SELF-PACED ONLINE MODULE

SET – B

STRATEGIC COST & PERFORMANCE MANAGEMENT

[RELEVANT FOR MAY, 2025 EXAMINATION AND ONWARDS]

BOOKLET ON CASE SCENARIOS

BOARD OF STUDIES

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA

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PREFACE

In today's global marketplace, characterized by increasing complexity, volatility, uncertainty, and rapid change, Chartered Accountants (CAs) have assumed a central and dynamic role in shaping and implementing organizational strategies. Beyond their traditional responsibilities, CAs are now pivotal in driving value creation and determining future strategies. Their role in strategy implementation encompasses securing funding for strategic initiatives and developing key performance indicators (KPIs) to monitor the organization's progress against its objectives. The syllabus reflects this evolution by introducing students to the strategic dimension of management accounting.

This booklet provides an extensive collection of case scenarios designed to enhance students' understanding of key strategic models and concepts critical for business strategy and decision-making. Developed by the Board of Studies, ICAI, as part of the Self-Paced Online Module–Set B, the booklet aims to offer a diverse range of multiple-choice questions (MCQs) for practice.

The MCQs are crafted to simulate real-world scenarios by incorporating innovative elements. Some questions present “multiple correct answers”, encouraging students to analyse scenarios comprehensively and identify all relevant options. This approach mirrors the multifaceted decision-making processes encountered in professional contexts. Additionally, questions using terms such as "most likely" or "most appropriate" require students to prioritise and contextualise their reasoning based on the scenario provided. To further enhance critical thinking, "NOT" MCQs are included, challenging students to identify exceptions and sharpen their attention to detail. These questions test the ability to distinguish between similar concepts and pinpoint deviations from established criteria. This comprehensive approach ensures that the assessment not only evaluates theoretical knowledge but also emphasizes the application of concepts in practical, real-world situations.

By integrating these features, the booklet aims to support students in developing a deeper understanding of strategic models while honing their analytical and interpretational skills. It serves as a valuable resource for fostering an engaging and practical learning experience, equipping students to excel in their professional roles.

Happy Reading and Best Wishes!

CASE SCENARIO 1

Payfast Limited offers an application-based service to make payments by phone. It allows linking of phone numbers with bank and allow bank to bank transfer through mobile phone. It was the 1st company in the country to provide such facility. The customers could not believe that money transfer process could be made so much simpler and the company witnessed exponential growth in very few days. The services level was immaculate and no charges were levied on the customers.

Seeing the growth of Payfast, many other companies joined the industry and started providing this service. Now, Payfast was required to provide other innovative offerings to the customers to maintain its leadership position.

Further, the user count was increasing and so Payfast was spending more to maintain security of the user data. Security breach, if any, could result into loss of millions to its users. Similarly, all its competitors were also spending a significant amount on the security of user data.

In order to incentivize customers, Payfast starting giving cash backs to its customers on every transfer. This was unheard of. Getting money for making transfer was unheard and its competitors also could not fathom it.

To compete with Payfast, its competitors started adding new features on their applications like movie booking, cab booking, etc. But this was not well received by customers as customers used different apps for such transactions which had much better user interface and features. Slowly, the competitors removed those features and went back to their original product.

To improve its brand presence, Payfast hired an international brand designed and designed a new logo for Payfast.

MULTIPLE CHOICE QUESTIONS

1. How would you best describe the offering by Payfast of application to make payments through mobile phone?

   (a) Performance attribute

   (b) Delighter

   (c) Indifferent

   (d) Delighter when introduced, currently threshold attribute

2. Which would be most appropriate description for Payfast's offering of security improvement for user data?

   (a) Delighter

   (b) Performance attribute

   (c) Indifferent

   (d) Reverse

3. Should Kano spend huge amount on logo designing to improve customer satisfaction?

   (a) Yes, as customers love great logo

   (b) No, as customers would be indifferent

   (c) Yes, as competitors had better logo

   (d) No, as companies change logo frequently

4. Is giving cashbacks by Payfast a justified cost?

   (a) Yes, as customers would be delighted

   (b) No, as customers would be indifferent

   (c) No, as it would affect profitability

   (d) No, as competitors would eventually catch up

5. Adding different features by the competitors can be termed as below?

   (a) Indifferent

   (b) Performance Attributes

   (c) Threshold

   (d) Reversal

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (d): Delighter when introduced, currently threshold attribute

Reason

Delighter when introduced, currently threshold attribute as currently all competitors are providing this feature.

2. Option (b): Performance attribute

Reason

Performance attribute as non-maintaining security will cause customer dissatisfaction.

3. Option (b): No, as customers would be indifferent

Reason

No as customer would be indifferent as logo does not add any satisfaction to customer.

4. Option (a): Yes, as customers would be delighted

Reason

Yes, as customers would be delighted as this is completely new way and customer satisfaction will increase.

5. Option (d): Reversal

Reason

Reversal, as complexity, has led to customers not liking it.

CASE SCENARIO 2

You recently joined Management Accounting department of a fashion retail brand '*Paridhaan*' which is struggling with dipping margin and deficiencies issues in distribution network. In meeting with CEO and COO you explained to them that Supply Chain Management can be great help for Paridhaan to overcome the many of challenges that Paridhaan is currently facing.

You explained them the case of Sara Fashions, how they manage their Supply Chain to create value. Sara Fashions is a well-known premium international clothing manufacturer and retailer based in Spain that was founded in the 1980s. Because of the collaborative relationship with customers and suppliers, Sara can complete the development and shipment of a new product to its stores in two to six weeks, which is faster than the industry average of six months. Sara sells their clothing through its own retail outlets.

One of the most significant benefits of Sara's supply chain strategy is its ability to respond quickly to all fashion trends and provide customers with the latest fashion outfits in two weeks in case of existing items while 4-6 weeks in case of new items. Secondly, Sara never produces in large quantities, so if the style does not sell as well as expected, Sara does not suffer as much loss because there is not much stock to discount. Thirdly, the advantages of a vertically integrated and shortened supply chain are obvious. Sara's advertising cost is only 0.3% of its revenue, whereas similar fashion retailers typically spend 3% on advertising and marketing.

The high frequency of shifts in displayed merchandise (about three-quarters of them are changed every three weeks) allows for consistent customer visits.

The main disadvantage of Sara's supply chain is that because Sara owns all of the supply chain channels, it is difficult to expand to distant locations because it is very expensive to distribute such products.

Sara factories in Spain employ flexible manufacturing systems to allow for rapid changeover operations. Only 24% of all items are manufactured in Asia and Africa, while 50% are manufactured in Spain; and rest 26% in the rest of Europe.

Sara's factories can quickly increase and decrease production rates, resulting in less inventory in the supply chain and less need for working capital to finance that inventory. They only do 50 to 60% of their manufacturing in advance, compared to competitors' 80 to 90%. Sara does not need to bet heavily on yearly fashion trends. They can place numerous smaller bets on short-term trends that are easier to predict.

They employ approximately 3,000 workers in manufacturing operations in Spain at an average wage of 11.00 euros per hour, compared to an average wage of 0.80 euros per hour in Asia.

COO pointed that there are two flows that majorly we need to manage at *Paridhaan*; the physical flow of material and exchange of information.

Since many of terms and points are new for them hence, they shower you back with questions which you need to answer (with most appropriate option) keeping above facts in backdrop of your mind.

MULTIPLE CHOICE QUESTIONS

1. By offering products through an exclusive distribution channel, Sara can _____.

   i. Differentiate

   ii. Better understand their customers

   iii. Encourage additional purchase

   iv. Specialise in a particular type of discounted merchandise

   Options

   (a) Only i

   (b) Only iii

   (c) iii and iv

   (d) i, ii, and iii above

2. COO statement in context of flows pertaining to supply chain management at *Paridhaan*, which of the following is/ are true for supply chain management?

   i. The physical material generally has up-stream movement

   ii. Exchange of information always happens both ways

   iii. Flow of cash always has downstream movement

   Options

   (a) Only i

   (b) Only ii

   (c) Only ii and iii

   (d) All of the i, ii, and iii above

3. Sara's response time to customer's demand is comparatively less than its peers, hence it has better control over physical flow of supply chain and capable to counter negative effects. One such effect is, due to small change in customer demands, inventory oscillations become progressively larger looking through the supply chain. This is known as –

   (a) Net effect

   (b) Bullwhip effect

   (c) Chain effect

   (d) Reverse effect

4. Which of following statements is/ are incorrect regarding Sara Fashions?

   i. Sara Fashions competes on flexibility and agility instead of low cost leadership

   ii. Sara Fashions can further reduce their cost production by shifting production facility to labour intensive market/ economy

Options

(a) Only statement i

(b) Only statement ii

(c) Both of the statements

(d) None of the statements

5. Which of following statements is/ are correct regarding cycle-time and turnover ratios of Sara Fashions?

   i. Stores of Sara Fashions expected to have lower inventory turnover ratio than the stores of other retail readymade clothing brands

   ii. Cycle time is lower in case of Sara Fashions than its peer group

Options

(a) Only statement i

(b) Only statement ii

(c) Both of the statements

(d) None of the statements

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (d): i, ii, and iii above

Reason

Sara only sells its clothing through its own retail outlets. This allows Sara to better understand their customers and encourages additional purchases. By offering products through an exclusive distribution channel, Sara can differentiate.

2. Option (b): Only ii

Reason

There are three types of main flows that happen in any supply chains: flow of materials/ goods, flow of money/ cash, and flow of information. There is a forward flow of materials/ goods for the regular flow that happens all the way from higher tier suppliers (upstream) to the end-consumer

(downstream). In addition, if there are any returns for any reason, there will be a reverse flow of materials/ goods in the opposite direction to the forward flow.

Flow of money (cash flow) happens from downstream to upstream. For example, the retailer needs to pay the distributor for the goods they have received from them.

Flow of information happens both ways in the supply chain since organizations will need to share different type of information with each other so that the whole supply chain can make better decisions to improve overall performance.

3. Option (b): Bullwhip effect

Reason

The bullwhip effect is a supply chain phenomenon describing how small fluctuations in demand at the retail level can cause progressively larger fluctuations in demand at the wholesale, distributor, manufacturer, and raw material supplier levels. The effect is named after the physics involved in cracking a whip.

4. Option (d): None of the statements

Reason

It is stated in fact of case that they employ approximately 3,000 workers in manufacturing operations in Spain at an average wage of 11.00 euros per hour, compared to an average wage of 0.80 euros per hour in Asia. Hence Sara competes on flexibility and agility instead of low cost and cheap labour.

Further it is stated that Sara factories in Spain employ flexible manufacturing systems to allow for rapid changeover operations. Only 24% of all items are manufactured in Asia and Africa, while 50% are manufactured in Spain; and rest 26% in the rest of Europe; hence scope of reducing cost of production by shifting production facilities to labour intensive economies such as India, Asian and African countries.

5. Option (b): Only statement ii

Reason

Since Sara Fashions keep low inventory level low and produce in small lots according to latest fashions and customers' needs hence Stores of Sara Fashions have higher inventory turnover ratio than the stores of other retail readymade clothing brands.

Sara Fashions took only 2-6 weeks to reach back to customers with their product that meet their requirements/ expectations hence in comparison to average of 6 months for peer group hence cycle time is lower in case of Sara Fashions.

CASE SCENARIO 3

Glen Engineering Limited (GEL) is adopting lean practices in a drive for excellence and productivity. Among the lean initiatives that GEL has taken in the recent past, TPM is prominent. While speaking to one of the quality circles, the Chief Management Accountant, Mr. Deepak, explains TPM consists of eight strategies (or pillars) that ensure equipment is consistently maintained and inspected by instilling a sense of responsibility for equipment in all employees. He further says one such pillar deals with routine maintenance, and all the workers are partners in the betterment of GEL, and the success of the TPM initiative depends upon their effort.

A couple of training programs for workers, in addition to the EDP (Executive Development Programme) and MDP (Management Development Programme) on 5S practices, were organized by GEL to empower its managers and employees. The focus of the programs was to explain the five S: sort, set-in-order, shine, standardise, and sustain, as well as highlight their scope and useful tools.

Mr. Shukla, who is VP-POM (production and operation management), also attended the MDP. He is of the opinion that there are six S instead of five, and the sixth S is Style, and he further says that the five S are only enablers for continual improvement and not results in themselves. Mr. Shukla's second opinion is countered by Trainer by emphasizing the expected benefits of each of the 5S.

Mr. Dev Raj, floor supervisor, is not sure about how shine can help in productivity and what is to be performed or covered under sort phase, so he desired to understand the importance of shine and the scope of sort phase.

Ms. Archana is the Manager of Risk and Control at GEL, and she is keen to know whether all the workers strive for 5S simultaneously or one person for each department at a time to speed up and avoid conflicts.

You are part of trainer’s team for MDP, expected to answer following questions with most appropriate option.

MULTIPLE CHOICE QUESTIONS

1. Which of the following item are parts of the Sort phase?

   i. Use of red tags

   ii. 48-hour rule

   iii. Disposition red tag items

   iv. Putting tools at the point of use

   Options

   (a) i, ii, and iii only

   (b) i, ii, and iv only

   (c) i, iii, and iv only

   (d) ii, iii, and iv only

2. Evaluate the correctness of opinions expressed by Mr. Shukla.

   i. Style is sixth S as extension of 5S

   ii. 5S are enablers that leads to continual improvement

   Options

   (a) Statement i only

   (b) Statement ii only

   (c) Both Statements

   (d) None of the Statements

3. Which pillar of TPM focuses on routine maintenance?

   (a) Quality maintenance

   (b) Early management

   (c) Planned maintenance

   (d) Autonomous maintenance

4. Which of following included in the expected benefits from Sort?

   i. Make work easier.

   ii. Customer satisfaction

   iii. Improving ownership

   iv. Prevent accumulation of unnecessary items

   v. Reduce chances of being distributed with unnecessary items

   Options

   (a) i, iv, and v only

   (b) i, iii, and v only

   (c) ii, iii, and iv only

   (d) i, ii, iii, iv, and v

5. Which of following included in the expected benefits from Shine?

   i. Creates pleasant environment

   ii. Makes comfortable with 5S procedures

   iii. Frees up space

   iv. Increases workers productivity

   v. Improves safety

   Options

   (a) i, ii, and iii only

   (b) i, ii, iii, and iv only

   (c) ii, iii, iv and v only

   (d) i, iii, iv, and v only

6. Which of the following statements is/are correct?

   i. 5S should be implemented by only one person per department to save time and avoid confusion

   ii. Changing the area's layout is included in Set-In-Order

Options

(a) Statement i only

(b) Statement ii only

(c) Both Statements

(d) None of the Statements

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): i, ii, and iii only

Reason

Putting tools at the point of use belong to set in order rather than sorting. 48-hour rule may be new concept for students; hence students are advised to take note that; the 48-hour rule says if it is not going to be used in the work area within 48 hours, and it does not belong there.

2. Option (b): Statement ii only

Reason

Safety is sixth S as extension of 5S. In this phase, leaders focus on identifying hazards and developing preventative measures to keep their team safe. 5S, being the foundation of TPM (even all the lean practices that eventually led to TQM), acts as the enabler for continual improvement and fits in at the Do stage.

3. Option (d): Autonomous maintenance

Reason

Autonomous maintenance focuses on routine maintenance. Routine maintenance includes cleaning, lubricating, and inspection operations performed by the operators.

4. Option (a): i, iv, and v only

Reason

Sorting makes work easier, prevents accumulation of unnecessary items, reduce chances of being distributed with unnecessary items. Customer satisfaction and ownership don't relate to Sort.

5. Option (d): i, iii, iv, and v only

Reason

Makes comfortable with 5S procedures relates to Standardize.

6. Option (b): Statement ii only

Reason

5S shall be implemented across organisation by all, simultaneously because 5S is more than ensuring that a workspace is neat and aesthetically orderly, 5S focuses on keeping everything in its place to maintain consistency in the work environment. Eliminating inconsistencies reduces disruptions to production processes, in turn resulting in reduced waste and a more predictable (and higher) quality of output.

Set-in-order signify the systemic arrangement by adherence to the one of 14th Principle of Management enunciated by Henri Fayol in Administrative Theory of Management i.e., Principle of order which provides that there shall be place for everything and everything shall be in its place. Therefore set-in-order arrange all necessary items into their most efficient and accessible arrangements so that they can be easily selected for use and make workflow smooth and easy. Hence changing the area's layout included in set-in-order.

CASE SCENARIO 4

KG Airlines is the second largest airline in India. Post the Covid 19 pandemic, the airline industry is slowly reviving its pre-pandemic levels of operations. Business is expected to revive and grow in the next few years. Profit margins of all players in the aviation industry are under constant pressure. This is due to adverse global economic factors and overall inflationary conditions within the domestic market. KG airlines like all other players in the industry is preparing for recovery of business and wishes to maintain if not grow its market share.

