

# CHAPTER 13

## AGRICULTURE (IND AS 41)

### QUESTIONS FROM STUDY MATERIAL

**Q1:** ABC Ltd grows vines, harvests the grapes and produces wine. Which of these activities are in the scope of Ind AS 41?

**Ans:** The grape vines are bearer plants that continually generate crops of grapes which are covered by Ind AS 16, Property, Plant and Equipment.

When the entity harvests the grapes, their biological transformation ceases and they become agricultural produce covered by Ind AS 41, Agriculture.

Vine involves a lengthy maturation period. This process is similar to the conversion of raw materials to a finished product rather than biological transformation hence treated as inventory in accordance with Ind AS 2, Inventories.

**Q2:** A farmer owned a dairy herd, of three years old cattle as at April 1, 20X1 with a fair value of ₹ 13,750 and the number of cattle in the herd was 250.

The fair value of three-year cattle as at March 31, 20X2 was ₹ 60 per cattle. The fair value of four-year cattle as at March 31, 20X2 is ₹75 per cattle.

Calculate the measurement of group of cattle as at March 31, 20X2 stating price and physical change separately.

<b>Ans: Particulars</b>	<b>Amount (₹)</b>
Fair value as at April 1, 20X1	13,750
Increase due to Price change [250 x {60 - (13,750/250)}]	1,250
Increase due to Physical change [250 x {75-60}]	3,750
Fair value as at March 31, 20X2	18,750

#### At the end of reporting period 31st March 20X2

Biological Asset (Cattle A/c)	Dr.	5,000
To Gain – Change in value (P/L A/c)		5,000

(Being change in value of Cattle recognised at the end of the reporting period)

**Q3:** XYZ Ltd, on 1 December 20X3, purchased 100 sheep from a market for ₹ 500,000. The transaction cost of 2% on the market price of the sheep was incurred which was paid by the seller. Sheep's fair value increased from ₹ 500,000 to ₹ 600,000 on 31 March 20X4. Transaction cost of 2% would have to be incurred by the seller to get the sheep to the relevant market.

Determine the fair value on the date of purchase and the reporting date and pass necessary journal entries.

**Ans:** The fair value less cost to sell of sheep's on the date of purchase would be ₹ 4,90,000 (5,00,000-10,000). Expense of ₹ 10,000 would be recognised in profit and loss.

**On date of Purchase**

Biological Asset	Dr.	4,90,000	
Expense on Purchase	Dr.	10,000	
To Bank			5,00,000

(Being biological asset purchased)

On 31 March 20X4 sheep would be measured at ₹ 5,88,000 as Biological Asset (6,00,000-12,000) and gain of ₹ 98,000 (5,88,000-4,90,000) would be recognised in profit or loss.

At the end of reporting period

Biological Asset	Dr.	98,000	
To Gain – Change in fair value			98,000

(Being change in fair value recognised at the end of reporting period)

**Q4:** Agro Foods Ltd. runs a poultry farm business. It has received a government grant from the government for setting up a new poultry unit in a backward area. Agro Foods Ltd used the amount of government grants to buy the first batch of broiler birds, incubators etc. The broiler birds are measured at fair value less costs to sell. However, the incubator machine is measured as per the cost model in Ind AS 16.

As such there are no conditions attached to the release of the government grants pertaining to purchase of poultry birds. However, as regards the investment in incubators and other related plant and machinery items, the government grant contains a condition that the plant and machinery item should be used for a minimum period of 3 years. The useful life of the incubator machine has also been determined to be 3 years in accordance with the management estimate of the time period over which the economic benefits embedded in the incubator machine shall be consumed.

Advise the accounting requirements prescribed in Ind AS 41 Agriculture and Ind AS 20 Accounting for Government Grants and Disclosure of Government Assistance in respect of both the government grants?

**Ans:** Ind AS 41 requires an unconditional government grant related to a biological asset measured at its fair value less costs to sell to be recognised in profit or loss when, and only when, the government grant becomes receivable. Accordingly, the amount of government grant attributable to the broiler birds which qualify as a biological bird shall be recognized in profit or loss account when the grant becomes receivable.

If a government grant is conditional, including when a government grant requires an entity not to engage in specified agricultural activity, an entity should recognize the government grant in

profit or loss when, and only when, the conditions attaching to the government grant are met. This provision of Ind AS 41 is not applicable as we have been informed that there are no conditions attached to the release of the government grant pertaining to broiler birds. In the given case, the grant related to broiler birds has already been received for the purpose of providing immediate financial support to the entity with no future related conditions to be fulfilled. Accordingly, the grant relating to broiler birds is to be recognized in profit and loss in the period in which it is received.

