Mock Test Paper - Series I: March 2025

Date of Paper: 21st March 2025

Time of Paper: 2 P.M. - 6 P.M.

FINAL COURSE: GROUP – II

PAPER – 6: INTEGRATED BUSINESS SOLUTIONS

SUGGESTED ANSWERS

## **ANSWERS TO THE CASE STUDY 1**

## **Answers to the Multiple Choice Questions**

1. (a) Low end disruption.

**Reason:** B3D is targeting low-income customer segment currently existing in the real estate market by offering them affordable homes using innovative 3D technology at highly attractive rates that cannot be matched by incumbents. Hence, it plans to enter the market at the lower priced product segment. Incumbents due to their inability to compete with the company, are expected to concentrate their business on higher end segments for middle income and luxury class segments.

Also, disruptive innovation is of two type low end disruption and new market disruption.

2. (c) Start up stage with product-market FIT stage

**Reason:** B3D is in the start up stage with product-market FIT stage. Getting regulator approvals, arranging for operational requirements in terms of men, machines and money, strategic tie-ups that will help its reach in the market, ongoing research and development activities to reduce costs of operations. All this indicates a commitment from B3D to get customer validation for the 3D affordable housing project that it wants to the market. Its offering will be tested in the market through its first project in Pune, where customer demand is expected to be generated and the value proposition starts generating cash flow, the company moves to the start – up stage with product-market FIT of its value proposition.

3. (d) Inventory to stock for construction materials like cement and steel while Just in Time purchasing for materials like bricks and glass.

**Reason:** Inventory to stock for construction materials like cement and steel. B3D wants the materials to be of specific quality grade. It also seems from the scenario, that the company may not be able to have sufficient negotiating power with the suppliers. Also, the lead time for procurement of material is uncertain. Hence, the ideal method would be the stock these inventories.

Just in Time purchasing will work well where the construction material like bricks and glass are very fragile and difficult to store. These materials can be procured only when needed in order to avoid loss due to storage due to their fragility. Loss will be incurred if the inventory is stocked and stored due to their fragility. It is given that These materials are widely available in the market with many suppliers and can be procured easily on demand. Hence, Just In Time purchasing requirements would be an ideal method for these inventories.

**4. (b)** ₹ 2.60 crores. Calculation as below

#### Reason:

PV of Cash Inflows =

$$\frac{(\text{₹1 crore}) \times 0.95}{(1.03)^{1}} + \frac{(\text{₹2 crore}) \times 0.90}{(1.03)^{2}} + \frac{(\text{₹2 crore}) \times 0.85}{(1.03)^{3}} + \frac{(\text{₹3 crore}) \times 0.80}{(1.03)^{4}} + \frac{(\text{₹2 crore}) \times 0.75}{(1.03)^{5}}$$

$$= \text{₹ 92,23,301} + \text{₹ 1,69,66,726} + \text{₹ 1,55,57,408} + \text{₹ 2,13,23,689} + \text{₹ 1,29,39,132}$$

$$= \text{₹ 7,60,10,256}$$

NPV = PV of Cash Inflows - Initial Investment

= ₹ 7.60,10,256 - ₹ 5.00,00,000 = ₹ 2.60,10,256 that is ₹ 2.60 crores.

**5. (d)** Lease component ₹ 5,60,000 per annum and non lease component ₹ 1,40,000 per annum

**Reason:** The stand alone price for the lease component represents 80% of the total estimated stand alone prices [₹ 8,00,000/₹ 10,00,000]. Therefore, B3D allocates the consideration in the contract i.e. ₹ 7,00,000 per annum as follows:

| Lease component for 3D printer 80% × ₹ 7,00,000 per annum | ₹ 5,60,000 per annum |
|---|----------------------|
| Maintenance component for 3D printer                      | ₹ 1,40,000 per annum |
| 20% × ₹ 7,00,000 per annum                                |                      |
| Total payment made to AK Enterprises                      | ₹ 7,00,000 per annum |

#### **Answers to the Descriptive Questions**

6. In the given case, **BharatTech3D (B3D)** (Indian company) took technical services of **Pathway Consulting GMBH** (German based company) of ₹ 25 lakhs in December 2024.

It deducted the tax at source but failed to deposit to the Government. Later, it deposited the TDS with the Government in December 2025.

## Disallowance of Expense under Section 40(a)(i):-

As per Section 40(a)(i) of the Income Tax Act, 1961, if an assessee deducted tax at source (TDS) on payment of fees for technical services to a non-resident but failed to pay the same on or before due date of filing return of income, then such expenditure shall be disallowed in the previous year. As per the first proviso to Section 40(a)(i), if tax has been deducted during the previous year but paid after due date of filing return of income, then the expense will be allowed in the year in which such tax is paid.

In the given case, since BharatTech3D (B3D) deducted tax but did not deposit it on or before the due date, the fees for technical services of ₹25 lakhs will be disallowed while computing business income for the Financial Year 2024-25 (A.Y. 2025-26). Since tax is paid in December 2025, the expense of ₹25 lakhs will be allowed as a deduction in the Financial Year 2025-26 (A.Y. 2026-27).

#### **Determination of TDS Amount:**

As per Section 195, any person responsible for paying interest (other than interest referred to in section 194LB or section 194LC) or any other sum chargeable to tax (other than salaries) to a non-corporate non-resident or to a foreign company is liable to deduct tax at source at the rates in force. Applicable rate of tax on such FTS is 20%. However, if DTAA provides for a rate lower than 20%, then, provisions of DTAA would apply.

The applicable TDS rate (assuming it qualifies as "fees for technical services" and DTAA benefit is considered) shall be 10% + surcharge (if applicable) + 4% cess.

TDS @10% on ₹25,00,000 = ₹2,50,000

HEC @4% on ₹2,50,000 = ₹10,000

So, the total TDS Amount shall be ₹2,60,000

#### Interest Calculation under Section 201(1A):-

Section 201(1A) imposes interest on delayed TDS payment as follows:

Interest for Delay in Deposit (1.5% per month or part thereof)

TDS was deducted on 31st December 2024 but deposited in December 2025

Delay = 12 months

Interest = 1.5% per month × 12 months × ₹2,60,000

Interest = ₹46,800

7. Osterwalder's Business Model Canvas comprises of nine elements, wherein four elements pertain to cost (key partners, key activities, key resources and cost structure). These are connected to the other four elements pertaining to revenue (customer relationships, channels, customer segments and revenue streams). This link is established through the nineth segment, value proposition.

#### **Key Partners:**

B3D relies on several key partners to support its operations and growth in the construction industry. This includes *suppliers of essential components* such as 3D construction printing machines, specialized cement, and steel required for 3D printers, as well as other construction materials like bricks and glass. *Suppliers of construction labour* are also crucial partners in executing projects efficiently.

Furthermore, B3D has formed a *strategic tie-up with banks like Smart Bank Ltd*. This partnership enhances market reach by facilitating easier access to financing for potential customers. Additionally, *consulting firms providing technical insights* on the latest developments in construction technology play a vital role in B3D's innovation and continuous improvement efforts.

## **Key Activities:**

B3D engages in several key activities to drive its business and innovation in the construction industry. First and foremost, it meticulously follows *advanced construction techniques, coordinating the necessary manpower, materials, and machinery* to complete projects within a swift 6-month timeframe. This efficient project management ensures timely delivery and customer satisfaction.

Secondly, B3D places a strong emphasis on ensuring that construction materials meet the required specifications and quality standards necessary to support 3D printing technology. This *commitment to quality* enhances the durability and efficiency of its construction processes.

Additionally, B3D invests significantly in *research and development activities to maintain a competitive edge*. These efforts focus on innovation in 3D printing technology and construction methodologies, enabling B3D to stay ahead in the market and continuously improve its offerings.

To facilitate quick inventory turnover and boost sales, B3D employs *targeted advertisements and leverages its strategic partnership* with Smart Bank Ltd. This collaboration not only expands its customer reach but also facilitates easy financing options for potential buyers, thereby accelerating sales and project timelines.

Moreover, B3D **evaluates the creditworthiness of customers** interested in outright purchases and actively encourages the use of home loans through Smart Bank Ltd. This approach ensures that financing solutions are accessible to a broader customer base, making homeownership more achievable for low-income segments.

#### **Key Resources:**

B3D relies on key resources essential for its operations and innovation in the construction sector. At the core of its technological advancement are **3D construction printers**, which enable efficient and precise construction of residential units. These printers are pivotal in realizing B3D's goal of delivering high-quality, affordable housing using advanced technology.