"Just like the skies we operate in; customers' expectations are limitless. At the same time, a limit certainly exists for the price that the customer is willing to pay for a flight as also to the costs we can incur in order to remain viable" bemoaned the Chief Executive Officer (CEO) of the company. This key challenge of balancing customer satisfaction and cost reduction efforts was discussed at length by the senior management team at the company's head quarters in Mumbai.

The Regional Marketing Head emphasised that customer experience should not be compromised due to cost reduction measures. Annoyed customers are very likely to switch to rival airlines and hence market share can be impacted.

The Chief Financial Officer (CFO) is a capable experienced Chartered Accountant who has good insights about the operations in an airline industry. She says *"We have many costs such as aviation turbine fuel, government taxes etc. which are not within our control. Let us, therefore, target those costs that are variable and hence controllable by us. Charging customers for every service can many times annoy and affect their flight experience. Therefore, let us reward them instead while cutting down costs!"* She further detailed how this can be done:

It was found that passengers arrive at the airport for check in typically or 2 hours before the flight, although the airline recommends that they come 3 hours before in order to avoid congestion. Due to the constant last-minute arrivals, the airline has a higher staffing requirement at the check in counter, flight boarding staff and other ground crew. If the arrivals are streamlined by making the passengers arrive earlier, the company can save ₹ 2,00,00,000 per annum due to lower staffing requirements. This benefit is considering the savings

across all airports that KG airlines operates in. To incentivise passengers to arrive 3 hours early, the airline can propose to add 50-mile points to their frequent flyer reward program. The reward points can be encashed to get exciting, customized gifts. Approximately 10,000 passengers are expected to avail of this incentive each year, with each mile point costing the airline ₹ 20 per mile point.

Additional mile points can help maintain a loyal frequent flyer base. Another major benefit is that the airline can avoid delays in flight take off due to late passenger arrival. Hence, the benefits of this program are far reaching.

MULTIPLE CHOICE QUESTIONS

1. Calculate the net benefit to KG airlines by incentivising passengers to arrive early at the airport?

   (a) 90,00,000

   (b) 1,00,00,000

   (c) 1,10,00,000

   (d) 80,00,000

2. As per the Kano model, match the factors to their corresponding attributes –

Factor	Attribute
i. Initiatives taken to ensure flight safety	a. Reverse attribute
ii. Initiative to incentivise early check in of passengers	b. Indifferent attribute
iii. Delay in flight take-off and landing	c. Threshold attribute
iv. Airport fees paid incurred by the airline	d. Excitement or delight attribute

   Options

   (a) i- a, ii- b, iii- c and iv- d

   (b) i- c, ii- a, iii- b and iv- d

(c) i- c, ii- d, iii- a and iv- b

(d) i- d, ii- a, iii- c and iv- b

3. During the meeting, the management discussed key information requirements and needs of various stakeholders. Using Mendelow's Matrix, match the stakeholders to the power and interest they wield over KG airlines.

Stakeholder	Power and interest
i. Air traffic control	a. Key Players - High power high interest
ii. Suppliers of aviation fuel	b. Influential - High power low interest
iii. Contract employees	c. Marginal - Low power low interest
iv. Environment activists	d. Affected - Low power high interest

Options

(a) i-b, ii- a, iii- c and iv- d

(b) i-a, ii- b, iii- c and iv- d

(c) i-c, ii- d, iii- a and iv- b

(d) i-b, ii- a, iii- d and iv- c

4. Growth in aviation sector has led to congestion in airports across the country. Due to which parking space available for planes at the airport hanger is limited. Due to high demand, the parking fees is also increasing at a rapid rate. Which tool of strategic cost management will you apply to minimise the time a plane is parked at the hanger?

(a) Kaizen improvement

(b) Quality management

(c) Theory of constraints

(d) Preventive maintenance

5. If KG wants to analyse its revenue generation based on various segments, which analysis should it undertake?

   (a) Value chain analysis

   (b) Customer profitability analysis

   (c) Supply chain analysis

   (d) Balanced scorecard

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): 1,00,00,000

Reason

The correct answer is ₹ 1,00,00,000.

Each mile costs ₹ 20, which means each passenger credited with 50-mile points for coming early, will cost ₹ 1,000. For 10,000 passengers the cost would be ₹ 1,00,00,000. Overall savings to the company due to this initiative is ₹ 2,00,00,000. Therefore, the net benefit to KG airlines for incentivising passengers to arrive early at the airport would be ₹ 1,00,00,000 (Savings of ₹ 2,00,00,000 less cost of ₹ 1,00,00,000).

2. Option (c): i- c, ii- d, iii- a and iv- b

Reason

Initiatives taken to ensure flight safety - Threshold attribute, a must have attribute.

Initiative to incentivise early check in of passengers - Excitement or delight attribute, a unique and unexpected reward that delights passengers.

Delay in flight take-off and landing - Reverse attribute, if present causes dissatisfaction, delays cause dissatisfaction. Customers always expect flights to be on time.

Airport fees paid incurred by the airline – Indifferent attribute since it is irrelevant to customer satisfaction.

3. Option (d): i- b, ii- a, iii- d and iv- c

Reason

Air Traffic Control: Influential - High power low interest.

Suppliers of aviation fuel: Key Players - High power high interest.

Contract employees: Affected - Low power high interest.

Environment activists: Marginal - Low power low interest.

4. Option (c): Theory of constraints

Reason

The correct answer is theory of constraints. Here, the constraint/ bottleneck is the parking space available in the airports. Using theory of constraints, KG airlines can plan its flight plan and route connections such that either (i) it can choose a time for arrival or departure when parking is reasonably available else (ii) it can plan it route connections such that the need for parking is reduced.

5. Option (b): Customer profitability analysis

Reason

Only customer profitability analysis.

CASE SCENARIO 5

A private bank has approached an Information Technology (IT) company for consultation regarding various challenges it is facing in business operations. Few of them are:

1. High staffing requirements for validating data across different applications, scanned documents, worksheets, and other paper documents.
2. Unforeseeable fluctuations in staffing (especially during exigencies like floods, pandemic etc.) disrupt regular business operations leading to unpredictable execution lead times. This has in the past lead to violation of Service Level Agreements (SLAs) and compliance issues.
3. Higher instances of error and resultant customer complaints due to significant manual intervention in many processes.

The IT company has studied the bank's various processes and has identified a set of processes that can be automated using Robotic Process Automation (RPA). Robotic Process Automation (RPA) is an intelligent software program that make use of "robotic bots" to handle repetitive, rule based digital tasks just the way humans do. The benefits these bots can do can be explained with an example: A call centre employee gets a complaint from a customer regarding a complaint about account login access. While the employee is attending to the customer, the robotic bot will instantaneously pull out the customer's data from various sources into a single screen. This will help the call centre executive assist the customer in a more holistic manner since information is readily available on hand.

MULTIPLE CHOICE QUESTIONS

1. Given that Robotic Process Automation (RPA) can handle routine repetitive tasks, which of the following tasks cannot be handled by RPA?
   (a) Generation of Tax Deduction at Source (TDS) Certificates like 15G/ 15H
   (b) New product development that requires engagement with clients

(c) Automated Teller Machine (ATM) transaction reconciliation

(d) Loan origination process involving data entry, document routing, email notification, etc.

2. Which of the following are benefits of RPA?

i. Fraud detection and prevention

ii Cost reduction in staffing requirements

iii Improved business productivity due to fast turnaround time

iv Enhanced customer experience due to continuous availability of service and accurate processing

Options

(a) i and ii

(b) ii and iv

(c) ii and iii

(d) i, ii, iii, and iv

3. Successful implementation of RPA would free up the availability of workforce. The bank plans to engage few of its talented workforce to create or unlock value in terms of enhanced revenue, either by cutting costs and/or by creating new processes, products, and services. The workforce will be working with the organization and will not have any ownership rights over innovations and other initiatives. This will promote innovation in the organization to attain cost efficiency and will give impetus to growth. Such a team of workforce would be known as:

(a) Entrepreneurship

(b) Intrapreneurship

(c) Innovators

(d) Task force

4. Considering that digital technologies are causing disruption across industries, especially the financial services industry, which strategy is the bank following in response to such disruptions?

(a) Withdraw

(b) Milking the cash cow

(c) Invest and counter invest

(d) Restrict presence and shift focus to the core

5. The bank's loan origination department manages handling many types of loans like personal loans, home loans, commercial loans to small and medium enterprises. The department's processes include filling up and completion of loan applications, confirming information in the form with supporting documentary evidence, routing the process further to loan approval and disbursement departments. Thus far, the loan origination process requires a lot of manual intervention and is subject to the capacity of workforce available with the department. With the introduction of RPA, all this can be digitalized and automated. Which of the cost management techniques has the bank implemented?

(a) Target costing

(b) Life cycle costing

(c) Theory of constraints

(d) Standard costing

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): New product development that requires engagement with clients

Reason

The correct answer is new product development that requires engagement with clients. These are not repetitive routine tasks that can be automated and hence cannot be handled by RPA. These would require bank personnel (who would now be freed of routine tasks) to engage with clients to develop new products based on changing customer demands.

2. Option (d): i, ii, iii, and iv

Reason

RPA dramatically improves business productivity as it automates routine, high volume transactions. Due to automation, processing is largely error

free which enhances customer experience. RPA bots are available any time at the click of the button and hence customers can avail service anytime. Service is no longer dependent on availability of staff. Automation also prevents fraud instances and RPA with other AI technologies can also help in fraud detection. Automation can significantly reduce the workforce requirement for routine tasks, and this can then be used for more creative and innovative work for the company.

3. Option (b): Intrapreneurship

Reason

The correct answer is Intrapreneurship. Intrapreneurship is a revolutionary system of speeding up innovations within large companies by making better use of available or allocated resources (with use of entrepreneurial talent of Intrapreneur). Hence, Intrapreneurship is a restorative action taken to counter stagnation within a large organisation.

4. Option (c): Invest and counter invest

Reason

The correct answer is 'invest and counter invest'. The bank is responding to digital transformation and disruption by investing in resources and capabilities that in turn cause disruption.

5. Option (c): Theory of constraints

Reason

The correct answer is theory of constraints. The loan origination department has a process that requires manual intervention and is subject to the capacity of the available workforce. This problem can be addressed with the introduction of RPA since the entire process can be digitalized and automated at the department. Due to this, the constraint of workforce time availability is reduced, and the freed-up time can be used to handle cases where exceptions have to be made to the standard process.

RPA does not necessarily address target costing, life cycle costing and standard costing, although if implemented properly it can help in cost reduction.

CASE SCENARIO 6

Hydrogen fuel cells are the cutting-edge technological development that is slated to replace standard petrol / diesel engines in large motor vehicles like buses and trucks. Green energy initiatives that reduce carbon emissions are the need of the hour, such ventures are being encouraged by the Governments across the globe through various policy initiatives. In order to have a viable business in place, an entire eco-system for supporting this technology is being developed in the form of service centres, hydrogen fuel storage and distribution centres and other infrastructural needs.

H-Power is a large petroleum oil refining company that has in the past 5 years forayed into manufacturing Green Hydrogen fuel cells business. Green Hydrogen fuel is being considered more environment friendly as compared to Grey Hydrogen fuel as the later uses fossil fuel like natural gas or coal in its production. On the other hand, Green Hydrogen uses solar and wind power in its production and hence is considered more environment friendly. Green Hydrogen can help reduce emission levels drastically.

Hydrogen as a gas is found in scare quantity on earth. Rather, it is found abundantly as being part of water, which is composed of Hydrogen and Oxygen. An electrolyser splits water into hydrogen and oxygen and is hence a very useful component in the production of Green Hydrogen. Ecopower is a company (Global Rank 110) that manufactures hydrogen electrolysers. Ecopower has been a supplier of electrolysers to H-Power for its Hydrogen fuel cell business. Recently, H-Power has been in talks with Ecopower for acquisition of company for a sum of $1 billion. The acquisition would help strengthen H-Power's production capabilities. Building production capabilities are very capital-intensive requiring billions of dollars of investment.

The adoption of hydrogen fuel technology is dependent on the cost of production of hydrogen fuel. Currently, the cost of producing Grey Hydrogen is much lower than the cost of producing Green Hydrogen. Hence, the adoption of Grey Hydrogen is more popular among both fuel cell manufacturers and manufacturers of buses and trucks. Lately, H-Power has started collaborating closely with the car and truck manufacturers to help them understand Green

Hydrogen technology. It has convinced few large car and truck manufacturers to revise its engines to accommodate Green Hydrogen fuel cells on an experimental basis.

MULTIPLE CHOICE QUESTIONS

1. Acquisition of Ecopower by H-Power would be an example of:
   (a) Horizontal Integration
   (b) Backward Vertical Integration
   (c) Forward Integration
   (d) Cost Integration
2. Given the information in the above scenario, which of Michael Porter's Five forces should H-Power consider as a concern to its business:
   i Bargaining power of suppliers
   ii Bargaining power of buyers
   iii Threat of substitutes
   iv Threat of new entrants

   Options
   (a) i and ii
   (b) i and iii
   (c) ii and iii
   (d) iii and iv
3. The transition that H-Power is adopting by foraying Green Hydrogen fuel cells affects which aspect of Triple Bottom Line concept of business?
   (a) Planet
   (b) Profit
   (c) People
   (d) Investment

4. Assuming that H-Power is able to develop commercially viable Green Hydrogen fuel cells for buses and trucks, with not much change in cost of production from current levels, this technology will represent which of the following business factor:

   (a) Critical Success Factor leading to cost leadership

   (b) Key Performance Indicator leading to product differentiation

   (c) Commercial Business Factor leading to cost leadership

   (d) Core Competency leading to product differentiation

5. Which of the following parameters is not a test for core competency?

   (a) Cost advantage

   (b) Difficulty in imitation by competitors

   (c) Relevance to the customer

   (d) Breadth of application in terms of the potential markets it can open up

6. In the case scenario, an ecosystem is being built for Hydrogen fuel cells which includes manufacturers of fuel cells like H-Power, their suppliers like Ecopower, customers like manufacturers of buses and trucks, other infrastructure providers like service centres, hydrogen fuel storage and distribution centres and other infrastructural need providers. Business ecosystems influence cost, value and performance which is explained in the form of flywheels. Match the following actions to the respective flywheel:

Action	Flywheel
i. Partnering with universities to improve current Green Hydrogen Technology in terms of efficiency and effectiveness	a. Cost Flywheel
ii. Exploring application in other industries like fertilizer and bulk chemicals	b. Data Flywheel
iii. Exploring the ability to achieve economies of scale in production of Green Hydrogen	c. Growth Flywheel

Options

(a) i-b, ii- c, and iii- a

(b) i- c, ii- b, and iii- a

(c) i- a, ii- c, and iii- b

(d) i- c, ii- b and iii- a

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): Backward Vertical Integration

Reason

The correct answer is Backward Vertical Integration. Ecopower is the supplier of H-Power. With this acquisition, H-Power would be able to control more levels of the supply chain, hence it is a vertical integration. Since this would be acquisition of a supplier, it would be backward vertical integration.

2. Option (c): ii and iii

Reason

The correct answer is threat of substitutes and the bargaining power of buyers.

Threat of substitutes, Grey Hydrogen is a substitute to Green Hydrogen. The cost of producing Grey Hydrogen is much lower than the cost of producing Green Hydrogen. This leads to bargaining power of buyers, who are the bus and truck manufacturers. The buyers due to the cost advantage are preferring Grey over Green Hydrogen. Hence, to make the transition to Green Hydrogen, H-Power should be able to convince them of the viability of Green Hydrogen technology.

3. Option (a): Planet

Reason

The correct answer is Planet, Green Hydrogen fuel cells are environmentally friendly. H-Power is transitioning its business from fossil

fuel-based Oil Refining business into Green Hydrogen fuels cell manufacturing. This has a positive impact on the Planet / environment.

4. Option (d): Core Competency leading to product differentiation

Reason

The correct answer is Core Competency leading to product differentiation.

Core Competency is a unique preposition which help firm to stand ahead in industry by serving value to its customers. Core Competency leads to either cost leadership or product differentiation, which are primary source for firm to gain competitive advantage.

In the case of H-Power a commercially viable Green Hydrogen fuel cell technology that results in very low emissions will represent a competency that will give it competitive advantage over its rivals. This leads to product differentiation.

Critical Success Factor articulates what the company must do, and do well, to achieve the goals outlined in its strategic plan.

In this case, H-Power had to make the technology commercially viable, but it does not lead towards cost leadership at the current cost of production. Rather preference of Green Hydrogen over Grey Hydrogen will be based on product differentiation.