If a government grant relates to a biological asset measured at its cost less any accumulated depreciation and any accumulated impairment losses, the entity applies Ind AS 20 Accounting for Government Grants and Disclosure of Government Assistance. The incubator machine does not qualify as a biological asset as it is specifically covered by Ind AS 16 which states that plant and machinery items used to develop or maintain biological assets is covered by Ind AS 16. Therefore, the provisions relating to Government grants contained in Ind AS 41 will not apply to the incubator machine. Therefore, we have to apply directly the provisions contained in IND AS 20. Ind AS 20 contains two methods of presentation in financial statements of grants (or the appropriate portions of grants) related to assets are regarded as acceptable alternatives:

- a) One method recognises the grant as deferred income that is recognized in profit or loss on a systematic basis over the useful life of the asset.
- b) The other method deducts the grant in calculating the carrying amount of the asset. The grant is recognized in profit or loss over the life of a depreciable asset as a reduced depreciation expense.

Therefore, the grant relating to incubator machine will have to be accounted as a deferred income that is recognized in Profit or loss on a systematic basis over a period of 3 years in line with the condition attached to the grant. Alternatively, the grant may be deducted in determining the carrying amount of the incubator. In such a case the grant is recognised in Profit or Loss over the 3-year useful life of the depreciable incubator machine as a reduced depreciation expense.

**Q5:** Moon Ltd prepares financial statements to 31 March each year. On 1 April 20X1 the company carried out the following transactions:

- Purchased a land for ₹ 50 Lakhs.
- Purchased 200 dairy cows (average age at 1 April 20X1 two years) for ₹ 10 Lakhs.
- Received a grant of ₹ 1 million towards the acquisition of the cows. This grant was non-refundable.

For the year ending 31 March 20X2, the company has incurred following costs:

- ₹ 6 Lakh to maintain the condition of the animals (food and protection).
- ₹ 4 Lakh as breeding fee to a local farmer.

On 1 October 20X1, 100 calves were born. There were no other changes in the number of animals during the year ended 31 March 20X2. As of 31 March 20X2, Moon Ltd had 3,000 litres of unsold milk in inventory. The milk was sold shortly after the year end at market prices.

Information regarding fair values is as follows:

Item	Fair Value less cost to sell		
	1 April 20X1	1 October 20X1	31 March 20X2
	₹	₹	₹
Land	50 Lakhs	60 Lakhs	70 Lakhs
New born calves (per calf)	1,000	1,100	1,200
Six month old calves (per calf)	1,100	1,200	1,300
Two year old cows (per cow)	5,000	5,100	5,200
Three year old cows (per cow)	5,200	5,300	5,500
Milk (per litre)	20	22	24

Prepare extracts from the Balance Sheet and Statement of Profit & Loss that would be reflected in the financial statements of the entity for the year ended 31 March 20X2. Discuss the relevant IND AS in support of your working. **[Exam JULY 2021 (9 Marks); MTP Jan 2026]**

**Ans:** Extract from the Statement of Profit & Loss

Income	WN	Amount
Change in fair value of purchased dairy cow	WN 2	1,00,000
Government Grant	WN 3	10,00,000
Change in the fair value of newly born calves	WN 4	1,30,000
Fair Value of Milk	WN 5	72,000
Total Income		13,02,000
Expenses		
Maintenance Costs	WN 2	6,00,000
Breeding Fees	WN 2	4,00,000
Total Expense		(10,00,000)
Net Income		3,02,000

**Extracts from Balance Sheet**

<b>Property, Plant and Equipment</b>		
Land	WN 1	50,00,000
Biological assets other than bearer plants:		
- Dairy Cow	WN 2	11,00,000
- Calves	WN 4	<u>1,30,000</u>
		<b><u>62,30,000</u></b>
<b>Inventory</b>		