Another critical resource for B3D is its *team of employees specialized in engineering and architecture*. These professionals bring expertise in designing and overseeing the implementation of 3D printing technology in construction projects. Their skills and knowledge are crucial for maintaining operational excellence and driving continuous improvement.

In addition to tangible resources like 3D printers and skilled personnel, B3D leverages *intangible assets* such as patents and process improvements generated through its research and development activities. These intangible assets not only protect B3D's innovations but also provide a competitive edge in the market by enhancing efficiency, reducing costs, and improving the quality of its construction projects.

## Value Proposition of B3D:

B3D addresses the pressing customer problem of the *lack of good quality, affordable housing facilities* in urban cities in India. By leveraging 3D construction printing technology and other innovative technological solutions, B3D *provides secure and affordable housing facilities*, revolutionizing the construction industry and meeting the urgent needs of low-income customers in these urban centers.

#### **Customer Relationships:**

B3D maintains customer relationships by managing a mass customer base through sales offices at each project site. These **offices conduct site tours and handle queries** about the novel 3D construction project, ensuring that potential buyers are well-informed and engaged throughout the purchasing process.

#### Channels:

B3D utilizes multiple channels to reach its customers effectively. **Sales offices are established at each project site** to directly engage with potential buyers. Additionally, B3D **leverages its tie-up with Smart Bank Ltd.**, which publicizes the projects through digital marketing activities and direct selling agents, ensuring wide reach and visibility among potential customers.

## **Customer Segments:**

B3D targets lower-income customers in urban cities across India who are in need of affordable housing facilities. The customer base consists of two types: those making **outright purchases** and those **requiring financial assistance** for home purchases.

#### **Revenue Streams:**

B3D's primary revenue stream comes from the **sale of residential units**, with a uniform selling price of ₹ 10 lakh per single bedroom flat and ₹ 12 lakh per double bedroom flat to popularize the scheme. There is flexibility to adjust prices upward based on cost considerations for each project across multiple cities, with a target profitability of 8% of the sale price of each flat.

In addition to direct sales revenue, B3D *generates ancillary income through commissions* from its partnership with Smart Bank Ltd. This collaboration facilitates loan approvals for customers, enhancing affordability and enabling guicker sales turnover.

This dual revenue model ensures that B3D not only meets the housing needs of lower-income segments but also maximizes its financial performance through strategic pricing and financial partnerships.

#### **Cost Structure:**

B3D's cost structure involves various management opportunities and challenges. On the *opportunity side*, utilizing 3D construction technology yields higher quality construction while reducing waste, errors, and time due to automated processes. This efficiency allows for better inventory management of materials like cement, steel, bricks, and glass, and decreases construction time, lowering labor costs by almost 40% and reducing overhead expenses. However, B3D *faces several challenges*, including high land acquisition costs, significant expenses for 3D printing machines, and the need for higher remuneration for skilled employees such as engineers and architects. Additionally, the specialized materials required for 3D printing are costly, inflation impacts other construction costs, and financing costs remain high.

- **8.** Ind AS 38 'Intangible Assets' requires an intangible asset to be recognized if, and only if, certain criteria are met.
  - Intention to complete the asset is apparent as it is a major project with full support from board
  - Finance is available as resources are focused on project
  - Costs can be reliably measured
  - Benefits are expected to exceed costs (in 3 years)
  - Regulatory approval which was received on June 1, 2023

Regulatory approval for the project was received on June 1, 2023. The project was completed on April 30, 2024. Costs of ₹ 24,00,000 incurred until March 31, 2024 have been recognized as an intangible asset. This is incorrect.

Expenses incurred prior to June 1, 2023 should be expensed out. Assuming that ₹24,00,000 has been incurred evenly from 1<sup>st</sup> April 2023, ₹ 4,00,000 has been charged to Profit and Loss account. Retrospective recognition of expense as an asset is not allowed.

Expenses incurred between June 1, 2023 and March 31, 2024 should be capitalized:  $₹24,00,000\times10/12 = ₹20,00,000$ 

Ind AS 36 'Impairment of assets' requires an intangible asset not yet available for use to be tested for impairment annually. As of March 31, 2024 the asset is not yet available for use, hence it has to be tested for impairment. Cash flow of ₹ 19,00,000 in perpetuity would clearly have a present value in excess of ₹ 19,00,000 and hence there would be no impairment. However, the research head Mrs. Sinha is technically qualified, so impairment tests should be based on her estimate of a five-year remaining life and so present value of the future cost savings of ₹ 18,00,000 should be considered in that case. ₹ 18,00,000 is greater than the offer received (fair value less cost to sell) of ₹ 17,00,000 and so ₹ 18,00,000 should be used as the recoverable amount.

The carrying amount should be consequently reduced to ₹ 18,00,000.

Calculation of Impairment loss of intangible asset under development:

| Particulars   | Amount (₹)  |
|---|-------------|
| Carrying amount of intangible asset as of March 31,2024 | 20,00,000   |
| Less Recoverable amount                                 | (18,00,000) |
| Impairment loss   | 2,00,000    |

Impairment loss of  $\ref{2}$ ,00,000 is to be recognized in the profit and loss for the year 2023-24.

Necessary adjusting entry to correct books of account will be:

| Particulars                                     |    | ₹        | ₹        |
|---|----|----------|----------|
| Operating expenditure – Development expenditure | Dr | 4,00,000 |          |
| Operating expenses – Impairment loss            | Dr | 2,00,000 |          |
| To Intangible asset under development           |    |          | 6,00,000 |

## **ANSWERS TO THE CASE STUDY 2**

## **Answers to the Multiple Choice Questions**

1. (c) Funding by angel investors

**Reason:** Angel investors typically use their own money. Often, they are among an entrepreneur's family and friends. They generally invest in small-start-ups and are attached to the idea of the business floated by start-up. However, venture capitalists take care of pooled money from other investors and place them in a strategically managed fund. Bootstrapping is an attempt to build the company from personal finances or from operating revenues of the company. Factoring is a method of bootstrapping.

2. (b) Company is eligible to deduction @ 100% of its profits from eligible business for any 3 consecutive assessment years out of 10 years beginning from the year in which start-up is incorporated. Further, certificate of eligible business in this regard is provided by Inter-Ministerial Board for Certification.

**Reason:** Under section 80-IAC (1) of Income tax act, 1961, where the gross total income of an assessee, being an eligible start- up, includes any profits and gains derived from eligible business, there shall, in accordance with and subject to the provisions of this section, be allowed, in computing the total income of the assessee, a deduction of an amount equal to one hundred per cent of the profits and gains derived from such business for three consecutive assessment years.

The deduction may at the option of the assessee, be claimed by him for any three consecutive assessment years out of ten years beginning from the year in which the eligible start-up is incorporated.

Further, explanation to section 80-IAC also defines eligible start-up which fulfils the following conditions namely: -

- (a) it is incorporated on or after the 1st day of April, 2016 but before the 1st day of April, 2024
- (b) the total turnover of its business does not exceed one hundred crore rupees in the previous year relevant to the assessment year for which deduction under sub-section (1) is claimed and

- (c) it holds a certificate of eligible business from the Inter-Ministerial Board of Certification as notified in the Official Gazette by the Central Government
- 3. (c) The company is an eligible start-up holding certificate of eligible business. However, such start-up is allowed to defer withholding tax when option is exercised and shares are allotted to Mr. X. It is deducted in required manner after expiry of certain timelines and/ or happening of certain events

**Reason:** Under section 192(1C), a person, being an eligible start-up referred to in section 80-IAC, responsible for paying any income to the assessee being perquisite of the nature specified in sub clause (*vi*) of sub-section (2) of section 17 in any previous year relevant to the assessment year, shall deduct or pay, as the case may be, tax on such income within fourteen days—

- (i) after the expiry of forty-eight months from the end of the relevant assessment year or
- (ii) from the date of the sale of such specified security or sweat equity share by the assessee or
- (iii) from the date of the assessee ceasing to be the employee of the person whichever is the earliest, on the basis of rates in force for the financial year in which the said specified security or sweat equity share is allotted or transferred.

Therefore, section 192(IC) provides for deferment of withholding tax in case of eligible start-ups.

4. (c) It involves giving notice of proposed scheme to Registrar and Official Liquidators and approval of scheme by both the companies. After approval of scheme by creditors, the scheme is filed with Regional Director, Registrar and Official Liquidators. The scheme is finally registered by Regional Director.