Key Performance Indicator measure the performance of business organisation regarding a particular Critical Success Factor.

5. Option (a): Cost advantage

Reason

The correct answer is Cost advantage is not a test of core competency.

6. Option (a): i-b, ii- c, and iii- a

Reason

The correct answer is i- b, ii- c, and iii- a.

Partnering with universities to improve current Green Hydrogen Technology in terms of efficiency and effectiveness – Data Flywheel,

because this action provides data for deeper and better insight that enables Research and Development work in the Hydrogen fuel industry.

Exploring application in other industries like fertilizer and bulk chemicals – Growth Flywheel, since this move explores application of value proposition to increase the network of users and consumers of Green Hydrogen technology.

Exploring the ability to achieve economies of scale in production of Green Hydrogen – Cost Flywheel, since achieving economies of scale in production of Green Hydrogen will help distribute the fixed cost of production over larger production quantity, thereby helping reduce the unit cost of production.

CASE SCENARIO 7

Ski Slope had planned, when it originally designed its budget, to buy its artificial ice for ₹ 10/ per kg. However, due to subsequent innovations in technology, producers slashed their prices to ₹ 9.70 per kg. and this figure is now considered to be a general market price for the purpose of performance assessment for the budget period. The actual price paid was ₹ 9.50, as the Ski Slope procurement department negotiated strongly for a better price. The other information relating to that period were as follows:

Original Standards (ex-ante)		Revised Standards (ex-post)		Actual (5,500 units)	
5,500 units × 5 Kgs. × ₹ 10	₹ 2,75,000	5,500 units × 4.75 Kgs. × ₹ 9.70	₹ 2,53,412.50	27,225 Kgs. × ₹ 9.50	₹ 2,58,637.50

MULTIPLE CHOICE QUESTIONS

1. Traditional Variances for 'Ice' are as under:
   (a) Usage Variance ₹ 2,750 (F); Price Variance ₹ 13,612.50 (F)
   (b) Usage Variance ₹ 13,750 (A); Price Variance ₹ 16,362.50 (F)
   (c) Usage Variance ₹ 2,750 (F); Price Variance ₹ 13,612.50 (A)
   (d) Usage Variance ₹ 10,670 (A); Price Variance ₹ 5,554 (A)
2. Operational Variances for 'Ice' are as under:
   (a) Usage Variance ₹ 10,670 (F); Price Variance ₹ 5,225 (A)
   (b) Usage Variance ₹ 13,750 (A); Price Variance ₹ 5,225 (F)
   (c) Usage Variance ₹ 10,670 (A); Price Variance ₹ 5,445 (F)
   (d) Usage Variance ₹ 10,760 (F); Price Variance ₹ 5,445 (A)
3. Planning Variances for 'Ice' are as under:
   (a) Usage Variance ₹ 13,750 (F); Price Variance ₹ 8,737.50 (A)
   (b) Usage Variance ₹ 13,570 (A); Price Variance ₹ 7,837.50 (F)

(c) Usage Variance ₹ 21,587 (A); Price Variance ₹ 8,737.50 (A)

(d) Usage Variance ₹ 13,750 (F); Price Variance ₹ 7,837.50 (F)

4. The better negotiation of a price should be recognised as an _____ matter.

(a) Operational

(b) Financial

(c) Planning

(d) Marketing

5. An innovation in technology is _____ the control of Ski Slope and is, by nature, a _____ 'error'.

(a) Under, Operational

(b) Outside, Technological

(c) Outside, Planning

(d) Outside, Marketing

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): Usage Variance ₹ 2,750 (F); Price Variance ₹ 13,612.50 (F)

Reason

Traditional Variances

Usage Variance = (27,500 Kgs. – 27,225 Kgs.) × ₹ 10= ₹ 2,750 (F)

Price Variance = (₹10 – ₹ 9.50) × 27,225 Kgs. = ₹ 13,612.50 (F)

2. Option (c): Usage Variance ₹ 10,670 (A); Price Variance ₹ 5,445 (F)

Reason

Operational Variances

Usage Variance = (26,125 Kgs. – 27,225 Kgs.) × ₹ 9.70

= ₹ 10,670 (A)

Price Variance = (₹ 9.70 – ₹ 9.50) × 27,225 Kgs.

= ₹ 5,445 (F)

3. Option (d): Usage Variance ₹ 13,750 (F); Price Variance ₹ 7,837.50 (F)

Reason

Planning Variances

Usage Variance = (27,500 Kgs. – 26,125 Kgs.) × ₹ 10 = ₹ 13,750 (F)

Price Variance = (₹ 10 – ₹ 9.70) × 26,125 Kgs. = ₹ 7,837.50 (F)

4. Option (a): Operational

Reason

The better negotiation of a price should be recognised as an operational matter. Operational variances are self-evidently under the control of operational management, so operational efficiency must be assessed with only these figures in mind.

5. Option (c): Outside, Planning

Reason

An innovation in technology is outside the control of Ski Slope and is, by nature, a planning 'error'.

Planning variances are generally not controllable. Where a revision of standards is required due to environmental/ technological changes that were not anticipated at the time the budget was prepared, the planning variances are truly uncontrollable. However, standards that failed to anticipate known market trends when they were set will reflect faulty standard-setting: it could be argued that these variances were controllable at the planning stage.

CASE SCENARIO 8

National Fabric Company (NFC) is a leading manufacturer of Khadi fabric that is further made up into dresses and suits. NFC was established 4 decades ago and presently enjoys the reputation as producer of quality fabric. The popularity of "Made in India" concept in the recent years, has led to a change in demand for Khadi fabric. NFC manufactures this fabric in designs established many years ago keeping its traditional nature intact. The manufactured fabric is further sold to designing and weaving companies who would then covert them into traditional Khadi attire like Kurtas, shirts etc. Hence, currently NFC does have any direct reach with textile retail outlets or final customers.

Management team at NFC believe in integration (vertical and horizontal) and diversification (product range or market reach) as tool of risk reduction and value enhancement (profit too).

NFC opts for acquiring 'Skylark Designer Clothing' (SDC). SDC is operating in designing and weaving of fabric into fashion wears which are mainly made from modern fabric material (for example satin, chiffon, velvet etc.) that give required gloss, style and look. SDC is targeting the customers who are in age group from 18 to 30 years. Customers in this category comprise of fashion-conscious youth, for whom looking "in vogue" would be a desired preference. Due to its high-quality sourcing of materials, young and dynamic fashion designers and well spread distribution channels, SDC is a very profitable enterprise. SDC's apparel are sold in different retail textile outlets that have a national presence.

The management of NFC plans to retain the fashion apparel line of SDC. However, it plans to scale up the operations of SDC to include the next age group category of 30 to 50 years. The end user customers of this category are generally price sensitive. However, they have higher disposable income as compared to the age group category of 18 to 30 years. Therefore, demand is likely to be at least 8 times more than the demand generated by the 18 to 30 year category.

Since, the scale of operations is expanding many times over, NFC plans for SDC to manufacture its own fabric instead of relying on external vendors. For the 30 to 50 year category, the quality of fabric will be of a lower grade as compared

to the other segment. A detailed market research is undertaken to understand the fashion apparel industry. NFC finds that there are many players in the 30-to-50-year category. Retail outlets hence have a variety of suppliers to choose from for the fashion apparel for the 30-to-50-year category. Hence, due to high competition and price sensitive end users, it is difficult to negotiate a premium price for the apparel for this category. Therefore, NFC finds the profit margin per apparel unit in this venture will be much lower. The management of NFC thereby concludes that due to the different market conditions, the pricing strategies for the 18 to 30 year category and the 30 to 50 year category will be different.

In order to increase profitability NFC plans to circumvent even the retail outlets and reach out to the direct customers directly via online website portals. It plans to ship the orders using private courier service. This is aimed at both the segments of customers of SDC.

MULTIPLE CHOICE QUESTIONS

1. By manufacturing lower grade cloth for use for the price sensitive 30 to 50 year age category, what competitive advantage is NFC trying to achieve?

   (a) Broad Target with Differentiation

   (b) Narrow Target with Differentiation Focus

   (c) Broad Target with Cost Leadership

   (d) Narrow Target with Cost Focus

2. Which of the following maybe a point of concern in end to end production of fashion apparel?

   (a) Access to customer specifications and customer related data

   (b) Control over production, pricing and marketing

   (c) Complexity of value system

   (d) Improves profitability

3. If the production at SDC has to happen in a sequential manner, production of fabric, weaving, designing and stitching which of the following may be very helpful to minimize work in progress between the processes:

   (a) Cellular Manufacturing

   (b) Principle of Kaizen

   (c) Principle of Six Sigma

   (d) Just in Time procurement of raw materials

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (d): Narrow Target with Cost Focus

Reason

The correct answer is Narrow target with cost focus NFC is focussing on reducing the cost of production by using lower grade cloth specifically for the 30 to 50 year age category. Hence, the advantage will have narrow target with focus on cost for that particular category.

2. Option (c): Complexity of value system

Reason

NFC is going from being a manufacturer of Khadi fabric sold to weaver and designers and is expanding into an end-to-end business in fashion apparel (manufacturing up to sales and delivery). The expansion of operations will make the value chain more complex with many linkages that NFC must have the capability to attend to.

3. Option (a): Cellular Manufacturing

Reason

The correct answer is – Cellular Manufacturing (i.e., group machines into working cells) that will reduce excessive work-in-process inventory and defective parts. A working cell is a small cluster of machines which can be run by a single machine operator. This individual machine operator takes each output part from machine to machine within the cell; and thus, there is no way for work-in-process to build up between machines.

CASE SCENARIO 9

National Fabric Company (NFC) is a leading manufacturer of Khadi fabric that is further made up into dresses and suits. NFC was established 4 decades ago and presently enjoys the reputation as producer of quality fabric. The popularity of "Made in India" concept in the recent years, has led to a change in demand for Khadi fabric. NFC manufactures this fabric in designs established many years ago keeping its traditional nature intact. The manufactured fabric is further sold to designing and weaving companies who would then covert them into traditional Khadi attire like Kurtas, Shirts etc. Hence, currently NFC does have any direct reach with textile retail outlets or final customers.

Management team at NFC believe in integration (vertical and horizontal) and diversification (product range or market reach) as tool of risk reduction and value enhancement (profit too).

NFC opts for acquiring 'Skylark Designer Clothing' (SDC). SDC is operating in designing and weaving of fabric into fashion wears which are mainly made from modern fabric material (for example satin, chiffon, velvet etc.) that give required gloss, style and look. SDC is targeting the customers who are in age group from 18 to 30 years. Customers in this category comprise of fashion-conscious youth, for whom looking "in vogue" would be a desired preference. Due to its high-quality sourcing of materials, young and dynamic fashion designers and well spread distribution channels, SDC is a very profitable enterprise. SDC's apparel are sold in different retail textile outlets that have a national presence.

Management of NFC plans to revamp the entire business operation of SDC. Due to their focus on a specific customer segment, in terms of scale of operations SDC is relatively smaller as compared to NFC. The management of NFC then plans to replace fashion apparel line with Khadi apparel. NFC will expand its capacity to manufacture more Khadi fabric, given that demand for the "Made in India" product. It will use SDC's facilities and manpower for designing and weaving the fabric into traditional attire. Using SDC's national wide distribution network, it plans to gain access to retail outlets that sell the textile to the end user. The target audience would be of every age group.

MULTIPLE CHOICE QUESTION

1. Which would best describe NFC's acquisition of SDC?
   (a) Backward organic integration
   (b) Backward un organic integration
   (c) Forward organic integration
   (d) Forward un organic integration
2. What would be the competitive advantage that NFC would gain by acquiring SDC?
   (a) Broad Target with Differentiation
   (b) Narrow Target with Differentiation focus
   (c) Broad Target with Cost Leadership
   (d) Narrow Target with Cost Focus

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (c): Forward organic integration

Reason

The correct answer is Forward organic integration. NFC is currently only a manufacturer of Khadi fabric with no access to further segments of the value chain. By acquiring SDC, it (1) plans to expand its own scale of operations to manufacture more Khadi fabric, (2) It plans to use SDC's capabilities to gain access to designing, weaving resources as well as SDC's well established national distribution network with retail textile outlets. Hence, point 1 makes it an organic growth and point 2 makes it a forward integration.

2. Option (a): Broad Target with Differentiation

Reason

The correct answer is Broad Target with Differentiation. Broad target since the target group is from all age groups. Differentiation is because NFC's products are unique due to their traditional nature and their concept of catering to the demand for "Made in India" products.

CASE SCENARIO 10

National Fabric Company (NFC) is a leading manufacturer of Khadi fabric that is further made up into dresses and suits. NFC was established 4 decades ago and presently enjoys the reputation as producer of quality fabric. The popularity of "Made in India" concept in the recent years, has led to a change in demand for Khadi fabric. NFC manufactures this fabric in designs established many years ago keeping its traditional nature intact. The manufactured fabric is further sold to designing and weaving companies who would then covert them into traditional Khadi attire like Kurtas, shirts etc. Hence, currently NFC does have any direct reach with textile retail outlets or final customers.

Management team at NFC believe in integration (vertical and horizontal) and diversification (product range or market reach) as tool of risk reduction and value enhancement (profit too).

NFC opts for acquiring 'Skylark Designer Clothing' (SDC). SDC is operating in designing and weaving of fabric into fashion wears which are mainly made from modern fabric material (for example satin, chiffon, velvet etc.) that give required gloss, style and look. SDC is targeting the customers who are in age group from 18 to 30 years. Customers in this category comprise of fashion-conscious youth, for whom looking "in vogue" would be a desired preference. Due to its high-quality sourcing of materials, young and dynamic fashion designers and well spread distribution channels, SDC is a very profitable enterprise. SDC's apparel are sold in different retail textile outlets that have a national presence.

With integration and diversification is the main reason for NFC's acquisition of SDC. NFC plans to retain the business operations of SDC as it is without changing much of the current structure.

MULTIPLE CHOICE QUESTION

1. Which of the following would best describe the acquisition of NFC of SDC?

   (a) Backward organic integration

   (b) Backward un organic integration

   (c) Forward organic integration

   (d) Forward un organic integration

2. What would be the competitive advantage (from SDC's business model) that NFC would gain by acquiring SDC?

   (a) Broad Target with Differentiation

   (b) Narrow Target with Differentiation Focus

   (c) Broad Target with Cost Leadership

   (d) Narrow Target with Cost Focus

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (d): Forward un organic integration

Reason

The correct answer is forward un organic integration. NFC is currently only a manufacturer of Khadi fabric with no access to further segments of the value chain. By acquiring SDC, it is going for an un organic integration by acquiring another company, (Organic integration would be one where the company uses internal growth to expand operations) NFC is expanding its operations in the form of extending its reach further in the value chain. SDC's business would give NFC access to textile retail outlets. This makes it a forward un organic integration.

2. Option (b): Narrow Target with Differentiation Focus

Reason

The correct answer is Narrow Target with Differentiation focus. SDC currently targets only customers within the age group from 18 years to 30 years. They are not targeting any other segment. Hence, this is a narrow target. To them, they sell stylish, "in vogue" fashion apparel that appeals to the youth. This is Differentiation focus.

CASE SCENARIO 11

Marcus Neo-Fashion Limited (MNFL) is leading brand in fashion world. Company is dealing in both fabric and readymade garments. Since the company was established long ago, hence has well established SOPs. Management at MNFL is highly concerned with performance and productivity.

In order to determine and appraise the performance, MNFL conducts fortnightly meetings of heads of different responsibility centres apart from quarterly master meeting. In master meeting each of such departmental head need to present report for his department on following aspects–

Performance Matrix Dashboard at MNFL

Criteria	Indicators
I	Average Capital Employed in department with detailed information of source and nature (working or permanent capital)
II	Revenue and Earnings
III	Output (in terms of no of units and per employee productivity)
IV	Existing Clients and New Customer added with data on market share

In one of recent such master meetings, which was chaired by CEO, newly appointed VP-HR quoted 'Intellectual capital is as critical as financial capital in order to ensure smoothening, success and sustainability of any business' hence employee where so ever lagged in technical skills, it is essential and important to work on his skills in order to enhance the productivity. VP-HR said at MNFL ratio of skilled, semi-skilled and unskilled worker are 1:2:6, which needs to be worked at. He also insists to roll-out new wage policy which should support 'Performance Related Pay'. He said, 'I don't know much about enterprise performance, but I strongly believe that performance indicators must include performance of employees in term of their skill and knowledge'.

Immediately *VP-Finance* said existing performance matrix is essentially focused EV/ EBIT and returns on capital hence sufficient from perspective of performance appraisal. Hence there is no major need to consider impact and

effect of human capital. He also added that entities revenue is growing @ of 14% and earning is growing at 12% which 4% on higher side then industry. He said present rate of ROI is 11.5% which is better than industry average of 9%; and Market Cap is also doing well.