Milk	WN 5	<u>72,000</u>
		<u>72,000</u>

**Working Notes:**

1. Land: The purchase of the land is not covered by Ind AS 41. The relevant standard which would apply to this transaction is Ind AS 16. Under this standard the land would initially be recorded at cost and depreciated over its useful economic life. This would usually be considered to be infinite in the case of land and so no depreciation would be appropriate. Under Cost Model no recognition would be made for post-acquisition changes in the value of land. The allowed alternative treatment under Revaluation Model would permit the land to be revalued to market value with the revaluation surplus taken to the other comprehensive income. We have followed the Cost Model.
2. Dairy Cows: Under the 'fair value model' laid down in Ind AS 41 the mature cows would be recognised in the Balance Sheet at 31 March 20X2 at the fair value of  $200 \times ₹ 5,500 = ₹ 11,00,000$ .  
 Increase in price change  $200 \times (5,200 - 5,000) = 40,000$   
 Increase in physical change  $200 \times (5,500 - 5,200) = 60,000$   
 The total difference between the fair value of matured herd and its initial cost ( $₹ 11,00,000 - ₹ 10,00,000 =$  a gain of  $₹ 1,00,000$ ) would be recognised in the profit and loss along with the maintenance costs and breeding fee of  $₹ 6,00,000$  and  $₹ 4,00,000$  respectively.
3. Grant: Grant relating to agricultural activity is not subject to the normal requirement of Ind AS 20. Under Ind AS 41 such grants are credited to income as soon as they are unconditionally receivable rather than being recognised over the useful economic life of the herd. Therefore,  $₹ 10,00,000$  would be credited to income of the company.
4. Calves: They are a biological asset and the fair value model is applied. The breeding fees are charged to income and an asset of  $100 \times ₹ 1,300 = ₹ 1,30,000$  recognised in the Balance sheet and credited to Profit and loss.
5. Milk: This is agricultural produce and initially recognised on the same basis as biological assets. Thus the milk would be valued at  $3,000 \times ₹ 24 = ₹ 72,000$ . This is regarded as 'cost' for the future application of Ind AS 2 to the unsold milk.

**Q6:** Entity A purchased cattle at an auction on 30th June 2019

Purchase price at 30th June 2019	₹ 1,00,000
Costs of transporting the cattle back to the entity's farm	₹ 1,000
Sales price of the cattle at 31st March, 2020	₹ 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.

Calculate the amount at which cattle is to be recognised in books on initial recognition and at year end 31st March, 2020. Show journal entries. **[RTP Nov 2020; MTP NOV 2021]**

**Ans: 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
<i>Cattle Measurement at year end</i>	
Fair value less costs to sell (₹1,10,000 – 1,000 – (2% x 1,10,000))	1,06,800

At 31st March, 2020, 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.

Journal Entries on 30<sup>th</sup> June, 20X1

Biological Asset (Cattle A/c)	Dr.	97,000	
Loss on initial recognition	Dr.	6,000	
To Bank			1,03,000
(Purchase and cost of transportation on purchase paid by buyer)			
(Being biological asset purchased)			

Journal Entries on 31st March, 20X2

Biological Asset (Cattle A/c)	Dr.	9,800	
To Gain on remeasurement (P/L A/c)			9,800
(Subsequent measurement of cattle at fair value less costs to sell)			

**Q7:** XY Ltd. is a farming entity where cows are milked on a daily basis. Milk is kept in cold storage immediately after milking and sold to retail distributors on a weekly basis. On 1 April 20X1, XY Ltd. had a herd of 500 cows which were all three years old.

During the year, some of the cows became sick and on 30 September 20X1, 20 cows died. On 1 October 20X1, XY Ltd. purchased 20 replacement cows at the market for ₹ 21,000 each. These 20 cows were all one year old when they were purchased.

On 31 March 20X2, XY Ltd. had 1,000 litres of milk in cold storage which had not been sold to retail distributors. The market price of milk at 31 March 20X2 was ₹ 20 per litre. When selling the milk to distributors, XY Ltd. incurs selling costs of ₹ 1 per litre. These amounts did not change during March 20X2 and are not expected to change during April 20X2.

Information relating to fair value and costs to sell is given below:

Date	Fair value of a dairy cow (aged)				Costs to sell a cow
	1 year	1.5 years	3 years	4 years	

1 <sup>st</sup> April 20X1	20,000	22,000	27,000	25,000	1,000
1st October 20X1	21,000	23,000	28,000	26,000	1,000
31st March 20X2	21,500	23,500	29,000	26,500	1,100

You can assume that fair value of a 3.5 years old cow on 1st October 20X1 is ₹ 27,000.

