – at the beginning of Year 2</td><td>
<table>
<tr><th>Particular</th><th>Debit</th><th>Credit</th></tr>
<tr><td>Equity (ESOP reserves) Dr.</td><td>7,500</td><td></td></tr>
<tr><td>To Investment in Subsidiary Dr.</td><td></td><td>2,500</td></tr>
<tr><td>To Dividend Income (Deemed Distribution from Subsidiary)</td><td></td><td>5,000</td></tr>
</table>
</td><td>
<table>
<tr><th>Particular</th><th>Debit</th><th>Credit</th></tr>
<tr><td>Equity (Distribution to Parent) Dr.</td><td>5,000</td><td></td></tr>
<tr><td>Equity (capital contribution from Parent) Dr.</td><td>2,500</td><td></td></tr>
<tr><td>To Equity (ESOP reserves)</td><td></td><td>7,500</td></tr>
</table>
</td></tr>
</table>

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<table>
<tr><td></td><td></td><td>(Parent is no longer required to settle ESOP for its own employees as well as subsidiary employees under New ESOP scheme by Subsidiary)</td><td>(Accounting of obligations taken by Subsidiary under New ESOP scheme by Subsidiary for parent employees as well as its own employees. This entry is passed since subsidiary has taken obligation of existing scheme)</td></tr>
<tr><td>Year 2-End</td><td>Modifications accounting – New ESOP scheme by Subsidiary</td><td>
<table>
<tr><th>Particular</th><th>Debit</th><th>Credit</th></tr>
<tr><td>Employees expenses* Dr.</td><td>8,000</td><td></td></tr>
<tr><td>To Dividend Income (Deemed Distribution from Subsidiary)</td><td></td><td>8,000</td></tr>
<tr><td colspan="3">(Recognition of employee expenses for parent employees under Old ESOP scheme and incremental fair value under New ESOP scheme for Year 2)</td></tr>
</table>
[*Parent employees =
A. Original ESOP scheme = (1000 options x ₹ 15 x 2/3 – 5,000) = ₹ 5,000
B. Incremental fair value – New ESOP scheme = (1000 options x ₹ 6 x ½) = ₹ 3,000
Total = ₹ 8,000]</td><td>
<table>
<tr><th>Particular</th><th>Debit</th><th>Credit</th></tr>
<tr><td>Equity (Distribution to Parent)# Dr.</td><td>8,000</td><td></td></tr>
<tr><td>Employees expenses## Dr.</td><td>4,000</td><td></td></tr>
<tr><td>To Equity (ESOP reserves)</td><td></td><td>12,000</td></tr>
<tr><td colspan="3">(Recognition of employees' expenses for parent employees as well as subsidiary employees under Old ESOP scheme and incremental fair value under New ESOP scheme for Year 2)</td></tr>
</table>
[#Parent employees = ₹ 8,000 (i.e. computation same as parent)
##Subsidiary employees =
A. Original ESOP scheme = (500 options x ₹ 15 x 2/3 – 2,500) = ₹ 2,500
Incremental fair value – New ESOP scheme = (500 options x ₹ 6 x ½) = ₹ 4,000]</td></tr>
<tr><td>Year 3-End</td><td>Modifications accounting – New ESOP scheme by Subsidiary</td><td>
<table>
<tr><th>Particular</th><th>Debit</th><th>Credit</th></tr>
<tr><td>Employees expenses Dr.</td><td>8,000</td><td></td></tr>
<tr><td>To Dividend Income (Deemed Distribution from Subsidiary)</td><td></td><td>8,000</td></tr>
<tr><td colspan="3">(Recognition of employee expenses for parent employees under New ESOP scheme for Year 2)</td></tr>
</table>
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<table>
<tr><th>Particular</th><th>Debit</th><th>Credit</th></tr>
<tr><td>Equity (Distribution to Parent) Dr.</td><td>8,000</td><td></td></tr>
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<tr><td colspan="3">(Recognition of employees' expenses for parent employees as well as subsidiary employees under under New ESOP scheme for Year 2)</td></tr>
</table>
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ACCOUNTING AND REPORTING OF FINANCIAL INSTRUMENTS

Questions

1. On 1st April, 2X01, Entity X issued a 10% convertible debenture with a face value of ₹ 1,000 maturing on 31st March, 2X11. The debenture is convertible into ordinary shares of Entity X at a conversion price of ₹ 50 per share. Interest is payable yearly in cash. On 1st April, 2X02, to induce the holder to convert the convertible debenture promptly, Entity X reduces the conversion price to ₹ 40 if the debenture is converted before 1st June, 2X02 (i.e., within 60 days). The market price of Entity X's ordinary shares on the date the terms are amended is ₹ 80 per share. How will the revised terms be accounted?