**Reason:** In case of merger between small companies/ start-ups, fast track procedure for merger has been prescribed under section 233 of Companies Act, 2013. It does not require filing of application with NCLT. The notices are to be given to registrar, official liquidator and Central Govt (powers delegated to Regional Director). After considering objections of registrar and official liquidator, the scheme is finally registered by Regional Director.

## 5. (a) Past performance indicators

**Reason:** In valuation of a start-up like Agrofine, there is no historical data on basis of which future projections can be drawn. Valuation of a start-up entirely rests on its future growth potential. The assessments of future growth are dependent upon competence and drive of persons running the business.

## **Answers to the Descriptive Questions**

**6.** Value as on 31st March, 2023

| Original cost                       | ₹ 3,00,000 |
|-------------------------------------|------------|
| Less: Amortisation (3,00,000 x 1/5) | (₹ 60,000) |
| Net Value                           | ₹ 2,40,000 |

#### Value as on 31st March, 2024

On 1<sup>st</sup> April, 2023, the downward revaluation is recorded by writing down the asset to the estimated value of ₹ 1,50,000, which necessitates a ₹ 90,000 charge to profit & loss (carrying value, ₹ 2,40,000 less fair value ₹ 1,50,000).

Amortisation provided for the financial year 2023-2024 is ₹ 75,000 (₹ 1,50,000 / 2)

Net value is = ₹ 1,50,000 - ₹ 75,000 = ₹ 75,000.

#### Value as on 31st March, 2025

As of 1st April, 2024, the carrying value of the patent is ₹ 75,000. Revalued amount of patent is ₹ 3,00,000.

Out of total revaluation gain of  $\stackrel{?}{_{\sim}} 2,25,000, \stackrel{?}{_{\sim}} 90,000$  will be charged to profit & loss and balance amount of  $\stackrel{?}{_{\sim}} 1,35,000$  ( $\stackrel{?}{_{\sim}} 2,25,000 - \stackrel{?}{_{\sim}} 90,000$ ) will be credited to revaluation reserve in OCI.

Amortisation provided for the financial year 2024-2025 is ₹ 75,000 (₹3,00,000 / 4)

Net value as on 31<sup>st</sup> March, 2025 = ₹ 3,00,000 - ₹ 75,000 = ₹ 2,25,000.

7. Start-up Agrofine, like many early-stage businesses, can seek funding from venture capital (VC) firms to meet its business requirements. Venture capital funding typically progresses through the following stages:-

**Seed Money** is the initial funding required to support the development of a concept, idea, or research and development (R&D) for product creation. At this stage, the risk is extreme, as the business is still in its conceptual phase, making the likelihood of failure very high. Investors typically commit funds for a long-term horizon of 7 to 10 years.

**Start-Up Funding** is provided to early-stage businesses that need financial support to develop prototypes, initiate operations, and begin marketing efforts. The risk remains very high since the business has yet to establish market acceptance or generate revenue. Investment at this stage usually spans 5 to 9 years.

**First-Round Funding** is directed toward businesses that have started commercial production and marketing but require additional financial support to sustain operations. The risk is still high as the company is in its early revenue-generating phase but has not yet achieved financial stability. Investments at this stage generally range from 3 to 7 years.

**Second-Round Funding** is intended for companies looking to expand their market reach, meet growing operational needs, and scale their business, although they have not yet achieved profitability. The risk at this stage is sufficiently high, as the company is generating revenue but has not yet reached a break-even point. Investors typically commit funds for a period of 3 to 5 years.

**Third-Round Funding (Mezzanine Financing)** is used for market expansion, acquisitions, or product development in companies that have started generating profits. The risk level at this stage is moderate, as the business model has been proven, but financial support is still required for large-scale growth. The investment horizon for this round is usually between 1 and 3 years.

**Fourth-Round Funding (Bridge Financing)** is designed to help companies transition to the public market by financing their Initial Public Offering (IPO) preparations. At this stage, the risk is relatively low, as the company is already established, generating profits, and preparing to go public. Investments in this phase generally last between 1 and 3 years.

Each funding stage carries a different level of risk, with the highest uncertainty in the seed and start-up phases, gradually decreasing as the company matures and moves toward an IPO.

#### **Alternative Solution:**

Stages of funding for VC

- 1. **Seed Money**: Low level financing needed to prove a new idea.
- 2. **Start-up**: Early-stage firms that need funding for expenses associated with marketing and product development.
- 3. **First-Round**: Early sales and manufacturing funds.
- 4. **Second-Round**: Working capital for early stage companies that are selling product, but not yet turning in a profit.
- 5. **Third Round**: Also called Mezzanine financing, this is expansion money for a newly profitable company.
- 6. **Fourth-Round**: Also called bridge financing, it is intended to finance the "going public" process.

Risk in different stages is given below:

| Financial<br>Stage | Period (Funds locked in years) | Risk<br>Perception   | Activity to be financed   |
|--------------------|--------------------------------|----------------------|---|
| Seed Money         | 7-10                           | Extreme              | For supporting a concept or idea or R&D for product development and involves low level of financing.              |
| Start Up           | 5-9                            | Very High            | Initializing prototypes operations or developing products and its marketing.                                      |
| First Stage        | 3-7                            | High                 | Started commercial production and marketing.  |
| Second Stage       | 3-5                            | Sufficiently<br>high | Expanding market and growing working capital needs though not earning profit.                                     |
| Third Stage        | 1-3                            | Medium               | Market expansion, acquisition & product development for a profit making company. Also called Mezzanine Financing. |

| Fourth Stage | 1-3 | Low | Facilitating public issue i.e. going public. Also called Bridge Financing. |
|--------------|-----|-----|--|
|--------------|-----|-----|--|

- 8. (i) Calculation of total labour cost :-
  - Cumulative Average Time for 256 equipments = 48.43 hrs. [112.50 × (0.908)] Total Time for 256 equipments = 12,398.08 hrs. [48.43 hrs.× 256 equipments] Total Labour Cost of 256 equipments = 2,47,961.60 [12,398.08 hrs.× 20]
  - (ii) Calculation of revised labour cost at zero profit and cumulative average time (revised) :-

Revised Labour Cost for zero profit = 3,22,961.60 [2,47,961.60 + 75,000]

Total Time for 256 equipments (Revised) = 16,148.08 hrs. [3,22,961.60 / 20]

Cumulative Average Time for 256 equipments (Revised) = 63.08 hrs. [16,148.08 / 256]

## **ANSWERS TO THE CASE STUDY 3**

## **Answers to the Multiple Choice Questions**

1. (a) Statements (i) and (iii) are true.

Reason: Statement (i) the successful marketing campaign by SAL that reached out directly to customers had resulted in a higher than anticipated sales volume. This would have put pressure on procurement and production systems to cater to this demand immediately. Due to JIT systems, they do not hold any stock to meet sudden spike in demand. Statement (iii) where the production department has to plan the annual production schedule based on demand forecasts. This will allow them to co-ordinate with procurement suppliers who provide raw material in order to operate smoothly. Any unexpected seasonal demand spike due cannot be foreseen, in which case JIT production system may not be suitable.

Statement (ii) is incorrect as Mr. Ray is in charge on only sale of the 3 grades of fertilizers and is not in charge of any other function or operation in the manufacturing process. Hence, he cannot be held accountable for the sudden increase in raw material prices which has led to decrease in actual contribution.

Statement (iv) is incorrect as JIT procurement and production system can function independent of each other. Raw material can be stocked while production can follow JIT system. Similarly, raw material can be procured on a JIT system while production can be made to stock.

#### 2. (c) (i) and (iii)

**Reason:** Statements (i) and (iii) are considerations that the auditors of SAL and PAL need to consider for their audits of financial statements.

Statements (ii): Incorrect. Even if explicitly banned, the auditor's responsibility for considering compliance remains.

Statement (iv): Incorrect. While evaluating the implications of non-compliance is important, it's not the primary responsibility of the auditor in this specific context.

3. (d) Grade 1 only as that is the only product that is both price sensitive as well as has the capability of yielding positive contribution due to high margins.

**Reason:** Grade 1 only as the increase in volume was 25% for a 10% discount offered on the price and it contributed positively as the net contribution is ₹ 130. As a high margin product, it could buffer any unexpected cost escalation.

|                                   | Grade 1 | Grade 2 | Grade 3 |
|-----------------------------------|---------|---------|---------|
| Reduction in selling price per kg | 50      | 20      | 20      |
| Reduction in selling price %      | 10%     | 7%      | 10%     |
| Increase in sales (in kgs)        | 500     | 100     | 400     |
| Increase in sales in %            | 25.00%  | 3.33%   | 8.00%   |
| Net contribution per kg (actual)  | 130     | 60      | -       |

While Grade 3 can be considered as price sensitive using the 5% threshold limit, the actual net contribution per kg was nil. Hence, it might not be prudent to offer much discount for Grade 3, being a lower margin product. Similarly, Grade 2 is also less price sensitive using the 5% threshold limit. Here a 7% discount in selling price resulted in only a 3.33% increase in sales volume. Hence, Grade 2 sales will not necessarily increase much by price discounts alone.