Pass necessary journal entries of above transactions with respect to cows in the financial statements of XY Ltd. for the year ended 31st March, 20X2? Also show the amount lying in inventory if any. **[Exam May 2023 (8 Marks)]**

**Ans:** Journal Entries on 1st October, 20X1

(All figures in ₹)

Loss (on death of 20 cows) (Refer W.N.)	Dr.	5,20,000	
To Biological asset			5,20,000
(Loss booked on death of 20 cows)			
Biological Asset (purchase of 20 new cows) (Refer W.N.)	Dr.	4,00,000	
Loss on initial Recognition (of 20 new cows)	Dr.	20,000	
To Bank			4,20,000
(Initial recognition of 20 new purchased cows at fair value less costs to sell)			

Journal Entries on 31st March, 20X2

Loss on remeasurement of old cows	Dr.	2,88,000	
To Biological asset [(1,30,00,000 – 5,20,000) – 1,21,92,000]			2,88,000
(Subsequent measurement of cows at fair value less costs to sell)			
Biological Asset (4,48,000 – 4,00,000)	Dr.	48,000	
To Gain on remeasurement of new cows			48,000
(Subsequent measurement of cows at fair value less costs to sell)			

Inventory (Milk) as at 31st March, 20X2 = ₹ 19,000 (1,000 x (20 – 1))

**Working Note:**

Calculation of Biological asset at various dates

Date	Number	Age	Fair Value (₹)	Cost to Sell (₹)	Net (₹)	Biological asset (₹)
1st April 20X1	500	3 years	27,000	1,000	26,000	1,30,00,000
1st October 20X1	(20)	3.5 years	27,000	1,000	26,000	(5,20,000)

1st October 20X1	20	1 year	21,000	1,000	20,000	<u>4,00,000</u>
						<b><u>1,28,80,000</u></b>
31st March 20X2	480	4 years	26,500	1,100	25,400	1,21,92,000
	20	1.5 years	23,500	1,100	22,400	<u>4,48,000</u>
						<b><u>1,26,40,000</u></b>

**Q8:** Company X purchased 100 beef cattle at an auction for ₹ 1,00,000 on 30 September 20X1. Subsequent transportation costs were ₹ 1,000 that is similar to the cost X would have to incur to sell the cattle at the auction. Additionally, there would be a 2% selling fee on the market price of the cattle to be incurred by the seller.

On 31 March 20X2, the market value of the cattle 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 cattle to the relevant market. An auctioneer's fee of 2% on the market price of the cattle would be payable by the seller.

On 1 June 20X2, X sold 18 cattle for ₹ 20,000 and incurred transportation charges of ₹ 150. In addition, there was a 2% auctioneer's fee on the market price of the cattle paid by the seller.

On 15 September 20X2, the fair value of the remaining cattle was ₹ 82,820. 42 cattle were slaughtered on that day, with a total slaughter cost of ₹ 4,200. The total market price of the carcasses on that day was ₹ 48,300, and the expected transportation cost to sell the carcasses is ₹ 420. No other costs are expected.

On 30 September 20X2, the market price of the remaining 40 cattle was ₹ 44,800. The expected transportation cost is ₹ 400. Also, there would be a 2% auctioneer's fee on the market price of the cattle payable by the seller.

Pass Journal entries so as to provide the initial and subsequent measurement for all above transactions. Interim reporting periods are of 30 September and 31 March and the company determines the fair values on these dates for reporting. [MTP SEP 2025]

**Ans:** Value of cattle at initial recognition (30 September 20X1)

(All figures are in ₹)

Biological asset (cattle)	Dr.	97,000*	1,01,000
Loss on initial recognition	Dr.	4,000	
To Bank (Purchase and cost of transportation)			
(Initial recognition of cattle at fair value less costs to sell)			

\*Fair value of cattle = 1,00,000 – 1,000 – 2,000 (2% of 1,00,000) = 97,000

Subsequent measurement at 31 March 20X2

(All figures are in ₹)

Biological Assets (Cattle)	Dr.	9,800	9,800
To Gain on Sale (Profit & Loss)			

(Subsequent measurement of Cattle at fair value less costs to sell (1,06,800** – 97,000))			
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\*\* Fair value of cattle = 1,10,0000 – 1,000 – 2,200 (2% of 1,10,000) = 1,06,800

Sale of cattle on 1 June 20X2

(All figures are in ₹)

Biological Assets (Cattle)	Dr.	226	
To Gain on Sale (Profit & Loss)			226
(Subsequent re-measurement of 18 Cattle at fair value less costs to sell just prior to the point at which they are sold [19,450 - {(1,06,800/100) x 18}])			
Cost to Sales	Dr.	19,450	
To Biological Assets (Cattle)			19,450
(Recording a cost of sales figure separately with a corresponding reduction in the value of the biological assets)			
Bank	Dr.	19,450	
Selling expenses (150 + 400)	Dr.	550	
To Revenue			20,000
(Recognition of revenue from sale of cattle)			