2. ABC Ltd. issues 4% 1,00,000 OCPS at a face value of ₹ 100 per share on 1st April, 20X1 and these are redeemable after 5 years, i.e., on 31st March, 20X6. Dividend is non-cumulative. Each preference shares entitles the holders to 10 equity shares and the preference shares are optionally convertible by the holder at any time until maturity.

   How will the preference shares be classified at initial recognition assuming that a comparable instrument carries a market interest rate of 7%? Provide journal entries for year 1. Will this classification be changed subsequently in case there is likelihood that OCPS will be encashed at the end of the maturity period?

3. State whether the following items meet the definition of Financial Asset or Financial Liability for an entity:

   (i) A bank advances an entity a five-year loan. The bank also provides the entity with an overdraft facility for a number of years.

   (ii) Entity A owns preference shares in Entity B. The preference shares entitle Entity A to dividends, but not to any voting rights.

   (iii) An entity has a present obligation in respect of income tax due for the prior year.

   (iv) In a lawsuit brought against an entity, a group of people is seeking compensation for damage to their health as a result of land contamination believed to be caused by waste from the entity's production process. It is unclear whether the entity is the source of the contamination since many entities operate in the same area and produce similar waste.

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4. In an arm's length transaction, Entity X buys 10,000 convertible preference shares in Company Z for cash payments of ₹ 40,000, with ₹ 25,000 payable immediately and ₹ 15,000 payable in two years. The market rate of annual interest for a two-year loan to the entity would be 6%.

   Explain the accounting treatment for the said transaction.

5. SEL has applied for a term loan from a bank for business purposes. As per the loan agreement, the loan required a personal guarantee of one of the directors of SEL to be executed. In case of default by SEL, the director will be required to compensate for the loss that bank incurs. Mr. Pure Joy, one of the directors had given guarantee to the bank pursuant to which the loan was sanctioned to SEL. SEL does not pay premium or fees to its director for providing this financial guarantee.

   Whether SEL is required to account for the financial guarantee received from its director? Will there be any disclosures under Ind AS 24?

6. On 1st April, 20X1, a bank provides an entity with a four-year loan of ₹ 5,000 on normal market terms, including charging interest at a fixed rate of 8% per year. Interest is payable at the end of each year. The figure of 8% is the market rate for similar four-year fixed-interest loans with interest paid annually in arrears. Transaction cost of ₹ 100 is incurred on originating the loan. Effective interest rate in this case is 8.612%.

   In 20X1-20X2, the entity experienced financial difficulties. On 31st March, 20X2, the bank agreed to modify the terms of the loan. Under the new terms, the interest payments in 20X2-20X3 to 20X4-20X5 will be reduced from 8% to 5%. The entity paid the bank a fee of ₹ 50 for paperwork relating to the modification.

   Analyse whether the modification of the loan terms constitutes an extinguishment of the original financial liability or not.

7. XYZ issued ₹ 4,80,000 4% redeemable preference shares on 1st April 20X5 at par. Interest is paid annually in arrears, the first payment of interest amounting ₹ 19,200 was made on 31st March 20X6 and it is debited directly to retained earnings by accountant. The preference shares are redeemable for a cash amount of ₹ 7,20,000 on 31st March 20X8. The effective rate of interest on the redeemable preference shares is 18% per annum. The proceeds of the issue have been recorded within equity by accountant as this reflects the legal nature of the shares. Board of directors intends to issue new equity shares over the next two years to build up cash resources to redeem the preference shares.

   Mukesh, Accounts manager of XYZ has been told to review the accounting of aforesaid issue. CFO has asked from Mukesh the closing balance of preference shares at the year

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end. If you were Mukesh, then how much balance you would have shown to CFO on analysis of the stated issue. Prepare necessary adjusting journal entry in the books of account, if required.

8. An Indian entity, whose functional currency is rupees, purchases USD dominated bond at its fair value of USD 1,000. The bond carries stated interest @ 4.7% p.a. on its face value. The said interest is received at the year end. The bond has maturity period of 5 years and is redeemable at its face value of USD 1,250. The fair value of the bond at the end of year 1 is USD 1,060. The exchange rate on the date of transaction and at the end of year 1 are USD 1 = ₹ 40 and USD 1 = ₹ 45, respectively. The weighted average exchange rate for the year is 1 USD = ₹ 42.

   The entity has determined that it is holding the bond as part of an investment portfolio whose objective is met both by holding the asset to collect contractual cash flows and selling the asset. The purchased USD bond is to be classified under the FVTOCI category.