4. (b) The takeover of UUL by SAL is invalid as even after the Tribunal dismissed the application made by the dissenting shareholders, UUL acquired the shares of only 5% out of the total 8% dissenting shareholders.

**Reason:** In the given case, since the application made by the dissenting shareholders has been dismissed by the Tribunal, SAL was bound to acquire all the shares of the dissenting shareholders i.e. the entire 8% shareholding. Since SAL acquired only 5% shareholding of the dissenting shareholders, this is in contravention to Section 235 of the Companies Act, 2013. Hence the takeover of UUL by SAL is invalid.

 (c) The income does not qualify as agricultural income and is taxable as business income under "Profits and Gains of Business or Profession," despite acquiring agricultural land.

**Reason:** Under Section 2(1A) of the Income Tax Act, 1961, Agricultural income in India primarily encompasses earnings derived from activities related to farming. This includes income generated from renting out agricultural land, cultivating and selling crops, processing agricultural produce for market (such as drying, cleaning, or simple processing), and income earned from farm buildings essential for agricultural operations.

Merely acquiring land to promote awareness or conduct demonstrations does not convert income from fertilizer sales into agricultural income. Land acquired by SAL is being used to promote awareness and conduct demonstrations about their applications of customized micronutrient mixture fertilizer. Farmers attending such promotional events purchase fertilizers that are customized for the crop that it is

required for. Sale of such fertilizers is not derived directly from any agricultural activities on the land. Further, the case clearly mentions that no actual agricultural production occurs on this land. Therefore, SAL's sales from such fertilizers are taxable as business income under "Profits and Gains of Business or Profession".

## **Answers to the Descriptive Questions**

- Accounting treatment as per IND AS 20, Accounting for Government Grants and Disclosure of Government Assistance:
  - 1. First Grant of ₹ 5 crore research on "Soil degradation due to misuse of fertilizers" The first grant for "Soil degradation due to misuse of fertilizers" involving research into effects of excessive use of fertilizers on soil quality (acidification, hardening and pollution) based on a specific area from a predominantly agricultural belt in Punjab. Since, the grant is unconditional and no details regarding its refund have been mentioned. Even though research has not started, nor major steps have been completed by SAL to commence the research, yet the grant will be immediately recognized in the profit and loss for the year ended March 31, 2025.
  - 2. Second Grant of ₹ 5 crore relates to the commercial development of crop-specific nutrition solution that will provide each crop variety with specific nutrients that it will need to grow. As per the information given in the case study, these solutions will be available in the market by April 2026. Hence, by that time, grant relates to the development of new technological solution (which is an asset) and should be initially recognized as deferred income. The deferred income should be recognized as income on a systematic and rational basis over the useful life of this new technology.

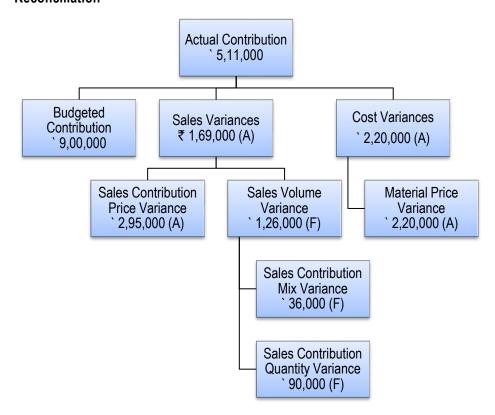
For the grant received of  $\stackrel{?}{\sim} 5$  crores, SAL should recognize a liability in the balance sheet as of March 31, 2025, and March 31,2026. Once the technology is used in the commercial development of crop-specific nutrition, the deferred grant income of  $\stackrel{?}{\sim} 5$  crores should be recognized over the useful life of this new technology to compensate for depreciation costs.

Alternatively, as per Ind AS 20 SAL would be permitted to offset the deferred income of  $\stackrel{?}{\sim}$  5 crores against the cost of development of this technology as at April 1, 2026.

3. Earthquake related compensation – SAL will be able to submit an application form only after May 31, 2025 i.e. in the F.Y. 2025-26. Although the earthquake happened in September 2024 relating to the financial year 2024-25, SAL should recognize the income from the government grant in the year the application is submitted and approved by the government for compensation.

Since in the F.Y. 2024-25, the application form could not be submitted due to adoption of financials with respect to sales figure before earthquake occurred, SAL should not recognize the grant income as it has not become receivable as at March 31, 2025.

#### 7. Reconciliation



### **Budgeted vs. Actual Contribution**

Referring to working notes, the total budgeted contribution for the year 2024-25 was  $\stackrel{?}{\stackrel{?}{?}} 9,00,000$  while the actual contribution was  $\stackrel{?}{\stackrel{?}{?}} 5,11,000$ . There is hence an adverse variance in terms of contribution = budgeted contribution - actual contribution =  $\stackrel{?}{\stackrel{?}{?}} 9,00,000 - \stackrel{?}{\stackrel{?}{?}} 511,000 = \stackrel{?}{\stackrel{?}{?}} 389,000$  (Adverse).

The actual contribution for all three grades of fertilizers is lower than the budgeted contribution. This is because of 2 reasons: Discount policy (b) Raw material procurement cost. Now let us analyse the variances in detail.

## Sales variances (in terms of contribution)

Sales variances in terms of contribution can be classified as sales contribution price variance and sales contribution volume variance.

## Sales contribution price variance is calculated as ₹2,95,000 (Adverse).

| Sr.<br>No. | Sales Contribution Price Variance  | Grade 1    | Grade 2    | Grade 3    | Total      |
|------------|--|------------|------------|------------|------------|
| 1          | Actual Contribution (per kg)   | 150        | 08         | 20         | -          |
|            | * Based on standard cost   | [450-300*] | [280-200*] | [180-160*] |            |
| 2          | Standard Contribution (per kg)   | 200        | 100        | 40         | -          |
| 3          | Actual Quantity (kg)   | 2,500      | 3,100      | 5,400      | 11,000     |
| 4          | Sales Contribution Price Variance =  (Actual Contribution – Standard Contribution) | (1,25,000) | (62,000)   | (1,08,000) | (2,95,000) |
|            | Standard Contribution) × Actual Quantity [(1 - 2) × 3]                             |            |            |            |            |

SAL's sales and marketing campaign allowed for slightly higher discounts were given on bulk purchases beyond a certain limit. This policy for additional discount was not factored in the standard price (budget), resulting in a difference between actual and budgeted contribution.

## Sales contribution volume variance is calculated as ₹1,26,000 (Fav).

| Sr.<br>No. | Sales Contribution<br>Volume Variance  | Grade 1  | Grade 2 | Grade 3 | Total    |
|------------|--|----------|---------|---------|----------|
| 1          | Actual Quantity (kg)   | 2,500    | 3,100   | 5,400   | 11,000   |
| 2          | Budget Quantity (kg)   | 2,000    | 3,000   | 5,000   | 10,000   |
| 3          | Standard Contribution (per kg)   | 200      | 100     | 40      | -        |
| 4          | Sales Contribution Volume Variance = (Actual Quantity - Budget Quantity) × Standard Contribution [(1 - 2) × 3] | 1,00,000 | 10,000  | 16,000  | 1,26,000 |

This is another fundamental metric to assess sales performance. By comparing the actual sales with the budget sales, the company can understand (a) market conditions in which

it operates (b) success of any sales and marketing campaigns or even (c) the reasonableness of the company's forecasting capabilities.

In the case of SAL, for the year 2024-25 the actual sales volume of 11,000 units has been higher than the budgeted sales of 10,000 units. A possible reason for this could be the spurt in demand due to its successful sales and marketing campaign for the three new grades that were introduced. This resulted in a favourable variance of  $\ref{thmos}$  1,26,000 for the year.

Sales variance in terms of contribution = Sales contribution price variance ₹2,95,000 (Adverse) + Sales contribution volume variance ₹1,26,000 (Favourable) = ₹1,69,000 (Adverse).