VP-Finance countered by *VP-Planning & Operations*, according to him 'skilled labour will be added advantage in order to develop 'zed' culture i.e., zero accidents, zero defects, zero delays, zero inventory, zero breakdowns, zero changeovers, zero waste'. He also said skilled labour can also add value by incorporating innovations. He quoted presently average defect rate is 1.5% of total production.

On this *VP-Marketing* add 'skilled employee means better process and better processes leads to competent value chain which can serve highly customised product; hence preconceived quality (conformance to customers' need) leads to strong brand equity.

Chief Information officer support VP-Marketing and VP-HR by quoting the position of brand can be improved by product development. Newly developed product will meet and set, latest style statement in market; eventually help MNFL to acquire new customers within existing marketing without incurring much on advertisement or sales and promotion. Skilled labour can easily bring innovation to the product.

MULTIPLE CHOICE QUESTION

1. What are the objectives of performance management indicators?

   i Evaluating the achievements of organisation strategic objective

   ii Evaluating the performance of the employees

   iii Provides an objective basis for compensating employees

   iv Assess the quantitative performance of an organization with its benchmarks only

   Options

   (a) ii and iii

   (b) i, ii and iii

(c) i, ii and iv

(d) i, ii, iii and iv

2. Which are the non-financial performance indicators mentioned in the case scenario?

I Skill, Attrition and Job Satisfaction of Human Resource

Ii Quality of Product

Iii Brand Equity

Iv Reduction in Delivery Cycle Time

Options

(a) i, ii and iii

(b) i, iii and iv

(c) ii, iii and iv

(d) i, ii, iii and iv

3. At present is Marcus Neo-Fashion Limited (MNFL) tracking any non-financial performance indicator at all?

(a) Yes, MNFL in addition to capital employed and revenue and earnings is tracking output performance indicators in terms of quantity and per employee productivity

(b) Yes, MNFL in addition to capital employed and revenue and earnings is tracking customer retention and expansion of market share

(c) No, MNFL is tracking only financial indicators since output performance and market share eventually relate to financial profits

(d) Yes, MNFL in addition to capital employed and revenue and earnings is tracking both production output (output quantity and employee productivity) and market share (existing and expansion of customer base)

4. Match the non-financial performance models to their objectives:

Non- Financial Performance Model	Objectives
i. Balanced Scorecard	a. Performance assessment based on market related measures in addition to financial measures
ii. Performance Pyramid	b. Identify and track KPIs for CSFs in order to determine performance related rewards for employees
iii. Building Block	c. Better information for decision making with respect to perspectives like customers, financial, innovation & learning and business processes

Options

(a) i-c, ii- a, and iii- b

(b) i-c, ii- b, and iii- a

(c) i-b, ii- a, and iii- c

(d) i-b, ii- c, and iii- a

5. Which of the following is not true regarding the role of quality in performance measurement systems?

(a) A strong costing system is a prerequisite for develop KPIs based on cost of quality that can be used as a basis for staff rewards

(b) There is an inverse relation between the rigor of Quality Management System and the cost of non-conformance

(c) Lean production system aims at reducing production activities to the minimum in order to improve quality performance

(d) Good quality information practices improve the reliability, accuracy, timeliness, objectivity of Management Information Systems (MIS) that is used for performance measurement

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): i, ii and iii

Reason

The correct answer is (i), (ii) and (iii). Statement (iv) is incorrect because performance management indicators assess qualitative performance in addition to quantitative performance of an organization. Therefore, an organization has both financial as well as non-financial indicators.

2. Option (a): i, ii and iii

Reason

The correct answer is i, ii and iii as all the indicators mentioned are non-financial performance indicators. Financial performance indicators are those that relate to profits of the company like EBIT, growth of revenue, ROI etc. Delivery cycle time is not discussed in the scenario.

3. Option (d): Yes, MNFL in addition to capital employed and revenue and earnings is tracking both production output (output quantity and employee productivity) and market share (existing and expansion of customer base)

Reason

MNFL in addition to capital employed and revenue and earnings is tracking both production output (output quantity and employee productivity) and market share (existing and expansion of customer base).

4. Option (a): i- c, ii- a, and iii- b

Reason

The correct answer is i- c, ii- a, and iii- b

Balanced Scorecard - Better information for decision making with respect to perspectives like customers, financial, innovation & learning and business processes.

Performance Pyramid - Performance assessment based on market related measures in addition to financial measures.

Building Block - Identify and track KPIs for CSFs in order to determine performance related rewards for employees.

5. Option (c): Lean production system aims at reducing production activities to the minimum in order to improve quality performance

Reason

The correct answer is - Lean production systems aim at reducing waste in production activities to the minimum in order to get the right thing to the right place at the right time, first time. Hence, leans production results in improvement in performance thought.

CASE SCENARIO 12

Rabi Ltd. Manufactures its product from Divisions X and Y. Rabi Ltd. is considering the discontinuance of Division Y since it is incurring a net loss of ₹ 2,00,000. The production at Division X is going to remain unchanged. The following information is given:

Particulars	Divisions X	Division Y	Total
Sales (Maximum achievable) (₹)	50,00,000	7,00,000	57,00,000
Less: Variable cost (₹)	36,00,000	4,00,000	40,00,000
Contribution (₹)	14,00,000	3,00,000	17,00,000
Less: Specific avoidable fixed cost (₹)	2,00,000	5,00,000	7,00,000
Divisional Income (₹)	12,00,000	-2,00,000	10,00,000

The rates of variable costs are 90% of the normal rates due to the current volume of operation. There is adequate market demand.

For any lower volume of operation, the rates would go back to normal rates.

Specific avoidable fixed cost relates to the rental and property tax cost of the premises of Division Y, which operates from a prime business area.

Facilities released by discontinuing Division Y cannot be used for any other purpose.

MULTIPLE CHOICE QUESTION

1. If Division Y is discontinued, what will the increase in Variable cost be for Rabi Ltd?

   (a) ₹ 3,60,000

   (b) ₹ 4,00,000

   (c) ₹ 4,44,444

   (d) ₹ 4,20,000

2. If Division Y is discontinued, what will be the total savings and total increase in cost for Rabi Ltd on account of this decision?

   (a) Savings ₹ 5,00,000; Increase in cost ₹ 7,00,000; net loss ₹ 2,00,000

   (b) Savings ₹ 5,00,000; Increase in cost ₹ 4,00,000; net benefit ₹ 1,00,000

   (c) Savings ₹ 7,00,000; Increase in cost ₹ 7,00,000; no loss or benefit

   (d) Savings ₹ 7,00,000; Increase in cost ₹ 4,00,000; net benefit ₹ 3,00,000

3. Rabi Ltd. is compelled to reconsider its decision of closing down Division Y because that could impact its brand image and pose challenges for re-establishment of the market for the product.

   What type of consideration is being given weight to by the management by looking into these factors?

   (a) Relevant cost consideration

   (b) Financial consideration

   (c) Ethical consideration

   (d) Non-financial consideration

4. Which of the following is not a limitation of non-financial consideration?

   (a) Subjective measurement that could be subject to bias and interpretation

   (b) Improper measures will lead the companies to draw attention on wrong objectives

   (c) Focuses on factors that can aid sustainability of the organization in the long run

   (d) Possibility of error due to lack of statistical reliability

MULTIPLE CHOICE QUESTION

1. Option (b): ₹ 4,00,000

Reason

The correct answer is ₹ 4,00,000, if Division Y is shut down no variable cost will not be incurred at the division, it will be incurred only in division X. The current variable cost is at 90% of normal rates, hence (₹ 36,00,000 / 90%) = ₹ 40,00,000 will be the total variable cost at full cost basis. Hence, the increase in variable cost will be ₹ 4,00,000

2. Option (a): Savings ₹ 5,00,000; Increase in cost ₹ 7,00,000; net loss ₹ 2,00,000

Reason

The correct answer is Savings ₹ 5,00,000 Increase in cost ₹ 7,00,000 therefore net loss ₹ 2,00,000.

Particulars		Amount (₹)
Savings Due to Discontinuance		
Specific Fixed Cost		5,00,000
Total	(A)	5,00,000
Loss/ Increase in Cost Due to Discontinuance		
Loss of Contribution		3,00,000
Increase in Variable Cost		4,00,000
Total	(B)	7,00,000
Excess of Loss Over Savings	(B) – (A)	2,00,000

3. Option (d): Non-financial consideration

Reason

The correct answer is non-financial consideration. Information about an organization, like number of employees, employee morale, customer satisfaction that cannot be expressed in monetary terms is termed non-financial in nature. Non- financial information is long term focused and ensures profitability and sustainability in the long term for an organization thereby evaluating the internal performance of the company.

Brand image and challenges in re-establishing the market for a product are non-financial aspects that a business must look into taking a balanced view into consideration.

Closure of a branch/ division is not unethical and is driven by business considerations. Relevant cost by its nature is a financial consideration.

4. Option (c): Focuses on factors that can aid sustainability of the organization in the long run

Reason

The correct answer is non-financial consideration makes an organization focus on factors that can aid sustainability of the organization in the long run. This will improve its profitability in the long run and encourages establishing a sustainable business model.

CASE SCENARIO 13

A company follows Cost Volume Profit (CVP) analysis to arrive at the Break Even Point of Sales. The company produces two products, Product A and Product B both of which are manufactured in batches. As quarterly exercise, the management is reassessing its production schedule for the products.

Currently, a machine produces 25 units of Product A in one batch. The monthly production of Product A 10,000 units. After each batch of Product A is produced, a setup is required for setting up the machine to produce product B. The company wants to increase the batch size of Product A to 50 units of Product A in one batch. Therefore, the number of set-ups will reduce from 400 (10,000 units / 25 units) to 200 (10,000 units / 50 units). Due to larger batch production, additional inventory storage area would be required to store that will cost the company ₹ 75,000 per month extra. Given below is information about Product A –

Particulars of Product A	**Activity Based CVP Analysis**
Monthly demand and production	10,000 units
Selling Price per unit	₹ 5,000 p.u.
Variable cost price per unit	₹ 4,000 p.u.
Fixed cost per month (excluding any additional inventory storage area cost)	₹ 8,00,000 p.m.
Current number of set ups and cost	400 set ups @ ₹ 500 per set up
Proposed number of set ups and cost	200 set ups @ ₹ 500 per set up

MULTIPLE CHOICE QUESTION

1. What is the current monthly Breakeven point of Product A in terms of units?

   (a) 1,000 units

   (b) 800 units

(c) 900 units

(d) 975 units

2. What is the current monthly profitability of Product A?

(a) ₹ 1,00,00,000

(b) ₹ 90,00,000

(c) ₹ 90,25,000

(d) ₹ 95,00,000

3. What is the monthly Breakeven point of Product A in terms of units after proposed change in batch size?

(a) 1,000 units

(b) 800 units

(c) 900 units

(d) 975 units

4. What is the expected monthly profitability of Product A after proposed change in batch size?

(a) ₹ 1,00,00,000

(b) ₹ 90,00,000

(c) ₹ 90,25,000

(d) ₹ 95,00,000

5. Should the company implement the proposed change of increasing the batch size from 25 units to 50 units of Product A?

i Yes, the monthly profitability of Product A increases.

ii Yes, the company as lesser set ups improve the productivity of the machine

iii No, by increasing the batch size, the inventory storage area requirement increases, this reduces the monthly profitability of Product A

iv No, because lesser set ups reduce the productivity of the machine

Options

(a) i only

(b) iv only

(c) i and ii

(d) iii and iv

6. Which of the following should not be included as labour cost while calculating set up cost?

(a) Cost of temporary labour hired for set up

(b) Cost of permanent labour who are otherwise idle

(c) Overtime cost paid to labour for set up activities

(d) Opportunity cost of permanent labour who are otherwise engaged in some other revenue generating production activity

7. What type of inventory management system is the company following?

(a) Pull system of inventory management

(b) Push system of inventory management

(c) Just in time production inventory management

(d) Batch level inventory management system

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): 1,000 units

Reason

The correct answer is 1,000 units is the current BEP of product A each month. Refer working in subsequent part.

2. Option (b): ₹ 90,00,000

Reason

₹ 90,00,000 is the current monthly profitability of Product A. Refer working in subsequent part.

3. Option (d): 975 units

Reason

BEP is 975 units of product A after the proposed change in batch size. Refer working in subsequent part.

4. Option (c): ₹ 90,25,000

Reason

₹ 90,25,000 is the expected monthly profitability of product A each month after the proposed change in batch size.

Particulars	Activity Based CVP Analysis	Activity Based CVP Analysis
	Current	Proposed
Selling Price per unit	5,000	5,000
Variable Cost per unit	4,000	4,000
Contribution per unit	1,000	1,000
Fixed Cost per month (per Activity Based method)	8,00,000	8,75,000
{Fixed Cost p.m. + (number of set-ups × cost per set-up)}/ Contribution p.u.	= {₹ 8,00,000 + (400 × ₹ 500 per set-up)}/ ₹ 1,000 per unit	= {₹ 8,75,000 + (200 × ₹ 500 per set-up)}/ ₹ 1,000 per unit
Or, Break-even Point (per month in units)	1,000	975
Monthly Demand (units)	10,000	10,000
Profit per month = {Monthly demand (units) × Contribution per unit} – (Fixed Cost per month + Set-up cost per month)	90,00,000	90,25,000

5. Option (c): i and ii

Reason

The correct answer is (i) and (ii) because the monthly profitability of Product A increases by ₹ 25,000 and lesser the number of set ups better the productivity of the machine. Set up costs will be lower. Since set ups are lesser, labour hour requirement will be lesser, which can be used to reduce costs or improve productivity elsewhere.

6. Option (b): Cost of permanent labour who are otherwise idle

Reason

The correct answer is the cost of permanent labour who are otherwise idle, is not an additional cost that the company incurs on account of machine set up. It is a sunk cost and hence should not be included while calculating set up costs.

7. Option (b): Push system of inventory management

Reason

The correct answer is Push System of inventory management, since inventory is being manufactured in anticipation of demand. Batch production is done in anticipation of demand and is not done based on actual client orders. This can also be inferred from the need for additional storage area on increasing the batch size production.

CASE SCENARIO 14

Kowloon Toy Company (KTC) expects to successfully launch Toy "H" based on a Disney character. KTC must pay a 20% royalty on the selling price to Disneyland.

KTC targets a selling price of ₹ 500 per toy and profit of 25% on the selling price.

The following are the cost data forecast:

	Cost Per unit of toy
Component H_1	90
Component H_2	70
Labour: 0.40 hr. @ ₹ 200 per hr.	80
Product Specific Overheads	20

In addition to the above, each toy requires 0.6 kg of other materials, which are supplied at a cost of ₹ 40 per kg with a normal 4% substandard quality, which is not usable in the manufacture.

MULTIPLE CHOICE QUESTION

1. Calculate the target cost for per unit of Toy "H".

   (a) ₹ 400 per unit

   (b) ₹ 375 per unit

   (c) ₹ 500 per unit

   (d) ₹ 275 per unit

2. Calculate the total cost of manufacturing of Toy "H".

   (a) ₹ 285 per unit

   (b) ₹ 286 per unit

   (c) ₹ 280 per unit

   (d) ₹ 290 per unit

3. What should be the cost reduction to meet the target cost of Toy "H"?

   (a) ₹ 11 per unit

   (b) ₹ 12 per unit

   (c) ₹ 10 per unit

   (d) ₹ 15 per unit

4. Which of the following statements is false?

   (a) Target costing takes a market driven approach towards cost by shifting focus on creation of values that tend to the needs of the customers

   (b) Target costing is capable to take into account initial design and engineering costs, as well as cost of manufacturing, distribution, sales, and services

   (c) Strategy of using target costing may affect the quality of the product negatively

   (d) Cost reduction through target costing is temporary in nature

5. In which of the following industries is the likelihood of utility of target costing may perhaps be lower?

   i Assembly oriented industries where most of the product costs are committed in the design phase

   ii Service oriented industries

   iii Industries with high levels of competition

   iv Industries involved in production of raw materials

   Options

   (a) i and iv

   (b) ii and iv

   (c) i, ii and iii

   (d) i, ii, iii, iv

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (d): ₹ 275 per unit

Reason

The correct answer is ₹ 275 per unit of Toy H. Below is the calculation-

	₹ / Toy
Target Selling Price	500
Less: Royalty @20%	100
Less: Profit @ 25%	125
Target Cost	275

2. Option (a): ₹ 285 per unit

Reason

The correct answer is ₹ 285 per unit of Toy "H". Below is the calculation -

	₹/ Toy
Component H_1	90
Component H_2	70
Labour (0.40 hr. × ₹ 200 per hr.)	80
Product Specific Overheads	20
Other Material (0.6 kg / 96% × ₹ 40)	25
Total Cost of Manufacturing	285

3. Option (c): ₹10 per unit

Reason

The correct answer is ₹ 10 per unit of Toy "H". As explained above, the target cost is ₹ 275 per unit while the current cost of manufacturing is ₹ 285 per unit. Hence, the cost reduction should be ₹ 10 per unit.