   The bond results in effective interest rate (EIR) of 10% p.a.

   Calculate gain or loss to be recognised in Profit & Loss and Other Comprehensive Income for year 1. Also pass journal entry to recognise gain or loss on above. (Round off the figures to nearest rupees)

9. On 1st April, 20X1, ABC Ltd. issues a 10- year bond with a par value of ₹ 15,00,000 and an annual fixed coupon rate of 8%, which is consistent with market rates for bonds with similar characteristics. ABC Ltd. uses Secured Overnight Financing Rate (SOFR) as its benchmark interest rate. At the date of inception of the bond, SOFR is 5%. At the end of the first year:

   - SOFR has decreased to 4.75%; and
   - The fair value of bond is ₹ 15,38,110. This value is consistent with an interest rate of 7.6%.
   - The remaining cash flows on bond are ₹ 1,20,000 per year for nine years and ₹ 15,00,000 at the end of nineth year. These cash flows discounted at 7.6% equals ₹ 15,38,110.

   ABC Ltd. assumes a flat yield curve, that all changes in interest rates result from a parallel shift in the yield curve, and that the changes in SOFR are the only relevant changes in market conditions.

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Following discounting factors may be considered

Discount rate @7.75%	Present value of ₹ 1 payable
At the end of year 9	51.1 paise
Cumulatively for the years 1–9	6.312
At the end of year 10	47.4 paise
Cumulatively for the years 1–10	6.786

Required

What is the amount transferred to the OCI at the end of Year 1?

10. On 1st April, 2X01, A Ltd. issued a 10% convertible debenture with a face value of ₹ 1,000 maturing on 31st March, 2X11. The debenture is convertible into equity share of A Ltd. at a conversion price of ₹ 25 per share. Interest is payable half-yearly in cash. At the date of issue, A Ltd. could have issued non-convertible debt with a ten-year term bearing a coupon interest rate of 11%.

On 1st January, 2X06, the convertible debenture has a fair value of ₹ 1,700. A Ltd. makes a tender offer to the holder of the debenture to repurchase the debenture for ₹ 1,700, which the holder accepts. On the date of repurchase, A Ltd. could have issued non-convertible debt with a five-year term bearing a coupon interest rate of 8%.

Required

How does A Ltd. account for the repurchase?

11. Zx issues a fixed-rate loan for ₹ 500,000 and incurs issue costs of ₹ 20,000, resulting in an initial carrying value of ₹ 480,000. The loan carries an interest rate of 8% per annum, and it is repayable at par at the end of year 10. However, under the contract, Zx can call the loan at any time after year 4 by paying a fixed premium of ₹ 30,000. The fair value of the option is ₹ 10,000 at inception. The effective interest rate amounts to 8.30213%.

Required:

(i) How is the embedded issuer-only call feature accounted for by Zx, the issuer initially?

(ii) Explain the accounting of the loan when

(a) In years 1 and 2, there is no change in interest rate since inception for an instrument of similar maturity and credit rating. The option's fair value (time value) at the end of year 2 is ₹ 6,000.

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(b) At the end of year 3, interest rates have fallen, and the option's fair value increases to ₹ 9,000.

(c) At the end of year 4, interest rates have fallen further. The option's fair value increases to ₹ 20,000, and the entity decides to repay the loan at the end of year 4.

12. A Ltd. has issued Optionally Convertible Debentures (OCD) amounting to ₹ 300 crores to B Ltd. on following terms:

- Tenor : 4 years
- Coupon : Nil
- IRR : 15% p.a.

During the tenor of OCDs, A Ltd. can call the OCD and redeem it with stated IRR.

The market rate for similar debt without conversion features is 17% p.a.

B Ltd. can also ask for conversion at any time before maturity based on following formula:

No of equity shares = (Investment amount + applicable IRR) / (Face value of equity share; i.e. ₹ 10)

If redemption or conversion doesn't happen before maturity, then OCDs will be redeemed mandatorily at maturity in same manner as for conversion.

Required:

How is this instrument accounted for in the books of A Ltd. in the following two scenarios:

Scenario A – When B Ltd. opts for conversion before maturity at the end of year 1

Scenario B – When B Ltd. doesn't opt for conversion and OCDs are redeemed at maturity.

13. On 1st April 2XX0, Zx Co originates a 10-year 6% ` 1,00,000 loan. The loan carries an annual interest rate of 6% payable at the end of each year and the loan is repayable at par at the end of year 10. Zx charges ` 3,000 non-refundable loan origination fee to the borrower and it also incurs ` 5,000 in direct loan origination costs. The contract specifies that the borrower has an option to pre-pay the instrument and that no penalty will be charged for pre-payment. The contract meets the SPPI criteria. At inception, Zx expects the borrower not to pre-pay.