This tallies with the overall results as explained above. It can be concluded that while volumes helped buffer the fall, SAL may have given deeper discounts that eventually impacted its profitability. For example, Grade 3 fertilizer, where the actual contribution is nil. Although SAL sold 400 units more than budget of Grade 3 fertilizer, the contribution towards actual profits was nil. This is equally due to discounts that were given as part of the sales and marketing campaign (the impact of material price discussed later). SAL's sales team should realize that such discounts may be unfeasible in the long run. Price sensitivity analysis of how the selling price of each grade impact demand is an exercise the SAL's team can undertake to understand how much discount to give in future.

## Analysing sales contribution volume variance in depth

To analyse sales contribution volume variance better, it can be further split up as sales contribution mix variance and sales contribution quantity variance.

Sales contribution mix variance is ₹36,000 Favourable.

| Products | Actual<br>Quantity<br>(AQ) | Actual Sales<br>in Budgeted<br>Proportion<br>(RAQ) | Difference<br>AQ - RAQ | Standard<br>Contribution<br>per kg | Mix Variance Difference × Standard Contribution |
|----------|----------------------------|--|------------------------|------------------------------------|---|
| Grade 1  | 2,500                      | 2,200  | 300                    | 200                                | 60,000  |
| Grade 2  | 3,100                      | 3,300  | (200)                  | 100                                | (20,000)  |
| Grade 3  | 5,400                      | 5,500  | (100)                  | 40                                 | (4,000)   |
| Total    | 11,000                     | 11,000   | •                      |                                    | 36,000  |

Sales mix variance helps identify which product or product lines are performing well. As per the budget proportion sales volume composition was Grade 1: 20%, Grade 2: 30%

and Grade 3: 50%. When applied to actual volume of 11,000 units, the distribution appears in the column RAQ – Revised Actual Quantity. The difference between actual quantity sold and the RAQ shows the variation in the mix / proportion of actual sales as compared to the budgeted proportion.

Accordingly, Grade 1 has sold 300 units more, having a higher proportion in the mix. It also has the highest contribution of ₹ 200 per kg as compared to the other 2 grades. This swings the variance to a favourable side. On the contrary, Grade 2 and Grade 3 have a lower proportion in the sales mix, contributing adversely to the sales mix ratio. Overall, the sales mix is positive because SAL sold more of Grade 1 fertilizer which also has a higher contribution as compared to the other 2 grades. Hence, it can be concluded the Grade 1 trends better than the other grades and contributes better towards the profitability of the business.

Sales contribution quantity variance is ₹90,000 Favourable.

| Products | Budget<br>Quantity<br>(BQ) | Actual<br>Quantity in<br>Budgeted<br>Proportion<br>(RAQ) | Difference<br>RAQ - BQ | Standard<br>Contribution<br>per kg | Quantity Variance Difference × Standard Contribution |
|----------|----------------------------|--|------------------------|------------------------------------|--|
| Grade 1  | 2,000                      | 2,200  | 200                    | 200                                | 40,000   |
| Grade 2  | 3,000                      | 3,300  | 300                    | 100                                | 30,000   |
| Grade 3  | 5,000                      | 5,500  | 500                    | 40                                 | 20,000   |
| Total    | 10,000                     | 11,000   | 1,000                  | -                                  | 90,000   |

A favourable sales contribution quantity variance indicates by how much the contribution has risen exclusively on account of actual sales in a predetermined proportion (i.e. budgeted) being higher than expectations as per budget. This does not consider any impact on account of variation in sale price and hence is measured with relation to standard contribution.

The actual sales are redistributed in proportion of their budget estimates to get a revised actual quantity (RAQ) mix. Hence, had the budget sales been 11,000 units, what would have been the proportion of sales of each of these grades of fertilizers? This is shown in the RAQ column. When compared with the original budget estimate of 10,000 units, it can show the impact on standard contribution due to change in the proportion of quantity of units sold.

A rise in the demand side for each grade of fertilizer resulted in positively contributing to the profitability of the company.

# Sales contribution volume variance = Sales contribution mix variance is $\ref{36,000}$ Favourable + Sales contribution quantity variance is $\ref{90,000}$ Favourable = $\ref{1,26,000}$ (Favourable)

Higher sales due to spurt in demand (indicated from favourable sales contribution quantity variance of ₹ 90,000) combined with a higher proportion of these sales coming from the profitable Grade 1 fertilizer (indicated from favourable sales mix variance of ₹ 36,000), resulted in a favourable sales contribution volume variance of ₹ 1,26,000.

#### **Cost variances**

Increase in costs due to unplanned material procurement at higher rates also adversely contributed.

## Material Price variance is ₹2,20,000 Adverse.

| Sr.<br>No. | Material Price Variance   | Grade 1  | Grade 2  | Grade 3    | Total      |
|------------|---|----------|----------|------------|------------|
| 1          | Standard Price (per kg)   | 150      | 100      | 75         | -          |
| 2          | Actual Price (per kg)   | 170      | 120      | 95         | -          |
| 3          | Actual Quantity (kg)  | 2,500    | 3,100    | 5,400      | 11,000     |
| 4          | Material Price Variance = (Standard Price - Actual Price) × Actual Quantity [(1) - (2) × 3] | (50,000) | (62,000) | (1,08,000) | (2,20,000) |

The material procurement cost for all the grades was higher than standard. There have been times when there is a sudden spike in demand for a particular grade of fertilizer combined with a successful sales and marketing campaign that spurred sales volume. Higher procurement cost from the open market than that agreed with the JIT supplier partners resulted in an adverse impact on actual contribution.

## **Working Notes**

## **Budget Contribution for the year 2024-25**

| Sr.<br>No. | Particulars                    | Grade 1 | Grade 2 | Grade 3 | Total  |
|------------|--------------------------------|---------|---------|---------|--------|
| 1          | Budget Quantity (kg)           | 2,000   | 3,000   | 5,000   | 10,000 |
| 2          | Average Selling Price (per kg) | 500     | 300     | 200     | -      |
| 3          | Direct Material Cost (per kg)  | 150     | 100     | 75      | -      |
| 4          | Direct Labour Cost (per kg)    | 100     | 60      | 75      | -      |

| 5 | Variable Overhead Cost (per kg)            | 50       | 40       | 10       | -        |
|---|--|----------|----------|----------|----------|
| 6 | Standard Contribution (per kg) [2-(3+4+5)] | 200      | 100      | 40       | -        |
| 7 | Budgeted Contribution [1 ×6]               | 4,00,000 | 3,00,000 | 2,00,000 | 9,00,000 |

## Actual Contribution for the year 2024-25

| Sr.<br>No. | Particulars                              | Grade 1  | Grade 2  | Grade 3 | Total    |
|------------|--|----------|----------|---------|----------|
| 1          | Actual Quantity (kg)                     | 2,500    | 3,100    | 5,400   | 11,000   |
| 2          | Average Selling Price (per kg)           | 450      | 280      | 180     | -        |
| 3          | Direct Material Cost (per kg)            | 170      | 120      | 95      | -        |
| 4          | Direct Labour Cost (per kg)              | 100      | 60       | 75      | -        |
| 5          | Variable Overhead Cost (per kg)          | 50       | 40       | 10      | -        |
| 6          | Actual Contribution (per kg) [2-(3+4+5)] | 130      | 60       | 40      | -        |
| 7          | Actual Contribution [1 ×6]               | 3,25,000 | 1,86,000 | -       | 5,11,000 |

### 8. Evaluation of SAL's Financial Performance

The benchmark WACC that SAL's management wants to maintain is below 10%. The company's actual WACC is 7.636%. SAL has managed to maintain its WACC below the required benchmark primarily on account of its capital structure. Long term debt of ₹16 crores, which is the cheaper source of capital, makes up more than half of the total capital employed of ₹25 crores.

SAL's financial performance reflects a strong operational foundation, though its capital structure presents certain financial risks that require careful management.

With 64% of its capital sourced from debt financing, SAL carries a significant financial obligation in the form of ₹1.12 crores in interest payments. While leverage can enhance returns, it also increases financial risk, making strong cash flow management essential for ensuring timely debt repayment and mitigating the risk of financial distress.

Despite this high debt level, SAL has demonstrated strong operational efficiency, achieving an PBIT of ₹ 9 crores. This indicates the company's ability to generate substantial earnings before financial obligations. Additionally, its EVA of ₹ 4.391 crores shows that SAL is earning returns above its cost of capital, confirming that it is creating value for shareholders rather than merely covering financing costs.

To sustain this positive path, SAL must carefully assess new investment opportunities, ensuring they generate returns exceeding its benchmark 10% WACC to drive long-term value creation. Moreover, effective risk management strategies—such as hedging against interest rate fluctuations, optimizing capital allocation, and maintaining a financial buffer—will be crucial in mitigating potential risks and ensuring financial stability.