4. Option (d): Cost reduction through target costing is temporary in nature

Reason

Cost reduction through target costing is permanent in nature. Target costing is not just a product costing system, but rather a management technique that aims at reducing the overall cost of a product (over the entire life cycle) with the help of productivity, value engineering, and effectiveness at the research and design phase.

5. Option (b): ii and iv

Reason

Target costing may be less useful in –

Service industries - In the services area, such as consulting, the bulk of all activities can be reconfigured for cost reduction when services are being provided directly to the customer.

Industries involved in production of raw materials - Production of raw materials has no design features. Instead, the industrial engineering staff tries to create the most efficient possible production process, which has little to do with cost reduction through the improvement of customer value.

CASE SCENARIO 15

H. Ltd. manufactures three products. The material cost, selling price and bottleneck resource details per unit are as follows:

Particulars	Product X	Product Y	Product Z
Selling Price ($)	100	200	300
Material and Other Variable Cost ($)	70	140	240
Bottleneck Resource Time (Minutes)	15	15	20

Budgeted factory costs for the period are $2,00,000. The bottleneck resources time available is 1,25,000 minutes per period.

Company adopted throughput accounting and products are ranked according to 'product return per minute'.

MULTIPLE CHOICE QUESTION

1. Which of the following is true regarding ranking of product as per product return per minute?
   (a) Rank 1 - Product X, Rank 2 - Product Y, and Rank 3 - Product Z
   (b) Rank 1 - Product Y, Rank 2 - Product X, and Rank 3 - Product Z
   (c) Rank 1 - Product Y, Rank 2 - Product Z, and Rank 3 - Product X
   (d) Rank 1 - Product X, Rank 2 - Product Z, and Rank 3 - Product Y
2. Which of the following is true regarding ranking of product as per Throughput Accounting Ratio?
   (a) Rank 1 - Product X, Rank 2 - Product Y, and Rank 3 - Product Z
   (b) Rank 1 - Product Y, Rank 2 - Product X, and Rank 3 - Product Z
   (c) Rank 1 - Product Y, Rank 2 - Product Z, and Rank 3 - Product X
   (d) Rank 1 - Product X, Rank 2 - Product Z, and Rank 3 - Product Y
3. Which of the following is not true regarding theory of constraints?
   (a) The optimum production of bottleneck activity should determine the production schedule of the non-bottleneck activities

(b) The workers of non-bottleneck machines should be motivated to improve their productivity

(c) Constraint can be removed by elevating system bottlenecks

(d) Constraint can be removed by increasing bottleneck efficiency and capacity

4. Which of the following is not true regarding Theory of constraints / Throughput Accounting (TOC/ TA) based approach for product mix decisions?

(a) The TOC/ TA approach focuses on push approach to production management as opposed to pull approach of Just in Time Management

(b) One of the disadvantages of the TOC/ TA approach is that there may be circumstances when operating expenses cannot be classified definitively as fixed

(c) Where the TA ratio is greater than 1 the product in question is profitable

(d) TOC/ TA approach has its main emphasis on quality of production

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (c): Rank 1 - Product Y, Rank 2 - Product Z, and Rank 3 - Product X

Reason

The correct answer is Rank 1 - Product Y, Rank 2 - Product Z and Rank 3 - Product X

Particulars	X	Y	Z
Selling Price	100	200	300
Variable Cost	70	140	240
Throughput Contribution	30	60	60
Minutes per unit	15	15	20
Contribution per minute	2	4	3
Ranking	III	I	II

2. Option (c): Rank 1 - Product Y, Rank 2 - Product Z, and Rank 3 - Product X

Reason

The correct answer is Rank 1 - Product Y, Rank 2- Product Z, and Rank 3 - Product X

Particulars	X	Y	Z
Selling Price	100	200	300
Variable Cost	70	140	240
Throughput Contribution	30	60	60
Minutes per unit	15	15	20
Contribution per minute	2	4	3
Factory Cost per minute (2,00,000 / 1,25,000)	1.6	1.6	1.6
TA Ratio (Cont. per minute / Factory Cost per minute)	1.25	2.5	1.875
Ranking Based on TA Ratio	III	I	II

3. Option (b): The workers of non-bottleneck machines should be motivated to improve their productivity

Reason

It is not true that the workers of non-bottleneck machines should be motivated to improve their productivity. Producing more non-bottleneck output results in an increase in WIP inventories. This is because the additional output cannot be processed by bottleneck machine. Therefore, the optimum production of bottleneck activity should determine the production schedule of the non-bottleneck activities.

4. Option (d): TOC/ TA approach has its main emphasis on quality of production

Reason

It is not true that the TOC/ TA approach places its main emphasis on quality of production. The main emphasis of this approach is to increases sales and sales volume.

CASE SCENARIO 16

Given data about Price (P) and quantity demanded (Q) given the following sales and demand data –

Selling Price per unit (P)	Number of units sold (Q)
₹ 100	500
₹ 90	480

MULTIPLE CHOICE QUESTION

1. Find the linear relationship between P and Q.

   (a) P = 350 – 0.5Q

   (b) Q = 350 – 0.5P

   (c) P = 350 + 0.5Q

   (d) Q = 350 + 0.5P

2. Find the equation for the Marginal Revenue based on your calculations above.

   (a) MR = 350 – Q

   (b) MR = 350 + P

   (c) MR = 350 + Q

   (d) MR = 350 – P

3. What is the volume of sales / production (Q) when it is given that profit is maximum when marginal cost is ₹ 150 per unit?

   (a) 210 units

   (b) 200 units

   (c) 190 units

   (d) 220 units

4. Based on your calculation in (iii) above, at what selling price (P) is the profit maximum.

   (a) ₹ 220 per unit

   (b) ₹ 240 per unit

   (c) ₹ 230 per unit

   (d) ₹ 250 per unit

5. The condition for profit maximisation is –

   (a) MC Curve cuts MR Curve from below

   (b) MC Curve cuts MR Curve from above

   (c) Slope of MC > Slope of MR

   (d) Slope of MC = Slope of MR

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): P = 350 – 0.5Q

Reason

P = a – bQ

Where 'P' is the selling price per unit, a is the price at which demand is zero, Q is the quantity demanded.

-b = -0.5 (change in price / change in quantity demanded = (₹ 100-₹ 90) / (500-480) units = -0.5)

Therefore, the equation is P = a – 0.5Q.

Substitute P and Q in the above equation to find 'a'

100 = a – (0.5×500). Therefore, a = 350 units.

Therefore, the linear relationship between Price (P) and quantity demanded (Q) can be written as P = 350 – 0.5Q.

2. Option (a): MR = 350 – Q

Reason

Marginal Revenue = a - 2bQ whereas calculated in (i) a = 350 units and b = -0.5

Therefore, the Marginal Revenue equation is MR = 350 – 2(0.5); MR = 350 - Q

3. Option (b): 200 units

Reason

When profit is maximum, as per the pricing theory Marginal Cost = Marginal Revenue = in this case ₹ 150 per unit.

From (ii) MR = 350 – Q. Therefore, 150 = 350 – Q. Therefore Q = 200 units. This is the sales volume at which profit is maximum.

4. Option (d): ₹ 250 per unit

Reason

Profit will be maximum when Selling Price (P) is ₹ 250 per unit.

From (iii) it is found that when sales volume is 200 units (Q) the profit is maximum because it is at this point that MR = MC.

From (i) the linear equation between P and Q is P = 350 – 0.5Q.

Substituting Q to be 200 units P = 350 – 0.5(200)

= 350 – 100

= ₹ 250

Therefore, it can be concluded that when Selling Price (P) is ₹ 250, the sales volume (Q) is 200 units and the profit earned at this level will be maximum.

5. Option (a): MC Curve cuts MR Curve from below

Reason

One of the two requirements for a firm to reach stable equilibrium is that its MC curve cuts the MR curve from below, not from above. The equilibrium created if the MC curve cuts the MR curve from above won't be stable because greater production could increase profits.

CASE SCENARIO 17

Nutty Bites produces many edible snacks that are very popular especially among children. Peanuts, Peanut oil are essential ingredients in many of its products. They are currently facing this ethical issue: Medical studies have indicated peanut allergic reactions are on the rise. The prevalence is more profound among children. Reactions can range from hives around the mouth to potentially life-threatening reactions when exposed even to the slightest trace of peanuts. There is growing media campaign to force companies like Nutty Bites to make disclosure about the presence of peanut on its package labelling.

Nutty Bites is a mid-size company that has a growing market. Risk to peanut exposure can come not just from the presence of peanuts in its products. Some of its bought-in ingredients (raw material input) are cooked in peanut oil. There are risks of "cross-contamination" amongst products. Let us say, an equipment has been used produce cookies that has peanuts. Next, the equipment is used, without being cleaned, to produce chips that does not have peanuts as an ingredient. Some portion of the peanuts / peanut oil could contaminate that specific batch of chips produced. Since labels of chips would not mention "peanuts" as an ingredient, it poses a potential risk of causing allergic reaction to a customer unaware of this contamination. Management of Nutty Bites has called for a meeting to discuss this issue. "The issue need not be addressed at all. After-all Nutty Bites is doing nothing against the law" is the opinion of many members on the board of the company.

MULTIPLE CHOICE QUESTION

1. Would you agree with the popular opinion with the management of Nutty Bites that "The issue need not be addressed at all. After-all Nutty Bites is doing nothing against the law"?

   (a) Yes, the health and safety of consumers cannot be the responsibility of Nutty Bites. Hence, the issue need not be addressed at all.

(b) No, food safety is a fiduciary duty that Nutty Bites owes to the society. Corporate Social Responsibility (CSR) is the duty an organization has towards a wider community. Hence, Nutty Bites has to take steps to address the problem.

(c) Yes, Nutty Bites is doing nothing against the law. Hence the issue need not be addressed at all.

(d) Yes, Nutty Bites need not take any action as there is no lawsuit filed against the company from the customers.

2. Which of the following scenarios has a less chance of happening if Nutty Bites does not take any action?

(a) On consuming the product, if the consumer faces a medical issue that gets traced back to the product manufactured by Nutty Bites, it could result in bad publicity that could damage its brand value

(b) It can increase the risk of potential legal action for tort or committing a civil wrong

(c) Operating in an ethical environment can increase employee morale and well being

(d) Profitability from sale of the products for the current month (short run) will be impacted

3. Which is not a non-financial consideration while considering any potential responses to address the health and safety issue?

(a) Disclosure about the presence of peanut on its package labelling

(b) Machine sanitization to remove traces of peanut oil

(c) Increase in selling price of products to recoup the cost of making proposed changes

(d) Audit of upstream supply chain to get information of which bought in ingredients (raw material input) are cooked in peanut oil

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. **Option (b): No, food safety is a fiduciary duty that Nutty Bites owes to the society. Corporate Social Responsibility (CSR) is the duty an organization has towards a wider community. Hence, Nutty Bites has to take steps to address the problem.**

   Reason

   The correct answer is No, food safety is a fiduciary duty that Nutty Bites owes to the society. Corporate Social Responsibility (CSR) is the duty an organization has towards a wider community. Hence, Nutty Bites has to take steps to address the problem.

2. **Option (d): Profitability from sale of the products for the current month (short run) will be impacted**

   Reason

   The correct answer is - Profitability from sale of the products for the current month (short run) will be impacted. In the very immediate future, as mentioned the span of current month, it is unlikely that the profit will be impacted. However, in the long-term health and safety concerns about the product can lead to potential financial penalties, legal issues that can impact the brand image.

3. **Option (c): Increase in selling price of products to recoup the cost of making proposed changes**

   Reason

   The correct answer is - Increase in selling price of products to recoup the cost of making proposed changes is a financial consideration. The rest are non-financial considerations.

CASE SCENARIO 18

A company makes a single product with the following details:

Particulars	Current Situation	Proposed Situation
Selling Price per unit (₹)	10	10
Direct Cost per unit (₹)	5	5
Present number of setups per production period, (Before each production run, setup is done)	40	₹
Cost per set up (₹)	400	270
Production units per run	1,000	2,000
Engineering hours for production period	600	460
Cost per engineering hour (₹)	10	10

The company has begun Activity Based Costing of fixed costs and has presently identified two cost drivers, viz. production runs and engineering hours. The total current fixed costs are ₹ 97,000. After the above ABC analysis on production runs and engineering runs, ₹ 75,000 of the remaining fixed costs are yet to be analysed. There are changes as proposed above for the next production period for the same volume of output.

MULTIPLE CHOICE QUESTION

1. Given the information above, compute the number of setups (which will also be the number of production runs) after the proposed change.

   (a) 20 production runs

   (b) 18 production runs

   (c) 24 production runs

   (d) 22 production runs

2. Based on the calculation in (i) above, what is the total set up cost?

   (a) ₹ 5,400

   (b) ₹ 4,860

   (c) ₹ 4,680

   (d) ₹ 5,940

3. What is the break-even point in the current scenario?

   (a) 19,200 units

   (b) 19,320 units

   (c) 19,400 units

   (d) 19,420 units

4. What is the break-even point in the proposed scenario?

   (a) 16,900 units

   (b) 16,000 units

   (c) 17,200 units

   (d) 17,000 units

5. The break-even point in the proposed scenario will be achieved in _____ production run.

   (a) 8^{th}

   (b) 9^{th}

   (c) 10^{th}

   (d) 11^{th}

6. What do you infer from the above case scenario?

   i Activity Based Costing showed that while costs may be fixed with respect to volume, they may not be fixed with respect to other cost drivers.

   ii Analysing cost using cost drivers can open up opportunities to save costs

iii It might be advisable to analyse the balance ₹ 75,000 fixed cost as well using Activity Based Costing

iv A lower break even point after proposed changes increases the chances of being profitable

Options

(a) i and ii

(b) i, ii and iv

(c) i, ii and iii

(d) i, ii, iii and iv

7. Given the above case scenario, if the management implements that proposed change in production, which among these will be a concern that the management needs to pay attention to?

(a) Set up time for production runs reduces due to the proposed change in production

(b) Doubling the batch size can lead to the risk of machine downtime and more repairs and maintenance

(c) Break even point has reduced due to the proposed change in production

(d) Engineering hours required for production run reduces due to proposed change in production

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): 20 production runs

Reason

The correct answer is 20 production runs.

Total number of units produced currently = Production units per run × Number of set ups (which is also the number of production runs) = 1,000 units × 40 set ups = 40,000 units.

Batch size after proposed changes = 2,000 units. Therefore, the number of production runs = 40,000 units / 2,000 units = 20 production runs.

2. Option (a): ₹ 5,400

Reason

The correct answer is ₹ 5,400. Total set up costs = 20 set ups × ₹ 270 per set up.

3. Option (c): 19,400 units

Reason

The correct answer is 19,400 units.

Total fixed cost = ₹ 97,000 and contribution per unit = ₹ 5 per unit (selling price ₹ 10 – direct cost ₹ 5).

Hence, Break-even point = fixed cost / contribution per unit = 97,000 / 5 = 19,400 units.

4. Option (d): 17,000 units

Reason

The correct answer is 17,000 units.

Total fixed cost = ₹ 85,000 and contribution per unit = ₹ 5 per unit (selling price ₹ 10 – direct cost ₹ 5).

Hence Break-even point = fixed cost / contribution per unit = 85,000 / 5 = 17,000 units.

5. Option (b): 9^{th}

Reason

The break-even point will be achieved in 9^{th} production run (BEP 17,000 units / 2,000 units per batch) = 8.5 batch which is basically the 9^{th} batch being produced.

6. Option (d): i, ii, iii and iv

Reason

The correct answer is all the statements are true.

7. Option (b): Doubling the batch size can lead to the risk of machine downtime and more repairs and maintenance

Reason

The correct answer is doubling the batch size implies that the machine runs for longer. The management has to consider whether this could lead to machine break down. In the long run this will lead to machine downtime and therefore more repairs and maintenance. Batch size is a non-financial factor which has a longer-term implication. Hence, while the company may be able to earn short term profits, it might not be profitable in the long term.

CASE SCENARIO 19

VServeU connects customers who require home services to service providers. Services provided include electrical, plumbing and similar home repair services at the customer's doorstep. The company owns the digital platform that uses algorithms to matches users to service providers in the required locality. The working of the business model is relatively simple. The consumer in need of services, uses VServeU's application that is available on both Andriod and IoS phones. By specifying their requirement, they place a request through the app. The company's algorithm then matches the request with service providers who are registered with the company. Once a match is made with respect to the requirement, locality and cost, the service provider is despatched to the customer's home for providing the service.