The effective interest rate is approximately 5.7317%.

What is the carrying amount on initial recognition and what impact does the pre-payment feature have on the amortised cost calculations?

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Answers

1. The fair value of the incremental consideration paid by Entity X is calculated as follows:

Number of ordinary shares to be issued to debenture holders under amended terms			
Particulars			
Face value			₹ 1,000
New conversion price		₹ 40 per share	
Number of ordinary shares to be issued to debenture holders under amended terms	1,000 / ₹ 40		25 Shares
Number of ordinary shares to be issued to debenture holders under original terms			
Face value			₹ 1,000
Original conversion price		₹ 50 per share	
Number of ordinary shares to be issued to debenture holders under original terms	1,000 / ₹ 50		20 Shares
Number of additional shares to be issued to debenture holders under amended terms			5 Shares
Value of additional shares upon conversion (to be recognised as loss in P&L)			
5 shares x ₹ 80 per share			₹ 400

2. The OCPS is redeemable at the end of the 5th year. Hence, the preference share contains a liability component. Further the dividend payable on the preference shares is non-cumulative. The holder may also be able to convert the preference shares at his option any time until maturity.

Paragraph AG 37 of Ind AS 32, *Financial Instruments: Presentation* states that non-cumulative dividends paid at the discretion of the issuer entity is part of equity element.

Paragraph 29 of Ind AS 32, *Financial Instruments: Presentation*, requires separate recognition of components of a financial instrument that (a) creates a financial liability of

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the entity; and (b) grants an option to the holder of the instrument to convert it into fixed number of equity instruments of the entity.

From the above paragraphs it is clear that OCPS issued by ABC Ltd. has a financial liability component as well as an equity component, making it a compound financial instrument.

As per paragraph 32, in case of compound financial instruments, the issuer first determines the carrying amount of the financial liability component by measuring the fair value of a similar liability that does not have an associated equity component. The carrying amount of the equity represented by (a) non-cumulative dividend feature and (b) option to convert the preference shares for fixed number of pre-determined ordinary shares is then determined by deducting the fair value of the financial liability component from the fair value of the compound financial instrument as a whole.

Measurement and recognition (Calculations have been done at full scale):

At 7% market rate of interest, the fair value of the financial liability component of the OCPS is ₹ 71,29,862 [100,000 OCPS x ₹ 100 x (1/ (1+7%))^5]

The fair value of the equity component is (residual value) ₹ 28,70,138 [₹ 1,00,00,000 - ₹ 71,29,862]

Journal Entries

1st April, 20X1	**On Initial recognition**			
	Bank	Dr.	1,00,00,000	
	To OCPS (Financial liability)			71,29,862
	To OCPS (Equity)			28,70,138
	(Being OCPS issued and recognised)			
31st March, 20X2	**Interest expense – unwinding of discount**			
	Interest expense@7% (Refer W.N.)	Dr.	4,99,090	
	To OCPS (Financial liability)			4,99,090
	(Being interest recorded as per EIR)			
	Interest entry will be passed every year till conversion option is not exercised			
	Whenever the option is exercised by the holder to convert to equity shares			
	OCPS (Financial liability)	Dr.	Balance on date of exercise of the option	
	To OCPS (Equity)			

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As per paragraph 30, in case of a convertible financial instrument, the classification of the liability and equity components is not revised as a result of change in the likelihood that a conversion option will be exercised.

In other words, the amount attributable to equity component on initial recognition shall remain in equity and will not be reclassified even if the OCPS are ultimately redeemed in cash by the issuer.

	If redeemed in cash on maturity		
31st March, 20X6	OCPS (financial liability) (Refer W.N.) Dr. To Bank (Being OCPS redeemed on maturity)	1,00,00,000	 1,00,00,000

Working Note:

Calculation of the amortised cost of the financial liability (at full scale):

Year	Opening Balance (₹)	Interest @ 7%	Repayment	Closing Balance (₹)
1	71,29,862	4,99,090	-	76,28,952
2	76,28,952	5,34,027		81,62,979
3	81,62,979	5,71,409		87,34,388
4	87,34,388	6,11,407		93,45,795
5	93,45,795	6,54,206	10,000,000	-

3. (i) The entity has two financial liabilities namely (a) the obligation to repay the five-year loan and (b) the obligation to repay the bank overdraft to the extent that it has borrowed using the overdraft facility. Both the loan and the overdraft result in contractual obligations for the entity to pay cash to the bank for the interest incurred and for the return of the principal.