Overall, SAL's strong operational performance and positive EVA highlight its ability to generate value. However, its high reliance on debt necessitates vigilant financial management. To ensure sustainable growth and maximize shareholder value, SAL should focus on prudent debt management, strategic investment in high-return projects, and robust risk mitigation strategies to navigate potential financial challenges effectively.

## Workings

= ₹ 4.391 Cr.

= ₹ 25 Cr.

WACC = 
$$(5 + 4)/25 \times 12.5\% + 16/25 \times 4.9\%$$

= 7.636%

|  | ₹ in Cr. |
|--|----------|
| PBIT   | 9.000    |
| Less: Interest                                 | (1.120)  |
| PBT  | 7.880    |
| Less: Tax @ 30%                                | (2.364)  |
| PAT  | 5.516    |
| Add: Interest (net of tax) [1.12 × (1 - 0.30)] | 0.784    |
| NOPAT  | 6.300    |

## **ANSWERS TO THE CASE STUDY 4**

## **Answers to the Multiple Choice Questions**

## 1. (d) ₹ 6 million and no gain or loss

**Reason:** As per Ind AS 40, Initial recognition of an owned investment property should be at cost only. As per para 59 of Ind AS 40, "Investment Property" Transfers between investment property, owner-occupied property and inventories do not change the carrying amount of the property transferred and they do not change the cost of that property for measurement or disclosure purposes. Hence if a property which was previously used for business operations, is subsequently reclassified as an investment property, and the company follows the cost model, the investment property should be recognized at its carrying amount at the date of reclassification.

In this case, the property was purchased for  $\ref{thmodel}$  10 million on April 1, 2020. After 4 years, the carrying amount is  $\ref{thmodel}$  6 million, after accounting for depreciation. Since as per Ind AS 40, the company has to follow the cost model, the fair value is relevant only for disclosure and not for the recognition of the asset in the balance sheet. Therefore, the investment property should be recognized at the carrying amount of  $\ref{thmodel}$ 6 million, as that is the value at which it is currently held on the books and there will be no gain or loss on such reclassification.

## **2. (d)** ₹ 54,670

Reason: Computation of customs duty payable by Mr. Raj Malhotra

| Particulars   | ₹               |
|---|-----------------|
| Personal effects [Duty free clearance is allowed]   | Nil             |
| Laptop computer [One laptop computer is exempt when imported into India by a passenger ≥ 18 years of age]                 | Nil             |
| Jewellery [Duty free jewellery allowance is not available to Mr. Raj since he did not reside abroad for more than 1 year] | 67,000          |
| Music system  | <u>1,25,000</u> |
| Total value   | 1,92,000        |
| Less: General duty-free baggage allowance of ₹ 50,000   | <u>50,000</u>   |
| Value of baggage liable to customs duty   | 1,42,000        |
| Rate of Duty  | 38.50%          |
| Customs duty @ 38.50% (including social welfare surcharge)  | 54,670          |

#### 3. (b) ₹7,23,867

**Reason:** Expense for F.Y. 2023-24 = Expected number of employees at the end of the vesting period x Shares per employee x Fair value of a share x Proportionate vesting period

= 440 employees x 100 shares x ₹ 122 x 1/2 = ₹ 26,84,000

Expense for F.Y. 2024-25 = (Expected number of employees at the end of the vesting period x Shares per employee x Fair value of a share x Proportionate vesting period) - Expense recognized in the year <math>2023-2024

= (419 employees x 100 shares x ₹ 122 x 2/3) – ₹ 26,84,000

= ₹ 7,23,867

## 4. (c) 81.87%

Reason: Calculation of Shifts:

Total Shifts = Days per week × Shifts per week × Total Weeks

 $= 6 \times 2 \times 4 = 48$  Shifts

#### Calculation of Un-Planned Downtime:

Un Planned Loss of minutes per shift = Total unplanned loss in minutes / Total shifts

=1440/48 = 30 mins

Total Loss = Breakdown Maintenance (in mins) + Set up

Changes (in mins) + Power Failure (in mins)

= 360 + 840 + 240 = 1440 mins

#### **Calculation of Planned Production time**

Planned Production minutes per shift = Total Time - Planned Downtime

= 540 - 60 = 480 mins

Total Time = 9 hrs × 60 mins = 540 mins

Planned Downtime = Lunch Break + Miscellaneous Breaks +

Preventive Maintenance

= 30 + 15 + 15 = 60

Availability Ratio =  $\{(480 \text{ min}-30 \text{ min})/480 \text{ min}\}= 93.75\%$ 

**Actual Production** = 140 units per shift

#### Standard time

= 3 minutes

#### Standard Time Required

- =140 units x 3 minutes
- =420 minutes

#### **Actual Time Taken**

- =480 mins 30 mins.
- =450 minutes

#### **Performance Ratio**

- $= (420 \text{ min}/450 \text{ min}) \times 100$
- = 93.33%

## **Quality Ratio**

- $= (131/140) \times 100$
- = 93.57%

Thus, OEE 0.9375×0.9333×0.9357=81.87%

**5.** (a) No, as such appointment did not amount to appointment of Mrs. Sunita to an office or place of profit in SPL.

Section 188 of the Companies Act, 2013, along with Rule 15 of the Companies (Meetings of Board and its Powers) Rules, 2014 contain provisions which regulate 'related party transactions'.

Further, Section 2(76) of the Act defines who is a 'related party. As per Section 2(76), 'related party', with reference to a company, means a director or his relative;

Where the transaction or transactions to be entered into as contract or arrangement is for appointment to any office or place of profit in the company, its subsidiary company or associate company at a monthly remuneration exceeding ₹ 2.5 lakh as mentioned in clause (f) of subsection (1) of Section 188, approval by an ordinary resolution is required.

The expression "office or place of profit" means any office or place -

(1) where such office or place is held by a director - if the director holding it receives from the company anything by way of remuneration over and above the remuneration to which he is entitled as director, by way of salary, fee, commission, perquisites, any rent-free accommodation, or otherwise; (2) where such office or place is held by an individual other than a director or by any firm, private company or other body corporate - if the individual, firm, private company or body corporate holding it receives from the company anything by way of remuneration, salary, fee, commission, perguisites, any rent-free accommodation, or otherwise.

Mrs. Sunita, a relative of a JayZee Ltd.'s director, was appointed as a director in JayZee Ltd.'s subsidiary, SPL, for a monthly salary of ₹3 lakhs in the F.Y. 2024-25. This compensation, received as a related party holding a director position in SPL, constitutes her sole remuneration. Consequently, her appointment does not create an 'office or place of profit' with respect to JayZee Ltd. Therefore, JayZee Ltd. was not required to obtain shareholder approval via an ordinary resolution for her SPL directorship.

#### **Descriptive Answer**

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

As per paragraph 40A of Ind AS 1, an entity shall present a third balance sheet as at the beginning of the preceding period in addition to the minimum comparative financial statements if, inter alia, retrospective restatement has a material effect on the information in the balance sheet at the beginning of the preceding period.

In the given case, expenses for the year ended 31st March, 2023 and liabilities as at 31st March, 2023 were understated because of non-recognition of bonus expense and related provision. Expenses for the year ended 31st March, 2024, on the other hand, were overstated to the same extent because of recognition of the aforesaid bonus as expense for the year. To correct the above errors in the annual financial statements for the year ended 31st March, 2025, the entity should:

(a) restate the comparative amounts (i.e., those for the year ended 31st March, 2024) in the statement of profit and loss; and

- (b) present a third balance sheet as at the beginning of the preceding period (i.e., as at 1st April, 2023) wherein it should recognise the provision for bonus and restate the retained earnings.
- 7. (A) (i) No. of Shares to be issued to the shareholders of BM Auto:

$$(10/20) \times 12,50,000 = 6,25,000$$

(ii) Revised P/E ratio of BM Autos Ltd.

EPS of BM Auto = ₹ 12,50,000/ 12,50,000 = ₹ 1

Market Price = EPS × P/E Ratio

Revised Market Price of BM Autos Ltd. = ₹ 1 × 6.4 = ₹ 6.40

## **Exchange Ratio**

New Exchange Ratio = ₹ 6.40 / ₹ 20 = 0.32 or i.e 0.32 shares of JayZee Ltd. for one share of BM Autos Ltd.

## Post-acquisition EPS of JayZee Ltd.

Post-acquisition EPS of JayZee Ltd.