Transfer of Cattle to Inventory on 15 September 20X2

(All figures are in ₹)

Inventory (48,300 - 420)	Dr.	47,880	
Loss on remeasurement	Dr.	1,176	
To Biological Asset (Cattle)			44,856#
To Bank (Slaughtering cost)			4,200
(Transfer of cattle to inventory)			

#Note: 44,856 is calculated as the proportion of cattle sold using the fair value (1,06,800+ 226 – 19,450) x 42/82)

Subsequent measurement of cattle at 30 September 20X2

(All figures are in ₹)

Biological Asset (Cattle)	Dr.	784	
To Gain on remeasurement			784
(Subsequent measurement of Cattle at fair value less costs to sell [43,504## – {(1,06,800 + 226 – 19,450)– 44,856}])			

##Fair value of cattle = 44,800 – 400 – 896 (2% of 44,800) = 43,504

**Q9:** On 1st November, 20X1, C Agro Ltd. purchased 100 goats of special breed from a market for ₹ 10,00,000 with a transaction cost of 2%. Goats fair value decreased from ₹ 10,00,000 to ₹ 9,00,000 as on 31st March, 20X2.

Determine the fair value on the date of purchase and as on financial year ended 31st March, 20X2 under both the cases viz-

- the transaction costs are borne by the seller and
- the transaction costs are incurred by the seller and purchaser both. Also pass journal entries under both the situations on both dates.

**Ans:** As per para 12 of Ind AS 41, a biological asset shall be measured on initial recognition and at the end of each reporting period at its fair value less costs to sell. Therefore, regardless of who bears the transaction costs, the transaction costs of 2% are the costs to sell the goats on 1st November 20X1, and therefore, the goats should be measured at their fair value less costs to sell on initial recognition date, i.e., ₹ 9,80,000.

### Journal Entry

#### As on 1st November 20X1:

##### (i) Where transaction costs are borne by the seller:

Biological assets (Goats) A/c	Dr.	9,80,000	
Loss on purchase of biological assets (Goats) A/c	Dr.	20,000	
To Bank A/c			10,00,000

##### (ii) Where transaction costs are borne by the buyer:

Biological assets (Goats) A/c	Dr.	9,80,000	
Loss on purchase of biological asset (Goats) A/c	Dr.	40,000	
To Bank A/c			10,20,000

#### As on 31 March 20X2 – under both the scenarios:

Loss on fair valuation of biological assets A/c	Dr.	98,000	
To Biological assets (Goats) A/c			98,000
[9,80,000 - (9,00,000 - 18,000)]			

**Q10:** Analyse whether the following activities fall within the scope of Ind AS 41 with proper reasoning:

- Managing animal-related recreational activities like Zoo
- Fishing in the ocean
- Fish farming

- Development of living organisms such as cells, bacteria and viruses
- Growing of plants to be used in the production of drugs
- Purchase of 25 dogs for security purpose of the company's premises.

[RTP May 2021; MTP Nov 2022; MTP Nov 2023; IBS CS 32]

Ans:

Activity	Whether in the scope of Ind AS 41?	Remarks
Managing animal-related recreational activities like Zoo	No	Since the primary purpose is to show the animals to public for recreational purposes, there is no management of biological transformation but simply control of the number of animals. Hence it will not fall in the purview of considered in the definition of agricultural activity.
Fishing in the ocean	No	Fishing in ocean is harvesting biological assets from unmanaged sources. There is no management of biological transformation since fish grow naturally in the ocean. Hence, it will not fall in the scope of the definition of agricultural activity.
Fish farming	Yes	Managing the growth of fish and then harvest for sale is agricultural activity within the scope of Ind AS 41 since there is management of biological transformation of biological assets for sale or additional biological assets.
Development of living organisms such as cells, bacteria viruses	Analysis required	The development of living organisms for research purposes does not qualify as agricultural activity, as those organisms are not being developed for sale, or for conversion into agricultural produce or into additional biological assets. Hence, development of such organisms for the said purposes does not fall under the scope of Ind AS 41.  However, if the organisms are being developed for sale or use in dairy products, the activity will be considered as agricultural activity under the scope of Ind AS 41.
Growing of plants	Yes	If an entity grows plants for using it in production

to be used in the production of drugs		of drugs, the activity will be agricultural activity. Hence it will come under the scope of Ind AS 41.
Purchase of 25 dogs for security purposes of the company's premises	No	Ind AS 41 is applied to account for the biological assets when they relate to agricultural activity. Guard dogs for security purposes do not qualify as agricultural activity, since they are not being kept for sale, or for conversion into agricultural produce or into additional biological assets. Hence, they are outside the scope of Ind AS 41.