In order to make the business more profitable, VServeU wishes to compete in the market based on quality and variety of services it can offer. Recent business trends indicate that services required by customers are more complex in nature that require an experienced service provider. Many times, they may require a host of service providers to address different home repair problems at the same time. Hence, VServeU wants to onboard agencies that offer different home repair services. These agencies hire different specialists who can work as a team while on assignments.

Agencies approach the platform to advertise their services on it. In return, VServeU helps the agency connect with customers who need their services. The agency benefits from this since its business reach expands exponentially using VServeU's platform. On the other hand, customers would prefer VServeU's platform since the quality and variety of services advertised is much more. Customers get it free, do not have to pay for using the VServeU application. This increases the popularity of the platform application, which in turn improves the visibility that the home repair agency can get. Higher visibility allows VServeU to charge a premium from agencies to advertise on its application platform. This makes the model more profitable for VServeU.

Once the assignment is complete, the customer can, using the VServeU application, rate the service agency on certain other parameters like cost,

quality, punctuality etc. and as also rate the digital platform provided by VServeU in terms of whether the customer expectations have been met, reliability etc.

MULTIPLE CHOICE QUESTION

1. Which is the business model that VServeU follows?
   (a) Experience model
   (b) On Demand model
   (c) Subscription model
   (d) Service ecosystem model
2. Which business model VServeU is planning to follow?
   (a) Hidden Revenue model
   (b) Razor Blade model
   (c) Subscription model
   (d) On Demand model
3. Which element of the business model canvas does the activity of customer rating and feedback represent?
   (a) Customer relationship
   (b) Key activity
   (c) Channel
   (d) Customer segment
4. VServeU is the first company in the country to offer convenient and standard quality home services to customers through the digital app platform. What kind of innovation does this represent?
   (a) Transformational innovation
   (b) Disruptive innovation
   (c) Basic research
   (d) Incremental innovation

5. Which is the key resource for VServeU as per the business model canvas?

   (a) The digital platform operating on applications

   (b) Service providers

   (c) Customers

   (d) Both customers and service providers

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): On Demand model

Reason

The correct answer is On Demand model, the digital platform connecting customers to service providers has made accessibility of service easier and convenient and "on demand" for the customer. VServeU earns a commission for matching the customer with the service provider.

2. Option (a): Hidden Revenue model

Reason

The correct answer is Hidden Revenue Model, also known Advertising model. This is a subset of the Free Business Models. The customer, user of the application platform, does not pay. The application instead earns revenue from the advertiser, who is the agency providing home repair solutions. The value proposition here is to connect customers to agencies that provide high quality service for a variety of home repair needs.

3. Option (a): Customer relationship

Reason

The answer is Customer relationship, where the company engages with the customer regarding the service. VServeU uses the feedback and ratings to improve its services that will help it develop a loyal customer base.

4. Option (b): Disruptive innovation

Reason

The correct answer is disruptive innovation as it is challenging the existing industry. The company is making home services easily accessible to customers in need of them while also providing the platform to service providers to expand their reach. Its online presence is bound to help extend the reach of services. Hence, the company is disrupting the current industry by making services easily available to a broader customer base.

5. Option (a): The digital platform operating on applications

Reason

The correct answer is the Digital platform operating on applications is the key resource of VServeU. It is this algorithm that matches customers to service providers. This is the key resource to deliver on the value proposition to both customers and service providers. Customers and service providers form part of the customer segment on the business canvas.

CASE SCENARIO 20

VServeU connects customers who require home services to service providers. Services provided include electrical, plumbing and similar home repair services at the customer's doorstep. The company owns the digital platform that uses algorithms to matches users to service providers in the required locality. The working of the business model is relatively simple. The consumer in need of services, uses VServeU's application that is available on both Andriod and IoS phones. By specifying their requirement, they place a request through the app. The company's algorithm then matches the request with service providers who are registered with the company. Once a match is made with respect to the requirement, locality and cost, the service provider is despatched to the customer's home for providing the service.

In general, customers have safety concerns about using the services of unknown professionals at home. To address this problem, VServeU has taken the onus of doing through background check and police verification of all service providers to ensure the safety of the customer. The other challenge is to keep the standard of service delivery uniform across service providers. This is vital for the company to ensure that the quality of service is as per standard irrespective of whichever service provider is deployed for the request. For this, the service providers are given training and are groomed for the service. They are also provided full equipment and other tools so that the customer gets an enhanced experience of getting service with least inconvenience.

Each time a service request is placed on the application, the customer makes an upfront payment. VServeU retains a part of it as commission for its service and the balance is passed onto the service provider. This commission-based revenue forms a large chunk of its revenue source.

MULTIPLE CHOICE QUESTION

1. Which is the business model that VServeU follows?

   (a) Experience model

   (b) Service ecosystem model

(c) Subscription model

(d) On Demand model

2. Who form the customer segment of VServeU on the business model canvas?

(a) Customers who need the service

(b) Service providers who provide the service

(c) Both customers and service providers

(d) All current and future customers

3. Which of the following are the value propositions for VServeU as per business model canvas?

i Providing quality home services on demand to customers conveniently at their doorstep.

ii Expanding the service reach of the service provider

iii Getting access to training and tools to provide the service effectively

iv Providing service at cost efficient rates

Options

(a) only i

(b) i and ii

(c) i, ii and iii

(d) i, ii and iv

4. Which is the key resource for VServeU as per the business model canvas?

(a) The digital platform operating on applications

(b) The service providers

(c) The customers

(d) Both customers and service providers

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (d): On Demand model

Reason

The correct answer is On Demand Model, the digital platform connecting customers to service providers has made accessibility of service easier and convenient and "on demand" for the customer. VServeU earns a commission for matching the customer with the service provider.

2. Option (c): Both customers and service providers

Reason

The correct answer is both customers and service providers form the customer segment for VServeU. The company earns a commission from the charges paid by the customer, the balance is passed onto the service provider. Service providers generate the commission revenue stream for the company and therefore are part of the customer segment.

3. Option (c): i, ii and iii

Reason

The correct answer is i, ii and iii.

Statement i is a value proposition for the customer who gets the service on demand at their convenience.

Statement ii is a value proposition for the service provider as their service reach can expand using the company's application. Without this, the service provider would have to find his own ways of marketing his services typically depending on word of mouth or advertisements in local papers.

Statement iii is also a value proposition for the service provider, who gets a structured training to improve and implement his skills.

The case scenario above does not state that services will be provided at cost efficient rates.

4. Option (a): The digital platform operating on applications

Reason

The correct answer is the digital platform operating on applications is the key resource of VServeU. It is this algorithm that matches customers to service providers. This is the key resource to deliver on the value proposition to both customers and service providers. Customers and service providers form part of the customer segment on the business canvas.

CASE SCENARIO 21

DG is a consumer goods multinational company well known for its personal health care and hygiene products. It manages world famous brands for products ranging from baby care, fabric care, home care, personal hygiene, skin care products. Traditionally it depended on its internal research and development team for innovation of new products. Over the years however, with increasing competition, the research was giving lesser payoffs. In the year 2000, its then CEO Mr. DKG saw that DG cannot meet its growth targets by spending more on R&D with lesser and lesser payoffs. Therefore, the "Connect and Develop" model was adopted partially opening up the research and development of products to experts from outside. While the core team of researchers and infrastructure would be in place, DG would also collaborate with external scientists, entrepreneurs, suppliers, and universities to create newer, better, and cheaper products. Through the internet, they partnered with platforms such as InnoCentives, Your-encore among others to reach out to the talent pool that can help generate and create ideas for its products. This is the "connect" part of the program. Using proven technologies, packages and products, viable ideas would then be assessed for improvement, scaling up and marketing. This is the "develop" part of the program.

In the following years, DG noticed that the connect and develop program substantially improved research productivity. Many products were launched that were influenced mainly by external expertise. Some of the well- known innovations are Swiffer Duster, Magic Eraser, Spinbrush etc. This created a sustainable innovation model for the company.

MULTIPLE CHOICE QUESTION

1. Match the following:

i.	Converting ideas into viable products	a.	Key Resources
ii.	Platforms that connect P&G to the expert talent pool	b.	Cost Structure
iii.	Grow by creating newer, better and cheaper products	c.	Key Activity

iv.	Improving impact of R&D spend by bridging internal R&D with external expertise	d.	Value Proposition

Options

(a) i-a, ii- b, iii- c, iv- d

(b) i-c, ii- a, iii- d, iv- b

(c) i-c, ii- b, iii- a, iv- d

(d) i-b, ii- c, iii- d, iv- a

2. Which type of approach has DG taken for developing a sustainable business model?

(a) Open innovation

(b) Sharing economy

(c) Closed loop production

(d) Social enterprises and benefit corporations

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1 Option (b): i- c, ii- a, iii- d, iv- b

Reason

Converting ideas into viable products – Key Activity

Platforms that connect DG to the expert talent pool – Key Resource

Grow by creating newer, better and cheaper products – Value Proposition

Improving impact of R&D spend by bridging internal R&D with external expertise – Cost Structure

2. Option (a): Open innovation

Reason

The correct answer is Open Innovation where a company collaborates with other organizations, groups of people, or individuals to generate and commercialize new ideas. This type of collaboration is especially suited to dealing with the complex interdependencies that characterize the transition to a more sustainable built environment.

CASE SCENARIO 22

"Be Informed" is a monthly magazine that focuses on current affairs, economics, international business, technology and culture. Few college students pursuing their course in Mass Communication had started this as a summer project. During the course of their project, they realized that there was a gap in the news media sector for in depth analysis on the afore-stated topics. Hence, this project was scaled up to become a regular business which has continued successfully for the last 5 years. The magazine has both a print edition and an online edition. Readers of the print edition pay an annual fee; the magazine is posted to their correspondence address each month during the year.

Due to ongoing economic slowdown, advertisement spend by companies have reduced across all mediums. Accordingly, advertisement revenue from the print version has been on the decline over the last 2 years. The annual fee income from readers alone will not be sufficient to support the print version of the magazine in the long run. To address this, the publishers decided to offer the online edition of the magazine. Readers of the online version create a login on their website, sharing personal details and reading preferences. They can access up to 5 articles each month free of cost. Beyond this the reader has to pay a subscription fee to access articles. A reader may be willing to pay for these articles because of the insight these in-depth analytical articles offer.

MULTIPLE CHOICE QUESTION

1. Identify the business model that is followed for the print edition of "Be Informed".

   (a) Freemium model

   (b) Subscription model

   (c) Advertising model (Hidden Revenue model)

   (d) Cross Subsidisation model

2. Identify the business model that is followed for the online edition of "Be Informed".

   (a) Freemium model

(b) Subscription model

(c) Advertising model (Hidden Revenue model)

(d) Cross Subsidisation model

3. What would be an appropriate Key Performance Indicator to determine if the business model of the online version of "Be Informed" is successful?

(a) Number of readers creating their user account on the website

(b) Number of readers reading the 5 articles each month free of cost

(c) Number of users upgrading their account to access further online articles

(d) Advertisement revenue increase for the online version of the magazine

4. What is the objective of publishers following the business model as described in the question for their online edition of the magazine?

i To reduce the reliance on advertisement as an income stream for the online edition

ii Corporate social responsibility of offering few articles for free to a user who creates an account on their website

iii To charge a premium for the value that the magazine is creating for the reader in the form of insights from its in depth analysis

iv To popularise and increase the readership of the magazine

Options

(a) i, ii and iv

(b) iii and iv

(c) i and iv

(d) i, iii and iv

5. "Be Informed" is a monthly magazine that provides an analytical viewpoint of on various subjects. The accuracy and relevance of these analytical write up would fall under which attribute of the Kano Model?

(a) Threshold Attribute

(b) Excitement Attribute

(c) Reverse Quality

(d) Indifferent Quality

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): Subscription model

Reason

The correct answer is Subscription model. The readers of the print edition have to pay an annual fee (subscription) to receive their magazine.

2. Option (a): Freemium model

Reason

The correct answer is Freemium model. Users share their personal information and preferences while creating an account on the website. 5 articles can be read free of cost of the online edition. Beyond this the reader has to pay a subscription fee to access articles. Hence, the product is first offered for free and for further access subscription fee has to be paid. Therefore, this is a freemium model.

3. Option (c): Number of users upgrading their account to access further online articles

Reason

Key Performance Indicator for the online version of the magazine (Freemium Model) would be the conversion of free users to subscription paying users. This is shown by the number of users upgrading their account to access further online articles.

4. Option (d): i, iii and iv

Reason

Statement i – It is given in the question description that the economic slowdown has reduced the advertisement spend of companies across all mediums. Hence, it is important to create an independent revenue stream for the magazine, which the publishers have done in the form of charging subscription fee for the magazine beyond 5 articles a month.

Statement iii – It costs to run and publish a magazine, hence it would be prudent to charge for the valuable insights that the reader derives from the in depth analysis of these articles. Hence, the Freemium business model followed here charges a fee for the premium product articles.

Statement iv – The idea of offering 5 articles for free each month to every reader is to spark their interest in the magazine and popularize it. This is the way to increase the conversion of readers from free model to a paying reader.

5. Option (a): Threshold Attribute

Reason

The correct answer is Threshold attribute of the Kano Model. Threshold attribute is the characteristics that are taken for granted, but when not met lead to dissatisfaction of the customers. If the articles are not accurate and relevant, the readers would be dissatisfied with the magazine and may slowly switch to other resources for information.

CASE SCENARIO 23

Buymore is an ecommerce company that connects retail buyers and sellers of wide range of products in consumer electronics, home essentials, fashion etc. It does not own any of the products, rather it connects the sellers of these brands to the buyers through its website. The company earns a seller fee for the sales made through the website. Buyers pay a yearly subscription fee in order to access the website services.

Data analysts at Buymore noticed that with penetration of internet connectivity, buyers in rural Indian towns have aspirations to procure many of the products sold on the website. Likewise, many of the sellers who are registered with Buymore are mainly medium to small scale entrepreneurs who do not have the capability of storing and shipping the goods beyond certain geographical limits from their main area of operation. Due to their inability to invest in warehousing and shipping services, sellers are unable to expand the reach of their products to newer markets. This is the reason most of the sales that are routed through the Buymore website are in more localized markets concentrated in mainly in the big cities.

Buymore is a well established company, that has the resources to rent out/ own warehouses and also to provide shipping services over road and railway means of transport. Therefore, to address the problem of the sellers' inability to expand their product reach, Buymore has decided to provide warehousing and shipping services. This will be provided at a charge in addition to the seller fee that is paid on each sale. This move will alleviate the pain faced by the sellers in expanding their product reach. It will also create gain to the buyers in rural Indian markets since they can now buy these products online.

MULTIPLE CHOICE QUESTION

1. What type of business model does Buymore follow?

   (a) Hypermarket model

   (b) Digital Platform model

(c) Freemium model

(d) Service Ecosystem model

2. Who are the customers of Buymore?

(a) The sellers who register on their website

(b) The buyers who register on their website

(c) The sellers and buyers who register on their website

(d) The sellers and buyers who do not register on their website

3. The aspirational need of buyers in rural Indian towns as well as the need of the sellers to expand their product reach represent which of the following in the Value Proposition Canvas?

(a) Customer Jobs

(b) Customer Pains

(c) Customer Gains

(d) Gain Creators

4. Inability of sellers to invest in warehousing and storage facilities represents which of the following represents in the Value Proposition Canvas?

(a) Customer Jobs

(b) Customer Pains

(c) Customer Gains

(d) Pain Relivers

5. Which of the following elements have acted as a pain reliver and/or a gain creator to each of Buymore's customers?

i Risk reduction

ii Accessibility

iii Performance

iv Convenience

Options

(a) i and ii

(b) ii and iv

(c) i and iii

(d) i and iv

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): Digital Platform model

Reason

The correct answer is Digital Platform model. More specifically Buymore follows the Business to Consumer digital platform Model. Buymore is a digital platform that connects business to retail consumers.

2. Option (c): The sellers and buyers who register on their website

Reason

The correct answer is – the sellers and buyers who register on their website. There are two revenue streams for Buymore, the seller fee collected on sales made through the website and the yearly subscription fees that the buyers pay to access the services.

3. Option (a): Customer Jobs

Reason

The correct answer is Customer Jobs. Customer Jobs describes the important issues that business's customers are trying to solve/resolve in their work, it could be their needs that they wish to satisfy or may be a task that they try to perform and complete in their life (professional and personal) or at workspace. The aspirational need of buyers in rural Indian towns as well as the need of the sellers to expand their product reach represent a need that is unresolved.