= ( ₹ 50,00,000 + ₹ 12,50,000) / (25,00,000 + 12,50,000\*0.32)

= ₹ 62,50,000/ 29,00,000 = ₹ 2.16

#### (iii) Desired Exchange Ratio

Post-acquisition total number of shares =

Post-Acquisition Earnings / Pre-Acquisition EPS of JayZee Ltd. =

₹ 62,50,000 / ₹ 2 = 31,25,000

Number of Shares Required to be Issued = 31,25,000 - 25,00,000 = 6,25,000

Thus, exchange ratio should be:

Exchange Ratio = 6,25,000 / 12,50,000 = 0.50

(B) In ordinary cases, the company taken over is the smaller company. The concept of takeover by reverse bid, or of reverse merger, is thus not the usual case of amalgamation of a sick unit which is non-viable with a healthy or prosperous unit. Instead, it is a case whereby the entire undertaking of the healthy and prosperous company is to be merged and vested in the sick company, which is non-viable. A company becomes a sick industrial company when there is erosion in its net

worth. This alternative is also known as taking over by reverse bid. The three tests to be fulfilled before an arrangement can be termed as a reverse takeover are specified as follows:

- 1. The assets of the transferor company are greater than the transferee company.
- 2. Equity capital to be issued by the transferee company pursuant to the acquisition exceeds its original issued capital.
- 3. The change of control in the transferee company through the introduction of a minority holder or group of holders.
- 8. In the present case, auditors are <u>unable to obtain sufficient and appropriate audit</u> <u>evidence</u> with respect to inventory of the company, neither the physical verification has been done by the management nor adequate inventory records are being maintained by JayZee Ltd. The audit team is also unable to undertake the physical inventory count and as such the value of inventory could not be verified. Further, inventory constitutes <u>30%</u> of the total assets of JayZee Ltd., which is significant.

In the above case, the auditor is unable to obtain sufficient appropriate audit evidence on which to base the opinion, and the possible effects on the financial statements of undetected misstatements, if any, **could be both material and pervasive**. Thus, auditors should give a **Disclaimer of Opinion**.

As per Companies Auditors' Report Order 2020 (CARO 2020) dated 25th Feb 2020, the audit report shall include a statement on the following matter:

Whether the physical verification of the inventory has been conducted at reasonable intervals by the management and whether, in the opinion of the auditor, the coverage and procedure of such verification by the management is appropriate. In view of the above the auditor should give a qualification in his report narrating the situation.

## **ANSWERS TO THE CASE STUDY 5**

## **Answers to the Multiple Choice Questions**

## 1. (c) 10% of net profits

**Reason:** Part (i) of the Second Proviso to Section 197(1), provides that except with the approval of the company in general meeting by a special resolution, the remuneration payable to any one managing director or whole time director or manager shall not exceed 5% of the net profits of the company and if there is more than one such director then remuneration shall not exceed 10% of the net profits to all such directors and manager taken together.

Here, after the appointment of Mr. Keyur as Managing Director, since the company had both Whole-time Director as well as Managing Director, the company Mr. Amit, the company secretary would have told the maximum remuneration that is allowed in a Financial Year to all such directors and manager taken together is 10% of net profits, as per the aforesaid provision.

## 2. (a) The company shall not waive recovery of excess remuneration paid unless approved by BDS Bank before obtaining approval by a special resolution.

**Reason:** Section 197 of the Companies Act, 2013, Where the company has defaulted in payment of dues to any bank or public financial institution or non-convertible debenture holders or any other secured creditor, the prior approval of such person respectively shall be obtained by the company before obtaining approval of such waiver by a special resolution.

Hence, SWAL shall not waive recovery of excess remuneration paid unless approved by BDS Bank before obtaining approval by a special resolution.

#### 3. (b) There are 3 separate Performance obligations.

Reason: Promise to provide goods and services is distinct if

- the company can benefit from the good or service either on its own or together with other resources that are readily available to the firm, and
- its promise to transfer the good or service to the company is separately identifiable from other promises in the contract

For broadband and voice call services -

Broadband and voice services are separately identifiable from other promises as company has various plans to provide the two services separately. These two services are not dependant or interrelated. Also the company can benefit on its own from the services received.

For sale of modem -

Company can either buy product from Giganet or third party. No significant customisation or modification is required for selling product.

<u>Based on the evaluation we can say that there are three separate performance</u> obligations: -

- Broadband Service
- ❖ Voice Call services
- ❖ Modem
- 4. (d) The Software license provides a right to use the Intellectual Property that is satisfied at a point in time.

**Reason:** Based on the facts given in question, although the updates and upgrades will change the functionality of the software, they are not activities considered in determining the nature of the entity's promise in granting the licence. The activities of DBMS Ltd. to provide updates or upgrades are not considered because they transfer a promised good or service to the company – i.e. updates or upgrades are distinct from the licence. Therefore, the software licence provides a right to use the IP that is satisfied at a point in time.

**5. (c)** JS & Associates will design the audit procedures based on their assessment of risks that could potentially cause errors in the financial statements of SWAL.

#### Reason: As per SA 701

The concept of significant auditor attention recognizes that an audit is risk-based and focuses on identifying and assessing the risks of material misstatement of the financial statements, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for the auditor's opinion. Options (a), (b), and (d) do not accurately represent the emphasis on risk assessment in a significant auditor attention approach.

## **Answers to the Descriptive Questions**

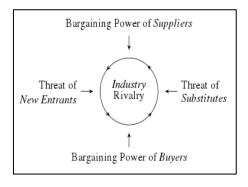
6. (i) Michael E Porter, in 1980 in his book "Competitive strategy: Techniques' for analysing industries and competitors" suggested five force model to assess the competitive environment of an industry. The five forces which are enumerated by this model are the bargaining power of suppliers; the bargaining power of customers (buyers); the threat of new entrants; threat of substitute products; and the level of rivalry among current competitors in the industry.

This model is also named as porter's five force analysis. Since each of these five forces affect the competitiveness of business, hence can be used to assess the potential of any organisation or entity; life-assurance business of SWAL (including 'sub-agency office' division) is not an exception to this. (Any Two Points)

### The bargaining power of suppliers

Number of suppliers will decide the dominance they possess in term of bargaining power regarding the price of good and service they supply to business. In case of 'sub-agency office' division following factors will affect the suppliers' power—

Control over Value Chain – By adopting the strategy of forward integration the insurance companies them-selves getting into the direct sale through own network of branch offices in order to enhance their margin or reducing the margin earned by SWAL's 'sub-agency office' division. Since number of insurance companies are neither too less nor too much,



hence bargaining power of insurance companies; in terms of percentage brokerage they offered to SWAL is moderate.

Importance of product – SWAL is also dealing in financial product's marketing and advisory, which contribute 50% of group sales and around 67% of group's profit; thus assurance business which is no doubt significant but only choice (business) available to SWAL. Hence, bargaining power of supplier is moderate.

Substitution among the brand – Life assurance product offers similar utility to client; hence easily substitutes among the brands, means if insurance company 1 charge lesser premium then insurance company 2, client will buy assurance of company 1. No doubt switching is less viable once policy subscribed. Since SWAL's 'sub-agency' division is offering the product from all 23 insurance companies, hence bargaining power of suppliers become low.

Supply of other factors – Other factor such 'sub-agency offices', which are largely on lease, has 30-year lease, this will reduce the lease cost as well as bargaining power of land-lord apart from bringing stability.

(Any Two Points)

## The bargaining power of customers

Whether seller is price taker or makes, this is outcome of bargaining power of customers (true sense competition). If the bargaining power is high seller will become price taker, else he is price maker. Following factors affect the bargaining power of customers of SWAL's 'sub-agency' division—

Number of buyers – In assurance industry the buyers are large (in comparison to few number of suppliers) and diversified, hence their bargaining power is low.

Standardised products – Since the life assurance is the product, which is standard from prospective of core functionality, hence buyers can easily substitute brands and can negotiate to reasonable extent.

Switching – Once policy subscribed can't be easily switched with another, hence due to high switching cost bargaining power reduced to some extent at-least.

(Any Two Points)

#### The threat of new entrants

Although entry of a new firm to the industry/ market depends upon the level of entry barriers, but if new entity enters into the industry; it will surely bring additional capacity which enhance the stiffness of competition; hence become a kind of threat. In case of 'sub-agency office' division, there are some major barriers to entry—

Less number of new life-assurance licenses by regulator due to tough regulations – As mentioned in the case that after considering the default by few insurance firms and increasing customer complaints, regulator of insurance business in country has tighten the registration criteria and harden the norms; hence this may act as entry barrier and reduce the threat of new entrants.