(ii) For Entity B: The preference shares may be equity instruments or financial liabilities of Entity B, depending on their terms and conditions.

For Entity A: Irrespective of Entity B's treatment, the preference shares are a financial asset because the investment satisfies the definition of a financial asset.

(iii) An income tax liability is created as a result of statutory requirements imposed by the government. The rights and obligations are not created by a contract. Hence, the liability for income-tax dues is not a financial liability.

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(iv) The fact that a lawsuit may result in the payment of cash does not create a financial liability for the entity because there is no contract between the entity and the affected group. The entity will need to consider providing for the payment as per Ind AS 37 'Provisions, Contingent Liabilities and Contingent Assets'.

4. Since payment of ₹ 15,000 is deferred for two years, the fair value of the consideration given for the shares is equal to ₹ 25,000 plus the present value of ₹ 15,000. The present value of ₹ 15,000 deferred payment is ₹ 13,350 (₹ 15,000 ÷ 1.06^2).

Entity X will initially measure the shares purchased at ₹ 38,350 (i.e., ₹ 25,000 + ₹ 13,350).

Since this transaction took place at an arm's length, this is considered to be fair value for initial recognition in the absence of evidence to the contrary.

The difference between the ₹ 40,000 cash paid out and the ₹ 38,350, i.e. ₹ 1,650, will be recognised as interest expense in profit or loss over the two-year period of deferred payment.

5. Ind AS 109 'Financial Instruments', defines a financial guarantee contract as 'a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument.

Based on this definition, an evaluation is required to be done to ascertain whether the contract between director and Bank qualifies as a financial guarantee contract as defined in Appendix A to Ind AS 109. In the given case, it does qualify as a financial guarantee contract as:

- the reference obligation is a debt instrument (term loan);
- the holder i.e. Bank is compensated only for a loss that it incurs (arising on account of non-repayment); and
- the holder is not compensated for more than the actual loss incurred.

Ind AS 109 provides principles for accounting by the issuer of the guarantee. However, it does not specifically address the accounting for financial guarantees by the beneficiary. In an arm's length transaction between unrelated parties, the beneficiary of the financial guarantee would recognise the guarantee fee or premium paid as an expense.

It is also pertinent to note that the entity needs to exercise judgment in assessing the substance of the transaction taking into consideration relevant facts and circumstances, for example, whether the director is being compensated otherwise for providing

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guarantee. Based on such an assessment, an appropriate accounting treatment based on the principles of Ind AS should be followed.

In the given case, SEL is the beneficiary of the financial guarantee and it does not pay a premium or fees to its director for providing this financial guarantee. Accordingly, SEL will not be required to account for such financial guarantee in its financial statements considering the unit of account as being the guaranteed loan, in which case the fair value would be expected to be the face value of the loan proceeds that SEL received.

In the given case based on the limited facts provided, SEL will be required to make necessary disclosures of such financial guarantee in accordance with Ind AS 24 as follows:

(a) the amount of the transactions;

(b) the amount of outstanding balances, including commitments, and:

  (i) their terms and conditions, including whether they are secured, and the nature of the consideration to be provided in settlement; and

  (ii) details of any guarantees given or received;

(c) provisions for doubtful debts related to the amount of outstanding balances; and

(d) the expense recognised during the period in respect of bad or doubtful debts due from related parties.

6. Since the interest was initially set at the market rate, on 1st April, 20X1 the entity on initial recognition will measure the loan at the transaction price, less transaction costs i.e. at ₹ 4,900.

The following is the original amortised cost calculation at 1st April, 20X1:

Time	Carrying amount at 1st April	Effective Interest @ 8.612%	Cash outflow	Carrying amount at 31st March
	(a)	(b=ax8.612%)	(c=5000x8%)	(d = a + b - c)
20X1-20X2	4,900.00	421.99	(400.00)	4,921.99
20X2-20X3	4,921.99	423.88	(400.00)	4,945.87
20X3-20X4	4,945.87	425.94	(400.00)	4,971.81
20X4-20X5	4,971.81	428.19	(5,400.00)	–

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At 31st March, 20X2:

1. The present value of the remaining cash flows of the original financial liability is ₹ 4,921.99 discounted at the original effective interest rate of 8.612%.

2. The present value of the cash flows under the new terms discounted using the original effective interest rate is ₹ 4,537.25 (Refer W.N.). Including the ₹ 50 fee, the present value of the total cash flows is ₹ 4,587.25.

3. The difference between ₹ 4,921.99 and ₹ 4,587.25 is ₹ 334.74 which is only 6.8% (₹ 334.74 ÷ ₹ 4,921.99) of the present value of the remaining cash flows of the original financial liability.