4. Option (b): Customer Pains

Reason

The correct answer is Customer Pains. Sellers who are registered with Buymore are its (Buymore's) customers. Inability to invest in warehousing and storage facilities have hindered their prospects of expanding their product reach. Hence, this represents customer pains on the value proposition canvas.

5. Option (b): ii and iv

Reason

Accessibility is making products and services available to customers who previously lacked access to them. Convenience is making things more convenient or easier to use can create substantial value. By providing warehousing and shipping services to sellers registered with Buymore, the company has made it easier for these sellers to expand their product reach. Along with convenience, access to these services have been provided by Buymore. This is a pain reliever / gain creator for the sellers.

Also, for buyers in the rural Indian markets this move will provide them access to products that were previously not available to them. Procurement of these products can be done online on Buymore's website, which adds to the convenience aspect. This is a pain reliever / gain creator for the buyers.

CASE SCENARIO 24

JPY Motors Corp. is a race car manufacturer based in Iwaki (city name). The company manufactures cars primarily for professional car racers who participate in championships held all across the world. Race cars need high grade fuel that is specially used in high performance engines. The company has many engineers from allied fields who constantly research on ways to improve performance. They have recently proposed a change to the fuel composition that will make a marked improvement to the performance of the engine. This will have a direct and immediate impact on the training and career performance of the customers of JPY Ltd, who are all professional car racers.

Improved engine performance has a direct bearing on the careers of professional car racers. Improved engine performance will enable JPY Ltd to improve its market share in this niche market. This will have substantial impact on the financials of the company. Changing the fuel composition also requires the company to get approvals from the Government for meeting emission standards as well as safety standards for the car. Many environmental groups have hailed this change as the new fuel composition is made from more sustainable source of fuel, moving away from fossil fuels.

The adoption of new fuel composition will require a change in the engine design and components. Hence, material requirement for the new model will require changes to the procurement function of the supply chain. Currently, suppliers for key components like engine and its parts are based in the vicinity of JPY Motors's factory in Iwaki. However, the proposed changes will require the company to purchase the key engine component from suppliers based in Yokohama.

While manufacturing process undergoes a change due to change in engine design, there will be no significant variation in the assembly line operations for the new model. Most of the employees in the assembly line are hired on contractual basis and do not have any union to represent them.

The above consideration to change the fuel composition is being viewed a decision that will affect the company's strategic position. Before making their decision public, the senior management wants to first assess the power and

interest of various stakeholders who can influence this decision. As a management accountant, you need to assist the senior management to understand the type of information to be given to each stakeholder depending on their power to influence and their interest in the objective to change fuel composition.

Using Mendelow's Matrix, answer the following questions –

MULTIPLE CHOICE QUESTIONS

1. Which of the following stakeholders are in the high interest and high power group?
   (a) Customers and Government regulators
   (b) Customers and Board of Directors
   (c) Government Regulators and Current Suppliers of key components
   (d) Suppliers of key components and Employees at assembly line operations
2. Which of the following stakeholders are in the high interest and low power group?
   (a) Current suppliers of key components and Environment activist groups
   (b) Government regulators and Environment activist groups
   (c) Employees at the assembly line and Current suppliers of key components
   (d) Customers and Environment activist groups
3. Which of the following stakeholders are in the high power and low interest group?
   (a) Employees at the assembly line
   (b) Customers
   (c) Current suppliers of key components
   (d) Government regulators

4. Which of the following stakeholders are in the low power and low interest group?
   (a) Employees at the assembly line
   (b) Customers
   (c) Current suppliers of key components
   (d) Government regulators
5. With which group should the company actively engage in order while implementing the change?
   (a) High power and low interest group
   (b) Low power and high interest group
   (c) High power and high interest group
   (d) Low power and low interest group
6. With which stakeholders should the company keep informed while implementing the change?
   (a) High power and low interest group, because they can be impacted by the decision
   (b) Low power and high interest group, because they can join forces with a more powerful stakeholder to influence the decision
   (c) High power and high interest group, because cannot influence the decision
   (d) Low power and low interest group, because it is very relevant decision for them
7. With which stakeholder should the company ensure that they are satisfied while implementing the change?
   (a) High power and low interest group
   (b) Low power and high interest group
   (c) High power and high interest group
   (d) Low power and low interest group

8. With which stakeholder is minimum effort to be taken while implementing the change?

   (a) High power and low interest group

   (b) Low power and high interest group

   (c) High power and high interest group

   (d) Low power and low interest group

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): Customers and Board of Directors

Reason

The correct answer is Customers and Board of Directors. Customers who are professional car racers will be directly impacted by JPY's decision as it affects both their training and career performance. JPY Motors manufactures cars primarily for professional car racers, hence customers have both high power and high influence over this objective. The change will improve market share in this niche market segment and will have substantial financial impact on the company. The Board of Directors as stakeholders will have high power and high influence over this objective.

2. Option (a): Current suppliers of key components and Environment activist groups

Reason

The correct answer is Current suppliers of key components and Environment activist groups. Current suppliers of key components will be adversely impacted by this decision since procurement for the new engine model will happen from Yokohama. However, despite having high interest, they do not have the power to influence this decision directly. Environment activist groups have a high interest since the fuel composition impacts the environment directly, which in the case of this change will be a positive impact due to the sustainable nature of the fuel. However, they too do not have the power to influence the decision directly.

3. Option (d): Government regulators

Reason

The correct answer is Government regulators. They have high power since the fuel composition change can be implemented only with their approval. However, they are not directly interested in the objective.

4. Option (a): Employees at the assembly line

Reason

The correct answer is Employees at the assembly line. While manufacturing process undergoes a change due to change in engine design, there will be no significant variation in the assembly line operations for the new model. Most of the employees in the assembly line are hired on contractual basis and do not have any union to represent them. Hence assembly line employees have low power and low interest in this decision.

5. Option (c): High power and high interest group

Reason

The correct answer is high power and high interest group. This will comprise of the customers will be directly impacted by the decision. Since the company manufactures the cars primarily for them, they need to be actively engaged while the decision is being taken. Likewise, since the financials and the market share of the company are going to be impacted, the board of directors will need to be actively engaged while the decision is being taken.

6. Option (b): Low power and high interest group, because they can join forces with a more powerful stakeholder to influence the decision

Reason

The correct answer is low power and high interest group. This group will comprise of current suppliers of key components and environment activist groups. While they have low power, they can join more powerful groups like the customers (professional car racers) and then try to influence the decision. By keeping the group informed, the company is showing

consideration towards this group. This may make them less inclined to try to indirectly influence by joining forces with other groups. Similarly, environment activist groups do not have direct power to influence the decision. However, they are in a position to influence indirectly say by influencing the news media perception about the change. Hence, this group should also be given consideration and be kept informed about the change while it is being implemented.

7. Option (a): High power and low interest group

Reason

The correct answer is high power and low interest group. These would be the government regulators who need to give approval for the fuel composition change. They have high power since the fuel composition change can be implemented only with their approval. While they are not directly interested in this decision, they have the power to influence it. Hence, the company should ensure that relevant information is provided to keep them satisfied while implementing the change.

8. Option (d): Low power and low interest group

Reason

The correct answer is low power and low interest group. This would be the group of assembly line workers who are not impacted by the change. Hence, their interest is low in this decision. As employees they do not have a union representing them, hence their power is low. Since there is no direct impact on their working, the company need not to focus too much on this group while implementing the change.

CASE SCENARIO 25

A company has a division A producing three products called X, Y, Z. Each product can be sold in the open market in the following manner.

Maximum external sales are X 800 units, Y 500 units, Z 300 units.

Particulars	X	Y	Z
Selling price per unit ($)	96	92	80
Variable Cost of production in Division A ($)	33	24	28
Labour Hours required per unit in Division A	6	8	4

Product Y can be transferred to Division B, but the maximum quantity that might be required for transfer is 300 units of Y.

Division B could buy similar product in the open market at a price of $45 per unit.

MULTIPLE CHOICE QUESTION

1. The number of hours needed for external sales are _____.

   (a) 11,500

   (b) 11,000

   (c) 10,000

   (d) 10,500

2. When Division A has capacity of 12,000 hours, which of the following statements are true?

   i. Contribution per hour of X is $10.50, Y is $8.50 and Z is $13

   ii. The constraining factor is labour hours, which needs to be utilized optimally

   iii. There is a shortfall 400 hours, to meet both external production and the request of 300 units of Y from Division B

iv. Due to limited capacity Division A will incur an opportunity cost due to lost sales if it caters to the request of Division B

Options

(a) i and ii

(b) ii, iii and iv

(c) i, iii and iv

(d) i, ii, iii and iv

3. When Division A has capacity of 12,000 hours, what will be optimum mix of production for external sales?

(a) X - 800 units, Y - 500 units and Z - 300 units

(b) X - 800 units, Y - 600 units and Z - 300 units

(c) X - 800 units, Y - 250 units and Z - 300 units

(d) X - 800 units, Y - 800 units and Z - 300 units

4. Given that Division A has a capacity of 12,000 hours. If Division A accepts to produce 300 units of Y for Division B, what will be the contribution lost from reduced sales?

(a) Contribution lost from reduced sales of X - $3,400

(b) Contribution lost from reduced sales of Y - $ 3,400

(c) Contribution lost from reduced sales of Y - $2,550

(d) Contribution lost from reduced sales of Y - $4,250

5. Given that Division A has a capacity of 12,000 hours. If Division A accepts to produce 300 units of Y for Division B, what should be the transfer price that should be charged to Division B at the minimum?

(a) $24 per unit

(b) $45 per unit

(c) $35.33 per unit

(d) $92 per unit

6. Given that Division A has a capacity of 12,000 hours. If Division A accepts to produce 300 units of Y for Division B, what should be the transfer price range that should be charged to Division B?

   (a) $24 per unit - $45 per unit

   (b) $45 per unit - $92 per unit

   (c) $35.33 per unit - $45 per unit

   (d) $92 per unit

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (c): 10,000

Reason

The number of hours needed for external sales are 10,000.

External Sales	Quantity (units)	Hours per unit	Total Hours need
X	800	6	4,800
Y	500	8	4,000
Z	300	4	1,200
Total hours needed for external sales			10,000

2. Option (d): i, ii, iii and iv

Reason

Statement i, ii, iii, iv are true.

The total hours needed for external sales is 10,000 and those need for internal transfer is 2,400 hours. In all, 12,400 hours are needed, when only 12,000 hours are available. There is a shortfall of 400 hours.

Capacity is hence limited. Since labour hours is the constraint, it should be used optimally for which the contribution per labour hour has to be calculated.

If Division A has to cater to the request from Division B, it has to account for opportunity cost from lost sales.

Contribution per hour of X is $10.50 per unit, Y is $8.50 per unit and Z is $13 per unit.

Particulars	X	Y	Z
Selling Price per unit	$96	$92	$80
Less: Variable Cost per unit	$33	$24	$28
Contribution per unit	$63	$68	$52
Labour hours per unit	6	8	4
Contribution per hour	$10.50	$8.50	$13.00
Ranking high to low	II	III	I

3. Option (a): X - 800 units, Y - 500 units and Z - 300 units

Reason

The correct answer is X 800 units, Y 500 units and Z 300 units is the optimum mix for external sales. The entire demand of Product Z will be produced first. This requires 1,200 hours. Out of the balance 10,800 hours, Product X will require 4,800 hours. This leaves a balance of 6,000 hours for Product Y. Product Y requires 8 hours p.u. External sales of product require 4,000 hours (500 units × 8 hours p.u.). This leaves 2,000 hours available for production of 300 units of Y to be sold to Division B.

Priority	External Sales	Quantity units	Hours per unit	Total Hours needed	Remaining hours
1	Z	300	4	1,200	10,800
2	X	800	6	4,800	6,000
3	Y	500	8	4,000	2,000

For the internal demand of Product Y 300 units will require 2,400 hours (300 units × 8 hours p.u.). Hence, there is a shortfall of 400 hours to meet this internal demand. This shortfall of 400 hours will be made up with diverting hours earmarked for external sale of Product Y (Rank 3 as explained earlier).

4. Option (b): Contribution lost from reduced sales of Y - $ 3,400

Reason

Contribution lost from reduced sales of Y $ 3,400.

As explained earlier, the shortfall of 400 hours to meet the internal requirement for Y is met by diverting hours earmarked for external sale of Product Y (Rank 3 as explained earlier).

Contribution Lost by Diverting 400 hours from Product Y for External Sales –

= 400 hours × contribution per hour

= 400 hours × $8.5

= $3,400

5. Option (c): $35.33 per unit

Reason

The correct answer is $35.33 per unit.

On a per unit basis, lost contribution = 3,400 / 300 units = 11.33 per unit

Therefore, Transfer Price

= Marginal Cost p.u. + Contribution Lost from Reduced External Sales

= 24 + 11.33

= $35.33 per unit

6. Option (c): $35.33 per unit - $45 per unit

Reason

The correct answer is $35.33 per unit - $45 per unit.

Division B will be willing to buy within in this range below the external buy in piece of $45 per unit. Division A will want to charge at the minimum $35.33 per unit.

In order to recoup the contribution from lost sales. Hence this will be the range.

CASE SCENARIO 26

A company has a division A producing three products called X, Y, Z. Each product can be sold in the open market in the following manner.

Maximum external sales are X 800 units, Y 500 units, Z 300 units.

Particulars	X	Y	Z
Selling price per unit ($)	96	92	80
Variable Cost of production in Division A ($)	33	24	28
Labour Hours required per unit in Division A	6	8	4

Product Y can be transferred to Division B, but the maximum quantity that might be required for transfer is 300 units of Y.

Division B could buy similar product in the open market at a price of $45 per unit.

MULTIPLE CHOICE QUESTIONS

1. The number of hours needed for external sales are _____.

   (a) 9,000

   (b) 10,000

   (c) 12,000

   (d) 11,000

2. When Division A has capacity of 8,000 hours, which of the following statements are true?

   i. There is a shortfall 4,400 hours to meet both external production and request of 300 units of Y from Division B

   ii. The constraining factor is labour hours, which needs to be utilized optimally

   iii. Contribution per hour of X is $10.50, Y is $8.50 and Z is $13

iv. Due to limited capacity Division A will incur an opportunity cost due to lost sales if it caters to the request of Division B

Options

(a) i and ii

(b) ii, iii and iv

(c) i, iii and iv

(d) i, ii, iii and iv

3. When Division A has capacity of 8,000 hours, what will be optimum mix of production for external sales?

(a) X - 800 units, Y - 500 units and Z - 300 units

(b) X - 800 units, Y - 600 units and Z - 300 units

(c) X - 800 units, Y - 250 units and Z - 300 units

(d) X - 733 units, Y - 500 units and Z - 300 units

4. Given that Division A has a capacity of 8,000 hours. If Division A accepts to produce 300 units of Y for Division B, what will be the contribution lost from reduced sales?

(a) Contribution lost from reduced sales of X - $8,400 and Z - $3,900

(b) Contribution lost from reduced sales of Y - $17,000 and Z - $3,900

(c) Contribution lost from reduced sales of Y - $17,000 and X - $8,400

(d) Contribution lost from reduced sales of Y - $17,000 and X - $4,200

5. Given that Division A has a capacity of 8,000 hours. If Division A accepts to produce 300 units of Y for Division B, what should be the transfer price that should be charged to Division B?

(a) $24 per unit

(b) $45 per unit

(c) $94.66 per unit

(d) $92 per unit

6. In continuation of previous part..... Should Division B purchase Y from Division A?

   (a) Yes, purchasing from Division A promotes goal congruence

   (b) No, the product Y is cheaper in the external market and hence Division B should purchase it from outside

   (c) Yes, the product Y is marginally cheaper in the external market and hence Division B should purchase it from Division A to promote goal congruence

   (d) No, the product Y is costlier in the external market and hence Division B should not purchase it from outside

ANSWERS TO MULTIPLE CHOICE QUIESTIONS

1. Option (b): 10,000

Reason

The number of hours needed for external sales are 10,000.

External Sales	Quantity (units)	Hours per unit	Total Hours need
X	800	6	4,800
Y	500	8	4,000
Z	300	4	1,200
Total hours needed for external sales			10,000

2. Option (d): i, ii, iii and iv

Reason

Statements i, ii, iii and iv are true when Division A has 8,000 hours of actual capacity.

Division A needs 10,000 hours for external sales and 2,400 hours for meeting Division B's request. Hence the total hours required is 12,400. Actual capacity is 8,000 hours. Hence there is a shortfall of 4,400 hours.

Since labour hours is the constraint, it should be used optimally for which the contribution per labour hour has to be calculated.

If Division A has to cater to the request from Division B, it has to account for opportunity cost from lost sales.