### QUESTIONS FROM RTP/MTP/EXAMS

**Q11:** As at 31st March, 2017, a plantation consists of 100 Pinus Radiata trees that were planted 10 years earlier. The tree takes 30 years to mature, and will ultimately be processed into building material for houses or furniture. The enterprise's weighted average cost of capital is 6% p.a.

Only mature trees have established fair values by reference to a quoted price in an active market. The fair value (inclusive of current transport costs to get 100 logs to market) for a mature tree of the same grade as in the plantation is:

As at 31st March, 2017: 171

As at 31st March, 2018: 165

Assume that there would be immaterial cash flow between now and point of harvest. The present value factor of ₹ 1 @ 6% for 19th year = 0.331 20th year = 0.312

State the value of such plantation as on 31st March, 2017 and 2018 and the gain or loss to be recognised as per Ind AS. **[RTP Nov 2018]**

**Ans:** As at 31st March, 2017, the mature plantation would have been valued at 17,100 (171 x 100).

As at 31st March, 2018, the mature plantation would have been valued at 16,500 (165 x 100).

Assuming immaterial cash flow between now and the point of harvest, the fair value (and therefore the amount reported as an asset on the statement of financial position) of the plantation is estimated as follows:

As at 31st March, 2017:  $17,100 \times 0.312 = 5,335.20$ .

As at 31st March, 2018:  $16,500 \times 0.331 = 5,461.50$ .

#### Gain or loss

The difference in fair value of the plantation between the two year end dates is 126.30 (5,461.50 – 5,335.20), which will be reported as a gain in the statement of profit or loss (regardless of the fact that it has not yet been realised).

**Q12:** Arun Ltd. is an entity engaged in plantation and farming on a large scale and diversified across India. On 1st April, 2018, the company has received a government grant for ₹ 20 lakh subject to a condition that it will continue to engage in plantation of eucalyptus tree for a coming period of five years.

The management has a reasonable assurance that the entity will comply with condition of engaging in the plantation of eucalyptus trees for specified period of five years and accordingly it recognizes proportionate grant for ₹4 lakh in Statement of Profit and Loss as income following the principles laid down under Ind AS 20.

Accounting for Government Grants and Disclosure of Government Assistance.

**Required:**

Evaluate whether the above accounting treatment made by the management is in compliance with the applicable Ind AS. If not, advise the correct treatment. **[Exam NOV 19]**

**Ans:** Arun Ltd. is engaged in plantation and farming on a large scale. This implies that it has agriculture business. Hence, Ind AS 41 will be applicable.

Further, the government grant has been given subject to a condition that it will continue to engage in plantation of eucalyptus tree for a coming period of five years. This implies that it is a conditional grant.

In the absence of the measurement base of biological asset, it is assumed that “Arun Ltd measures its Biological Asset at fair value less cost to sell”:

As per Ind AS 41, the government grant should be recognised in profit or loss when, and only when, the conditions attaching to the government grant are met i.e., continuous plantation of eucalyptus tree for coming period of 5 years. In this case, the grant shall not be recognised in profit or loss until the five years have passed. The entity has recognised the grant in profit and loss on proportionate basis, which is incorrect.

However, if the terms of the grant allow part of it to be retained according to the time elapsed, the entity recognises that part in profit or loss as time passes. Accordingly, the entity can recognise the proportionate grant for ₹ 4 lakh in the statement of Profit and Loss based on the terms of the grant.

Alternatively, it may be assumed that Arun Ltd. measures its Biological Asset at its cost less any accumulated depreciation and any accumulated impairment losses (as per para 30 of Ind AS 41):

In such a situation, principles of Ind AS 20 (with respect to conditional grant will apply). According to Ind AS 20, the conditional grant should be recognised in the Statement of Profit and Loss over the periods and in the proportions in which depreciation expense on those assets is recognised. Hence the proportionate recognition of grant ₹ 4 lakh (20 lakh / 5) as income is correct since the entity has reasonable assurance that the entity will comply with the conditions attached to the grant.

Note: In case eucalyptus tree is considered as bearer plant by Arun Ltd., then Ind AS 20 will be applicable and not Ind AS 41.