The entity applies its judgement to decide whether the terms of the instruments exchanged are substantially different. Since the difference of the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is less than 10% of the present value of the remaining cash flows of the original financial liability, this modification should not be considered a substantial modification of the terms of the existing loan. Therefore, the modification would not be accounted for as an extinguishment of the original financial liability.

Working Note:

The calculation of the present value of the cash flows under the new terms discounted using the original effective interest rate is as follows:

Time	Cash outflow	Discounting factor @ 8.612%	Present value at 31st March
31st March, 20X3	250.00	0.921	230.25
31st March, 20X4	250.00	0.848	212.00
31st March, 20X5	5,250.00	0.780	4,095.00
Total present value			4,537.25

7. The preference shares provide the holder with the right to receive a predetermined amount of annual dividend out of profits of the company, together with a fixed amount on redemption.

Whilst the legal form is equity, the shares are in substance debt. The fixed level of dividend is interest and the redemption amount is equivalent to the repayment of a loan.

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Under Ind AS 32 'Financial Instruments: Presentation' these instruments should be classified as financial liabilities because there is a contractual obligation to deliver cash. The preference shares should be accounted for at amortised cost using the effective interest rate of 18%.

Year	1 April, 20X5 ₹	Interest @18% ₹	Paid at 4% ₹	31 March, 20X6 ₹
20X5-20X6	480,000	86,400	(19,200)	547,200

Accordingly, the closing balance of Preference shares at year end i.e. 31st March, 20X6 would be ₹ 5,47,200.

Accountant has inadvertently debited interest of ₹ 19,200 in the profit and loss. However, the interest of ₹ 86,400 should have been debited to profit and loss as finance charge.

Similarly, amount of ₹ 5,47,200 should be included in borrowings (non-current liabilities) and consequently, Equity should be reduced by ₹ 480,000 proceeds of issue and ₹ 67,200 (86,400 – 19,200) i.e. total by 5,47,200.

Necessary adjusting journal entry to rectify the books of accounts will be:

		₹	₹
Preference share capital (equity) (Balance sheet)	Dr.	4,80,000	
Finance costs (Profit and loss)	Dr.	86,400	
To Equity – Retained earnings (Balance sheet)			19,200
To Preference shares (Long-term Borrowings) (Balance sheet)			5,47,200

8. Computation of amounts to be recognized in the P&L and OCI:

Particulars	*USD*	*Exchange rate*	*₹*
Cost of the bond	1,000	40	40,000
Interest accrued @ 10% p.a.	100	42	4,200
Interest received (USD 1,250 x 4.7%)	(59)	45	(2,655)
Amortized cost at year-end	1,041	45	46,845
Fair value at year end	1,060	45	47,700
Interest income to be recognized in P & L			4,200
Exchange gain on the principal amount [1,000 x (45-40)]			5,000

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Exchange gain on interest accrual [100 x (45 - 42)]	300
Total exchange gain/loss to be recognized in P&L	5,300
Fair value gain to be recognized in OCI [45 x (1,060 - 1,041)]	855

Journal entry to recognize gain/loss

Bond (₹ 47,700 – ₹ 40,000)	Dr.	7,700	
Bank (Interest received)	Dr.	2,655	
To Interest Income (P & L)			4,200
To Exchange gain (P & L)			5,300
To OCI (fair value gain)			855

9. The amount of change in fair value of the bond that is not attributable to changes in market conditions giving rise to market risk is estimated as follows:

Step (a)

The bond's IRR at the start of the period is 8%.

Step (b)

Because the benchmark interest rate (SOFR) is 5%, the instrument - specific component of the IRR is 3%.

Step (c)

The contractual cash flows of the instrument at the end of the period are:

- Interest of ₹ 1,20,000 [₹ 15,00,000 x 8%] per year for the next 9 years.
- Principal repayment of ₹ 15,00,000 at the end of 9th year.

The present value of these cash flows is calculated using a discount rate of 7.75%. This rate is arrived at as below:

- 4.75% end of period SOFR, plus
- 3% instrument - specific component calculated as at the start of the period

This gives a notional present value of ₹ 15,23,670

= [(15,00,000 x 0.511) + (1,20,000 x 6.312)].

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Step (d)

The fair value of the liability at the end of the period is ₹ 15,38,110. Hence, ABC Ltd. should present ₹ 14,440 [₹ 15,38,110 – ₹ 15,23,670] in the OCI.