Less number of new insurance agent due to no new authorisation by insurance companies – As market is revamping, the agents is becoming competitor to the insurance companies and as mentioned insurance companies stopped authorising new insurance agents, hence this will act an entry barrier for new insurance agents, which is a great positive for SWAL's 'sub-agency office' division and intact the competitive advantage.

Learning curve and economies of scale – Since all the 23 insurance companies dealing in life assurance and SWAL are 10 to 20 years old organisations; hence learning curve and economies of scale (shared services for the 580 offices - presence in 580 cities) which they are enjoying may become entry barriers for new

firm. Since new firms require huge capital to be at par to such learning curve and economies of scale. (Any Two Points)

#### Threat of substitution

Substitution means the product from some other industry which can render the same function which life assurance is rending. The threat of substitute product is quiet low.

## **Competitive rivalry**

The level of competition among the players to acquire or retain the market share directly affects the profitability in an industry. Following factor is affecting the competitive rivalry—

Number of competitors and respective market size – Since there are good number of competitors, hence competition will be intense; may cut throat rivalry. Presently SWAL's insurance business represent 14.55% of market share (in 2024-25) in comparison to 14.29% of market share five year ago, without any major variation, hence possibility of gaining new market share is limited that too at high cost (in form of advertisement and more after sale services).

Lack of differentiation – Standardise product results in high rivalry, since the life assurance is standard product hence rivalry may be high on account of easy substitution effect among the different brands.

Slow market growth – If market is growing at high rate, rivalry may be stiffer or may be moderate; because everyone has reasonable opportunity to grow. The moment growth stagnated rivalry become stiffer because no one wish to lose market share. The industry life cycle curve is flatter here, because during last four years overall industry wide CAGR (compounded annual growth rate) of life assurance business is 3.39%, whereas year-on-year growth from 2023-24 to 2024-25 is 1.91%. Although potential is limited, but competition is still high.

Exit barriers – If the exit cost for player to move out of industry is high, it will have to be in industry and fight for survival, which may make competition tougher. Since agency agreement and lease agreement is already signed by SWAL hence, it becomes difficult to exit from the business, hence need to participate in competition to retain the share.

(Any Two Points)

## (ii) Case for holding the 'sub-agency office' division

The strategic review committee suggests that the SWAL's 'sub-agency office' division should be sold off and that SWAL shall re-position its assurance business

as an online solution, but the same suggestion firstly needs to be evaluated in terms of financial perspective among the other criteria.

The growth in life assurance business is stagnated and industry is in maturity stage of industry life cycle. This is evident from industry size and growth in the same. During last four years overall industry wide CAGR (compound annual growth rate) of life assurance business is 3.39%, whereas year-on-year growth from 2023-24 to 2024-25 is 1.91%. The moment growth stagnated rivalry become stiffer because no one wish to lose market share. Hence, there is intense competition in market. In cases where market witnesses intense competition, operating efficiently is essential and reduction in cost become key success factor; in order to offer competitive deals to clients and retain market share.

Hence it becomes need of hour, that we review the operating processes followed at 'sub-agency offices' to check whether they are efficient or not, in order to ensure greater profitability rather thinking to sale off the entire 'sub-agency office' division.

Now, move to financial analysis, which suggests it is beneficial to hold back 'subagency' division.

Contribution to the group – Insurance business is contributing 50% of top-line of overall group revenue (and 1/3<sup>rd</sup> of bottom line), and around 86% (280/ 326) of this comes from 'sub-agency office' division and 'E-platform' division contribute only remaining 14%.

Profitability – Margins are positive. There are two major parameters to evaluate profitability further on–

- Operating profit (EBIT/ Revenue) No doubt, operating profit shrink from 12.4% to 6.43% in three years' time frame. But as earlier quoted, margin is positive and secondly, there is sign of recovery as well. EBIT increased in absolute terms (from 16 to 18).
- Return on capital employed (ROCE) [EBIT / (Equity + Long Term Debt)] No doubt, ROCE shrink from 15.5% to 7.69% in three years' time frame. But reduction in EBIT is not only a reason, another major reason for decline is also change in capital structure. Long term debt is increased in absolute terms (from 50 to 78).

Liquidity – Current ratio (Current Assets / Current Liabilities) being reasonable measure of liquidity indicates enough liquidity in 'sub-agency office' division to meets it obligation. There is minor decline from 1.367 times to 1.33 times. Component analysis of working capital can be performed for greater insight.

Gearing (Debt / Equity) – Gearing ratio depicts the financial leverage, a measure of risk. Gearing ratio no doubt increased as result of introduction of debt, from 1/3 to 1/2, but under control. (Any Two Points)

Some other quasi-finance and significant factors relevant to the decision of sale of 'sub-agency office' division and full focus on 'E-platform' division—

Client's demography – Clients from all age groups from 20 to 60+ are clients of SWAL's assurance brokerage business. 66.56% (217/326) of revenue coming from clients with 50+ years of age, and 99% (215/217) out of them are associated through 'sub-agency offices', hence holding of 'sub-agency' division become essential. Secondly, clients from all age group may not find it convenient to shift to 'E-platform' 'Policy at you click' and their resistance may result in losing business. Thirdly, they have easily available substitute, because competitors also have branch offices which will give them same feel.

Resistance from employees – Out of 1,564 on-roll employees of assurance brokerage business, only 50 are associated in 'E-platform' division- 'Policy at you click', rest all in 'sub-agency office' division. If SWAL re-structure itself fully as online solution for life assurance then also can't absorb all the employees, many of them need to be retrenched. Resistance will be there in both the cases, because transferred employee may not have requisite skill set, result in poor quality of service and no job satisfaction to employee. Whereas in case of retrenched workers redundancy cost will become additional financial burden. This can be seen as exit barrier.

Legal aspect in term of pre-closure of lease - SWAL has practice to sign 30-year lease, when so ever taking and 'sub-agency office' on lease in order to reduce the lease cost and bring stability. It started the business 2 decades ago and expanded it 3 years ago and many of leases are active right now, in case of pre-closure, it may be possible to bear additional financial burden as per terms of lease agreement.

Loosing USP – 'Independence and impartial advice' with presence wide across the nation, in form of 'sub-agency offices' equipped with professionally trained sale staff headed by financial planner or advisor, where customer can take advise and discuss opinion prior to investing/ buying any insurance or financial product is USP for SWAL's assurance brokerage business. By disposing the 'sub-agency office' division this central idea, with which SWAL was established may be washed out.

(Any Two Points)

In nutshell, the life assurance market has matured in recent years, and result in low growth potential and lower profitability but still yielding positive numbers. Hence, sale of 'sub-agency' division will adversely hit the revenue as well as profitability.

**7.** As per Rule 32(4) of the CGST Rules, 2017, the value of supply under GST for each of the plans would be as follows:

## Plan 1: Investment-Linked Policy

Rule 32(4)(a): The gross premium is reduced by the amount allocated for investment/savings.

Gross premium: ₹ 1,00,000

Investment/savings allocation: ₹ 60,000

Value of supply: ₹ 1,00,000 - ₹ 60,000 = ₹ 40,000

## Plan 2: Single Premium Annuity

Rule 32(4)(b): For single premium annuity policies, the value is 10% of the single premium.

Single premium: ₹ 5,00,000

Value of supply: 10% of ₹ 5,00,000 = ₹ 50,000

## Plan 3: Regular Life Insurance

Rule 32(4)(c): For regular policies, the value is 25% of the premium in the first year and 12.5% of the premium charged from the policy holder in subsequent years.

First Year:

Premium: ₹ 80,000

Value of supply: 25% of ₹ 80,000 = ₹ 20,000

Second Year and onward:

Premium: 80.000

Value of supply: 12.5% of ₹ 80,000 = ₹ 10,000

#### Plan 4: Pure Risk-Cover Policy

Proviso to Rule 32(4): If the entire premium is for risk cover, the rule doesn't apply. The entire premium charged from the policy holder is the taxable value.

Premium: ₹ 50,000 (entirely for risk cover)

Value of supply: ₹ 50,000

8. At reporting date, no change in 12-month POD and entity assesses that there is no significant increase in credit risk since initial recognition – therefore lifetime ECL is not required to be recognised.

| Particulars                        | Details             |
|------------------------------------|---------------------|
| Loan                               | ₹ 100,00,00,000 (A) |
| LGD                                | 25% (B)             |
| PoD – 12 months                    | 0.5% (C)            |
| Loss allowance (for 12-months ECL) | ₹ 12,50,000 (A×B×C) |