**Q13:** On 1st November 2019, Cattle Agro Limited purchased 100 goats of special breed from a market for ₹ 10,00,000 with a transaction cost of 2%. Goats fair value decreased from ₹ 10,00,000 to ₹ 9,00,000 as on 31st March 2020. Determine the fair value on the date of purchase and as on financial year ended 31st March 2020. Also pass relevant journal entries on 1st November 2019 and 31st March 2020. **[Exam JAN 2021 (4 Marks)]**

Ans: The fair value less cost to sell of goats on the date of purchase i.e. on 1st November, 2019, would be ₹ 9,80,000 (10,00,000-20,000). Expense of ₹ 20,000 would be recognised in profit and loss.

<b>On date of Purchase</b>			
Biological Asset	Dr.	9,80,000	
Expense on initial recognition	Dr.	20,000	
To Bank			10,00,000
(Being biological asset purchased)			

On 31st March, 2020 goats would be measured at ₹ 8,82,000 as Biological Asset (9,00,000-18,000) and loss of ₹ 98,000 (9,80,000 - 8,82,000) would be recognised in profit or loss.

#### At the end of reporting period

Loss – Change in fair value	Dr.	98,000	
To Biological Asset			98,000

(Being change in fair value recognised at the end of reporting period)

**Note:** It is assumed that the transaction cost is borne by the seller.

**Q14:** 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? **[RTP Nov 2022; Nov 2024]**

**Ans:** 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.

**Q15:** A herd of 15, 4 year old cows valued at ₹ 500 thousands per cow were held in 'M Dairy Farm' as at 1st April 2021. The following transactions took place on 1st October, 2021:

- A. One cow aged 4.5 years was purchased for ₹ 520 thousands.
- B. One calf was born.

No cow was sold or disposed off during the year.

The per cow/calf fair value less cost to sell was as follows: ₹ in thousands

4 year old cow on 1st April 2021	500
New born calf on 1st October 2021	400
4.5 year old cow on 1st October 2021	520
New born calf on 31st March, 2022	410
0.5 year old calf on 31st March, 2022	440
4 year old cow on 31st March, 2022	516
4.5 year old cow on 31st March, 2022	540
5 year old cow on 31st March, 2022	560

You are required to:

- a) Calculate change in fair value less costs to sell showing:

- i) The portion attributable to physical changes  
 ii) The portion attributable to price changes.
- b) Calculate the carrying cost of the herd as on 31st March, 2022.  
 c) Prepare an extract of the livestock account for the year ended 31st March, 2022.

[Exam Nov 22 (6 Marks)]

Ans:

- (i) Change in fair value less costs to sell, due to physical change and price change:

₹ in thousand

Fair value less costs to sell of herd at 1 <sup>st</sup> April 2021 (15 × 500)		7,500
Purchase on 1 <sup>st</sup> October 2021 (1 × 520)		520
<b>(a)</b>	<b>Increase in fair value less costs to sell due to price change:</b>	
	15 cows x (516 – 500)	240
	1 cows x (540 – 520)	20
	1 calf x (410 – 400)	<u>10</u>
		270
<b>(b)</b>	<b>Increase in fair value less costs to sell due to physical change:</b>	
	15 cows x (560 – 516)	660
	1 cows x (560 – 540)	20
	1 calf x (440 – 410)	30
	1 calf x 400 (Gain on initial recognition)	<u>400</u>
		<u>9,400</u>

- (ii) Calculation of carrying cost of herd as on 31st March 2022 i.e.

Fair value less costs to sell of herd at 31st March 2022

16 × 560	8,960
1 × 440	440
	<u>9,400</u>

- (iii) Extract of Livestock Account for the year 31st March 2022

Particulars	Amount (₹ in 000)	Particulars	Amount (₹ in 000)
To Opening Stock	7500	By Closing Balance	9,400
To Purchases (1x520)	520		
To Increase in fair value (Price Changes)	270		

To Increase in fair value (Physical Changes)	<u>1,110</u>		
Total	<u>9,400</u>	Total	<u>9,400</u>

**Q16:** 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 fishes. Comment whether such fishing activity will be covered within the scope of Ind AS 41? **[RTP May 2023]**

**Ans:** 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 fishes 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

**Q17.** 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 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? [RTP Nov 2023]

**Ans.** 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%  $[(15,000 / 2,00,000) \times 100]$  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.