10. In the financial statements of A Ltd., the carrying amount of the debenture is allocated on issue as follows:

	₹
Liability component	
Present value of 20 half-yearly interest payments of ₹ 50, discounted at 11% (₹ 50 x 11.95)	598
Present value of ₹ 1,000 due in 10 years, discounted at 11%, compounded half-yearly (₹ 1,000 x 0.342)	342
	940
Equity component	
Difference between ₹ 1,000 total proceeds and ₹ 940 allocated above	60
Total proceeds	**1,000**

The repurchase price is allocated as follows:

	Carrying Value (₹)	Fair Value (₹)	Difference (₹)
Liability component:			
Present value of 10 remaining half-yearly interest Payments of ₹ 50, discounted at 11% and 8% respectively	377	406	
Present value of ₹ 1,000 due in 5 years, discounted at 11% and 8%, compounded half yearly, respectively	585	676	
	962	1,082	(120)
Equity component	60	618	(558)
Total	**1,022**	**1,700**	**(678)**

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A Ltd. recognises the repurchase of the debenture as follows: (₹)

Liability component	Dr.	962	
Debt settlement expense (P&L)	Dr.	120	
To Cash			1,082
(To recognize the repurchase of the liability component)			
Equity component	Dr.	60	
Reserves and Surplus	Dr.	558	
To Cash			618
(To recognize the cash paid for the equity component)			

The debt settlement expense represents the difference between the carrying value of the debt component and its fair value.

11. It is first necessary to determine whether the call option is closely related to the host debt instrument. Because the fixed premium is required to be paid whenever the call option is exercised after year 4, it is not known if it will be equal to the present value of any interest lost during the remaining term after exercise of the option. Additionally, the call option's exercise price is ₹ 5,30,000 (inclusive of the premium) therefore, it is unlikely to be approximately equal to the debt instrument's amortised cost in year 4, or at any subsequent year. Consequently, the call option shall be separated from the host debt contract and accounted for separately. This assumes that the expected life of the instrument is the full 10-year term. Even if the expected life is assumed to be four years, the 10-year loan with a call option after four years is economically same as a four-year loan with a six-year extension option. Because there is no concurrent adjustment to the interest rate after four years, the term extension option would not be closely related, and it would need to be accounted for separately. Thus, whichever way the loan and option are viewed, the embedded derivative needs to be separated.

Even though the option is out of the money at inception, because the option's exercise price is greater than the debt instrument's carrying value, it has a time value.

Since the value of a callable bond is equal to the value of a straight bond less the value of the option feature, the accounting entries at inception is:

		Dr (₹)	Cr. (₹)
Embedded option (derivative asset)	Dr.	10,000	
Cash	Dr.	4,80,000	
To Debt instrument (host)			4,90,000

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Since the call option will be fair valued and accounted for separately, with fair value movements taken to profit or loss, it has no impact on the entity's estimate of future cash flows; accordingly, the amortisation period will be the debt host's period to original maturity. The amortisation schedule is shown below:

	Opening amortised cost ₹	Interest expense @ 8.30213% ₹	Cash payments ₹	Closing amortised cost ₹
Year 1	490,000	40,680	40,000	490,680
Year 2	490,680	40,737	40,000	491,417
Year 3	491,417	40,798	40,000	492,216
Year 4	492,216	40,864	40,000	493,080
Year 5	493,080	40,936	40,000	494,016
Year 6	494,016	41,014	40,000	495,030
Year 7	495,030	41,098	40,000	496,128
Year 8	496,128	41,189	40,000	497,317
Year 9	497,317	41,288	40,000	498,605
Year 10	498,605	41,395	540,000	-

The entity would recognize interest expense in profit or loss and the loan's amortised cost in the balance sheet each year, in accordance with the above amortisation schedule.

In years 1 and 2, there is no change in interest rate since inception for an instrument of similar maturity and credit rating. The option's fair value (time value) at the end of year 2 is ₹ 6,000. The decrease in fair value of ₹ 4,000 since inception will be reported in profit or loss, and the option will be recorded at ₹ 6,000 at the end of year 2.

At the end of year 3, interest rates have fallen, and the option's fair value increases to ₹ 9,000. The increase in value of ₹ 3,000 will be recorded in profit or loss, and the option will be recorded at its fair value of ₹ 9,000 at the end of year 3.

At the end of year 4, interest rates have fallen further. The option's fair value increases to ₹ 20,000, and the entity decides to repay the loan at the end of year 4.