**Q18:** At RTL's Darjeeling plantation site, manufacturing process commences with the plucking of tea leaves from the plantation. Once the tea leaves are harvested, they are transported to the internal processing centres to continue the manufacturing process.

The local accountant at the site is currently preparing site's financials in accordance with Indian Accounting Standards (Ind AS) under your supervision.

Required

- a) Whether these plucked tea leaves are agriculture produce as per Ind AS 41 or not?
- b) How should such plucked tea leaves be initially measured?
- c) What will be subsequent measurement of such tea leaves in line with Ind AS 41 and Ind AS 2? [IBS CS3]

**Ans:**

- (i) Paragraph 3 of Ind AS 41, Agriculture states that: Ind AS 41 is applied to agricultural produce, which is the harvested produce of the entity's biological assets, at the point of harvest. Thereafter, Ind AS 2, 'Inventories' or another applicable Standard is applied. Accordingly, Ind AS 41 does not deal with the processing of agricultural produce after harvest; for example, the processing of grapes into wine by a vintner who has grown the grapes. While such processing may be a logical and natural extension of agricultural activity, and the events taking place may bear some similarity to biological transformation, such processing is not included within the definition of agricultural activity in Ind AS 41.

In the given case, RTL produces tea by processing tea leaves after they are plucked from tea plants, i.e., after they are harvested. Accordingly, any processing of harvested agricultural produce (processing of tea leaves into tea) will not be within the scope of Ind AS 41 as per aforementioned paragraph 3 of Ind AS 41.

Paragraph 5 of Ind AS 41, 'Agriculture' defines agricultural produce:

As per the standard as the harvested product of the entity's biological assets. A biological asset is a living animal or plant.

Based on above definitions, at the point of harvest, the plucked leaves are the harvested product of tea plants which are the biological assets of RTL, hence such plucked tea leaves are agricultural produce as per Ind AS 41.

- (ii) Paragraph 13 of Ind AS 41 states that: Agricultural produce harvested from an entity's biological assets shall be measured at its fair value less costs to sell at the point of harvest. Such measurement is the cost at that date when applying Ind AS 2 'Inventories' or another applicable Standard.

Therefore, in line with paragraph 13 of Ind AS 41, the fair value less costs to sell of the plucked leaves at the point of harvest would be the cost of such plucked leaves at the date of applying Ind AS 2.

- (iii) Subsequently, such plucked tea leaves will be measured as inventory as per the accounting principles of Ind AS 2, 'Inventories'.

**Q19.** 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 goat's 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 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

[RTP SEP 2025]

Ans: Journal Entries

		₹	₹
<b>Initial recognition of goats at 30<sup>th</sup> September, 20X7</b>			
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)			
<b>Sale of goats on 1st June, 20X8</b>			
Cash Dr.		19,450	
Selling expenses (150+400) Dr.		550	
To Revenue			20,000
(Recognition of the revenue from the sale of goats)			
<b>Transfer of biological assets to inventory on 15th Sep, 20X8</b>			
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)			
<b>Subsequent measurement of goats at 30th September, 20X8</b>			

Biological Asset (Goats)	784	
To Gain on remeasurement		784
(Subsequent measurement of Cattle at fair value less costs to sell [43,504## – {(1,06,800 + 226 – 19,450) – 44,856}])		
##Fair value of cattle = 44,800 – 400 – 896 (2% of 44,800) = 43,504		

**Working Notes:**

<b>1.</b>	<b>The fair value less costs to sell at initial recognition</b>	₹
	Fair value in the most relevant market	1,00,000
	Transport costs	(1,000)
	Auctioneer's fee	<u>(2,000)</u>
		<u>97,000</u>
<b>2.</b>	<b>The fair value less costs to sell at 31<sup>st</sup> March, 20X8 and gain thereupon</b>	
	Fair value in the most relevant market	1,10,000
	Transport costs	(1,000)
	Auctioneer's fee	<u>(2,200)</u>
		1,06,800
	Less: Original cost recorded	<u>(97,000)</u>
		<u>9,800</u>
<b>3.</b>	<b>The fair value less estimated costs to sell of the carcasses on 15<sup>th</sup> Sep, 20X8</b>	
	Market value of carcasses	48,300
	Transport costs	<u>(420)</u>
		<u>47,880</u>
	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]	
<b>4.</b>	<b>The fair value less costs to sell at 30<sup>th</sup> September, 20X8</b>	
	Fair value in most relevant market	44,800
	Transport costs	(400)
	Auctioneer's fee	<u>(896)</u>
		<u>43,504</u>

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.

**NOTES**

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