The accounting entries, to reflect the change in the option's fair value and the loan's early repayment at the end of year 4, are as follows:

		Dr (₹)	Cr. (₹)
Embedded option	Dr.	11,000	
To Profit or loss			11,000
(Early repayment of loan)			

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Debt instrument (host)	Dr.	4,93,080	
Loss on de- recognition of liability	Dr.	56,920	
To Embedded option (derivative asset)			20,000
To Cash			5,30,000

12. OCD issued by A Ltd. is a compound financial instrument. The host instrument will be classified as liability, since there is contractual obligation to pay cash towards interest (i.e. guaranteed IRR of 15% p.a.) and principal repayment that issuer A Ltd. cannot avoid. The equity conversion option is accounted as equity.

Date	***Particulars***		***Amount (rounded off in crores)***	
Day 1	Bank	Dr.	300	
	To Equity (balancing figure representing residual interest)			20
	To Debentures (future cash flows discounted @17%)			280
	(Initial recognition of the financial instrument in the nature of a compound instrument comprising of elements of debt and equity)			
Subsequent Accounting				
End of Year 1	Interest on Debentures	Dr.	48	
	To Debentures (classified under "Liability component of compound financial instrument")			48
	(Interest recognised in P&L @17% i.e. 280 x 17%)			

Scenario A – When B Ltd opts for conversion at end of year 1

Since conversion was allowed under the original terms of instrument, the entity should determine the amortised cost of liability component using the original IRR till the conversion date. It will derecognise the liability component and recognises it as equity. There is no gain or loss on early conversion.

Date	*Particulars*		*Amount (rounded off in crores)*	
End of Year 1	Debentures [280 + 48]	Dr.	328	
	To Equity Share Capital			328
	(Conversion of OCD into equity shares of the Company)			

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Scenario B – When B doesn't opt for conversion and OCDs are redeemed at maturity

Date	*Particulars*		*Amount (rounded off in Crores)*	
End of Year 1-4	Interest on debentures (cumulative interest for 4 years)	Dr.	245	
	To Debentures			245
	(Interest recognised in P&L @ 17%)			
End of Year 4	Debentures [280 + 245]	Dr.	525	
	To Bank			525
	(Being debentures redeemed)			

Working Note:

Computation of maturity value of OCD as per the formula stated by B Ltd.:

Year	Opening balance (In crores)	Interest @15% IRR (In crores)	Closing balance (In crores)
1	300	45	345
2	345	51.75	396.75
3	396.75	59.5125	456.2625
4	456.2625	68.439	524.7015 or 525
		224.7015 or 225	

13. The initial carrying amount of the loan asset is calculated as follows:

	₹
Loan principal	1,00,000
Origination fees charged to borrower	(3,000)
Origination costs incurred by lender	5,000
Carrying amount of loan	1,02,000

Because the entity expects the borrower not to pre-pay, the amortisation period is equal to the instrument's full term.

The carrying amount of the loan over the period to maturity, assuming that the entity continues to expect the borrower not to pre-pay, will be as follows:

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	Opening Carrying amount	Cash in flows (coupon)	Interest-income@ 5.7317%	Amortisation of net fees	Closing Carrying amount
		₹	₹	₹	₹
	a	b=1,00,000 x 6%	c=a x 5.7317%	d=b-c	e=a-d
1 Apr 2XX0					1,02,000
31 Mar 2XX1	1,02,000	6,000	5,846	154	1,01,846
31 Mar 2XX2	1,01,846	6,000	5,838	162	1,01,684
31 Mar 2XX3	1,01,684	6,000	5,828	172	1,01,512
31 Mar 2XX4	1,01,512	6,000	5,818	182	1,01,330
31 Mar 2XX5	1,01,330	6,000	5,808	192	1,01,138
31 Mar 2XX6	1,01,138	6,000	5,797	203	1,00,935
31 Mar 2XX7	1,00,935	6,000	5,785	215	1,00,721
31 Mar 2XX8	1,00,721	6,000	5,773	227	1,00,494
31 Mar 2XX9	1,00,494	6,000	5,760	240	1,00,254
31 Mar 2X10	1,00,254	6,000	5,746	254	1,00,000
		60,000	58,000	2,000	
31 Mar 2010		Repayment of principal			(1,00,000)
31 Mar 2010		Carrying value of loan			Nil

The effective interest income for the period is calculated by applying the effective interest rate of 5.7317% to the loan's amortised cost at the end of the previous reporting period. The annual interest income decreases each year, to reflect the decrease in the asset's carrying value as the initial net fee is amortised. So, the difference between the calculated effective income for a given reporting period and the loan's coupon is the amortisation of the transaction costs during that reporting period. The loan's amortised cost at the end of the previous period less amortisation in the current reporting period gives the loan's amortised cost at the end of the current period. By maturity date, the net fees received are fully amortised and the loan's carrying amount is equal to the face amount, which is then repaid in full.

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