Particulars	X	Y	Z
Selling Price per unit	$96	$92	$80
Less: Variable Cost per unit	$33	$24	$28
Contribution per unit	$63	$68	$52
Labour hours per unit	6	8	4
Contribution per hour	$10.50	$8.50	$13.00
Ranking high to low	II	III	I

3. Option (c): X - 800 units, Y - 250 units and Z - 300 units

Reason

The correct answer is X - 800 units, Y - 250 units and Z - 300 units. The optimum production mix for external sales is calculated as –

Total hours available = 8,000 hours. The products are ranked as per their contribution per hour. Product Z yields the maximum contribution per labour hour, followed by X and Y (Refer to earlier part). Hence, hours will first be allotted to Z, then to X and the last to Y.

Priority	External Sales	Quantity units	Hours per unit	Total Hours needed	Remaining hours
1	Z	300	4	1,200	6,800
2	X	800	6	4,800	2,000
3	Y	250	8	2,000	NIL

The entire demand of Product Z will be produced first. This requires 1,200 hours. Out of the balance 6,800 hours, Product X will require 4,800 hours. This leaves a balance of 2,000 hours for Product Y. Product Y requires 8

hours per unit. Hence, maximum production of product Y = 2,000 hours/ 8 = 250 units.

4. Option (d): Contribution lost from reduced sales of Y - $17,000 and X - $4,200

Reason

Contribution lost from reduced sales of Y = $17,000 and X = $4,200.

If Division A accepts to produce 300 units of Y for Division B, the total hours required for internal sales would be 2,400 hours. This can be catered to by curtailing its external sales. 2,000 hours from production of external sales of Product Y is first diverted and the balance 400 hours are diverted from production of Product X. Hence this results in lost contribution, an opportunity cost that has to be included in transfer pricing.

Contribution Lost from Reduced External Sales –

= Product Y (2,000 hours × contribution per hour of $8.5) + Product X (400 hours × contribution per hour of $10.5)

= $17,000 + $4,200 = $21,200

5. Option (c): $94.66 per unit

Reason

If Division A accepts to produce 300 units of Y for Division B, what should be the transfer price range that can be charged to Division B would be $94.66 per unit.

On a per unit basis, lost contribution works out to $21,200/ 300 units = $70.66. Please refer to earlier parts for explanation for lost contribution.

Transfer Price = Marginal Cost p.u. + Contribution Lost from Reduced External Sales

= $24 + $70.66 = $94.66

Since Division B can buy at $45, it would be cheaper to purchase the component from outside.

6. Option (b): No, the product Y is cheaper in the external market and hence Division B should purchase it from outside

Reason

No, the product Y is cheaper in the external market and hence Division B should purchase it from outside.

Transfer price set at as explained in earlier part is $94.66 per unit. External buy in cost in $45 per unit. Hence it would be cheaper to purchase from outside.

CASE SCENARIO 27

Speed Auto-mobile Limited (SAL) is recently formed Indian automobile company with aspiration to be global brand in upcoming decade. It enters into strategic alliance with enterprises based in Japan, Germany, and France for R&D support apart from sharing of latest technologies. SAL striving towards effectiveness and efficiency by better correlate system, strategy, staff, skill etc.

Mr. Deepak Gupta, the Management Accountant of SAL had experience of using 7-S framework in his previous job and willing to apply the same framework at SAL to support the drive for efficiency and effectiveness. He made presentation to C-suite. CEO is convinced with utility that 7-S framework is capable to produce. But she and some of officers have queries regarding the application of Mckinsey's 7-S; moreover, sceptic about; how SAL going to get maximum out of 7-S?

Mr. Gupta explained that 7-S are divided into two sets i.e., Soft and Hard elements based upon ease in their identification and degree of influence that management can exercise. He also explained the successful cases of US companies which used 7-S in drive towards efficiency and effectiveness.

Since concept is new for many of C-suite members, hence, MD-cum-CEO Ms. Catz asked Mr. Gupta to list out the 7-S with classification into Soft and Hard S elements and also stating reason and implications thereof.

Chief Strategic Officer Ms. Karen argues that business environment of US and India is not same, hence not wise to opt and implement 7-S framework applied by US firms. She asked Mr. Gupta to explain the steps that are involved in implementation of 7-S framework, so that a caution list can be prepared if it is decided to go ahead. She further raises the issue of change resistance.

HR head Mr. Ajai Singh asked, whether HR practices also covered by any one out of 7-S, or combination thereof. He took reference of role a leader play, stories and belief prevailing among employees, etc.

Chief marketing officer Mr. Andrew extended the point raised by Mr. Ajai and ask whether 7-S has bearing on generic strategies adopted by business. He took reference of various global automobiles companies to understand how these

automobile company with different generic strategies get advantage from 7-S framework.

Then, Chief Operating Officer Ms. Anjum Aggarwal whose KRA includes designing and implementation of SOPs willing to know whether adjustment can be made to all the S elements or only in some of them.

Some of question posed by C-suite are specified ahead, you are required to select most appropriate option for each of MCQ.

Students may take note, the C-suite refers to a company's top management positions, where the "C" stands for "chief." Various chief officers (e.g., CEO, CIO, CFO, etc.) are the occupants of the C-suite.

MULTIPLE CHOICE QUESTIONS

1. The McKinsey 7-S Framework highlights the _____ of the seven hard and soft elements.
   (a) Interchangeability
   (b) Independence
   (c) Interconnectedness
   (d) Intermittence
2. In context to question posed by Ms. Anjum, which of the following statement are correct –
   i. If one area of the 7-S framework needs adjusting or tweaking for business success, the other S elements are presumed to be stable or remain constant i.e., ceteris paribus
   ii. If one area of the 7-S framework needs adjusting or tweaking for business success, the other S elements are need adjusting too
   iii. Hard S elements are easily identified and influenced by management comparing to Soft S
   iv. Soft S elements are easily identified and influenced by management comparing to Hard S

Options

(a) Only statement i and iii are correct

(b) Only statements ii and iii are correct

(c) Only statement i and iv are correct

(d) Only statements ii and iv are correct

3. In context of requirement to list out Hard and Soft S elements by Ms. Catz, the 'hard' elements of the 7-S framework include all of the following except –

(a) Strategy

(b) Structure

(c) System

(d) Style

4. The McKinsey 7-S Framework is useful in which of these situations?

i. Improving overall business performance

ii. Understanding worker termination process

iii. Examining effects of future change

iv. Aligning departments during a merger

Options

(a) i and iii only

(b) i and iv only

(c) i, ii and iii only

(d) i, iii and iv only

5. Which of the following S element signify the superordinate goals?

(a) Staff

(b) Shared Value

(c) Strategy

(d) Not covered by any of S element of 7-S

6. In context to question posed by HR head, Mr. Ajai Singh 'How the company's managers lead' falls under which S element of 7-S?

   (a) Skill

   (b) Style

   (c) Staff

   (d) Not covered by any of S element of 7-S

7. In context of requirement to list out Hard and Soft S elements by Ms. Catz, the 'Soft' elements of the 7-S framework include all of the following except –

   (a) Skills

   (b) Shared values

   (c) Systems

   (d) Style

8. Regarding concern highlighted by Ms. Karen in context to implementation of 7-S framework and change resistance, which of following statement are incorrect?

   i. Change agents can effectively implement the McKinsey 7-S model using a top-bottom approach

   ii. Organisation should identify internal change agents or hire change consultants best suited to implement your changes

   Options

   (a) Statement i only

   (b) Statement ii only

   (c) Both of the statement i and ii

   (d) None of the statement i and ii

9. In context of relation among the elements of 7-S framework and with the strategy which of following are incorrect:

   i. Strategy is one among the 7 elements of 7S framework that is core to all remaining elements of 7S

   ii. All the element of 7S framework have equal importance

   iii. Hard S elements have more important than Soft S elements

   Options

   (a) i and ii

   (b) ii and iii

   (c) i and iii

   (d) None of the i, ii and iii

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (c): Interconnectedness

Reason

The McKinsey 7S Model refers to a tool that analyses a company's 'organizational design'. The goal of the model is to depict how effectiveness can be achieved in an organization through the interactions of seven key and interconnected elements that are Structure, Strategy, Skill, System, Shared Values, Style, and Staff.

Note – All the 'S' of 7-S having same importance and impact on each other due to interconnectedness.

2. Option (b): Only statements ii and iii are correct

Reason

The goal of the 7-S framework is to depict how effectiveness can be achieved in an organization through the interactions of seven key and interconnected elements that are Structure, Strategy, Skill, System, Shared Values, Style, and Staff. Since all the S of 7-S impact each other due to interconnectedness, hence if one area of the 7-S framework needs

adjusting or tweaking for business success, the other S elements are need adjusting too.

The seven components of McKinsey's 7-S model are divided into two groups: hard S and soft S. The Hard S elements are Strategy, Structure, and Systems. The Soft S elements are Style, Staff, Skills, and Shared values. Since there is substantial involvement of human element in Soft S elements, which make change management relatively difficult; further Soft S elements are highly intangible and invisible in nature hence identification of underlying sub-set of Soft S elements are relatively difficult. Therefore, Hard S elements are easily identified and influenced by management comparing to Soft S.

3. Option (d): Style

Reason

Strategy, Structure, and Systems are feasible and easy to identify. These can be found in strategy statements, corporate plans, organizational charts, and other documentations. They are easier to change than the others. Therefore, called Hard S elements.

While Skills, Staff, Style, and Shared Values are called Soft S elements.

4. Option (d): i, iii and iv only

Reason

Understanding worker termination process is not covered by any S element of the 7-S Framework. While rest three are objectives or use-cases of 7-S.

5. Option (b): Shared Value

Reason

The superordinate goals signify what we stand for and are the glue that holds the organization together i.e., shared values (refers to the values the members of the organization share). When this model was suggested first, the term superordinate goals was used instead of shared value, later replaced with shared value.

6. Option (b): Style

Reason

Style refers to the management style prevalent in a company that decides the level of employee productivity and satisfaction, including leadership styles (such as Autocrat, Bureaucrat, Democrat, Laissez-faire, Transformational and Transactional).

Staff represents the talent pool required, the size of the existing workforce, and their motivations.

Skill refer to the abilities of employees to complete tasks.

7. Option (c): Systems

Reason

Strategy, Structure, and Systems are feasible and easy to identify. These can be found in strategy statements, corporate plans, organizational charts, and other documentations. They are easier to change than the others. Therefore, called hard S elements.

While Skills, Staff, Style, and Shared Values are not change-feasible. These are harder to describe since capabilities, values and elements of corporate culture are continuously developing and changing. They are highly determined by the people at work in the organization. Hence these are harder to change directly, and typically take longer to do so. Therefore, called soft S elements.

Note - Effective companies, however, tend to pay as much attention to these soft S factors as to the hard S's.

8. Option (d): None of the statement i and ii

Reason

The change implementation stage is the most critical stage of any change initiative, and only well-implemented changes will avoid resistance to change and prevent overall change failures. Hence change agents can effectively implement the McKinsey 7-S model using a top-bottom approach. Moreover, the organisation should identify internal change agents or hire change consultants best suited to implement your changes.

A change agent, or agent of change, is someone who promotes and enables change to happen within any group or organization. In business, a change agent is an individual who promotes and supports a new way of doing something within the company.

9. Option (c): i and iii

Reason

All the elements of 7S framework have equal importance, while shared values are core to rest of elements. Hard and Soft S are different from each other only in respect to identification and influence that can be exercised by the management.

CASE SCENARIO 28

Given the information below

	Division A	Division B
Profit	₹ 50,00,000	₹ 12,00,000
Investment	₹ 5,00,00,000	₹ 80,00,000
Cost of capital	8%	8%

MULTIPLE CHOICE QUESTIONS

1. What is the Return on Investment for Division A and Division B?
   (a) Division A 12%; Division B 15%
   (b) Division A 10%; Division B 15%
   (c) Division A 8%; Division B 8%
   (d) Division A 2%; Division B 7%
2. What is the Residual Income for Division A and Division B?
   (a) Division A ₹ 50,00,000; Division B ₹ 12,00,000
   (b) Division A ₹ 40,00,000; Division B ₹ 6,40,000
   (c) Division A ₹ 10,00,000; Division B ₹ 5,60,000
   (d) Division A ₹ 90,00,000; Division B ₹ 18,40,000
3. Which of the following summarizes the performance of Division A and Division B correctly-
   (a) The return on investment of Division B is more than Division A but in absolute terms the residual income of Division B is lower than of Division A
   (b) The return on investment of Division A is more than Division B but in absolute terms the residual income of Division A is lower than of Division B

(c) The return on investment of Division B is more than Division A but in absolute terms the residual income of Division A is lower than of Division B

(d) The return on investment of Division B is the same as Division A but in absolute terms the residual income of Division B is lower than of Division A

4. Based on the conclusion in above, which of the following are correct?

i. Higher the residual income of the division necessarily means better the performance of the division

ii. Residual income alone is the best measure of evaluating the performance of managers of Division A and B

iii. It is not appropriate to use residual income as the only basis for evaluating the performance of managers of Division A and B

iv. Return on investment along with residual income should be considered for evaluating the performance of managers of Division A and B

Options

(a) i only

(b) ii only

(c) i and iv

(d) iii and iv

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): Division A 10%; Division B 15%

Reason

The correct answer is – Division A 10% and Division B 15%.

ROI = Profit / Investment

	Division A	Division B
Profit	50,00,000	12,00,000
Investment	5,00,00,000	80,00,000
ROI	10%	15%

2. Option (c): Division A ₹ 10,00,000; Division B ₹ 5,60,000

Reason

Residual Income is – Division A ₹ 10,00,000; Division B ₹ 5,60,000

Residual Income = Profit *less* Cost of Capital

Cost of Capital = 8% × Investment in Division

	Division A	Division B
Profit	50,00,000	12,00,000
Less: Cost of Capital	40,00,000	6,40,000
Residual Income	10,00,000	5,60,000

3. Option (a): The return on investment of Division B is more than Division A but in absolute terms the residual income of Division B is lower than of Division A

Reason

The return on investment of Division B (15%) is more than Division A (10%) but in *absolute terms* the residual income of Division B (₹ 5,60,000) is lower than of Division A (₹ 10,00,000).

4. Option (d): iii and iv

Reason

It is not appropriate to use Residual Income as the only basis for evaluating the performance of managers of Division A and B. The ROI of Division B (15%) is more that Division A (10%) but in absolute terms the residual income of Division B (₹ 5,60,000) is lower than of Division A (₹ 10,00,000). Hence, going by Residual Income alone, it seems that Division A is performing better than Division B. However, this is only because of the *difference in size of operation* of Division A and Division B. As per ROI, Division B is more profitable. Hence Return on Investment along with Residual Income should be considered for evaluating the performance of managers of Division A and B.

CASE SCENARIO 29

A1 is an organization that does trading of milk and milk products and operates within a large district in Uttar Pradesh, India. Milk producers (dairy farmers) sell quality milk and milk products which is then sent to retailers to be sold to customers. Each day the milk producers get the milk to the collection centre in the village. A sample of milk is drawn from individual lots to test the milk for quality. Once the quality check is passed, measurement of milk is done carefully, and the milk collected is recorded in the name of the individual milk producer. The milk is then brought to the main collection centre where further quality check is done. Once the quality test is passed, the milk is then packaged and dispatched in specially designed vans with coolers to retailers spread across various locations within the district. Consumers get their daily milk supplies from the retailers.

MULTIPLE CHOICE QUESTIONS

1. From the viewpoint of A1, procurement of good quality milk from dairy farmers best describes which of the following situations?

   (a) Value chain management

   (b) Upstream supply chain management

   (c) Downstream supply chain management

   (d) Triple bottom line

2. From the viewpoint of A1, ensuring distribution of milk packets to retailers well within the expiry date (milk being a perishable commodity) best describes which of the following situations?

   (a) Value chain management

   (b) Upstream supply chain management

   (c) Downstream supply chain management

   (d) Triple bottom line

3. In the recent years, A1 has been battling complaints about decreasing quality of products. Hence it is thinking of taking strategic decisions. One among them is to own dairy farms where the livestock are kept, instead of procuring the milk from dairy farmers individually. It is felt that this would standardize the rearing the livestock cattle (breed of cattle, their feed, milk collection procedure etc). This will also give better control over milk production and therefore improve quality of milk output. Which scenario best describes this scenario?

   (a) Value chain management

   (b) Upstream supply chain management

   (c) Downstream supply chain management

   (d) Triple bottom line

4. The decision enumerated in (iii) above has raised concerns with the dairy farmers who stand to lose their livelihood. A1 has assured them that all the dairy farmers will be given employment within the dairy farms owned by the organization. Moreover, milk production will be based on sustainable methods which will ensure the good health of the livestock cattle as also that of the environment. The customers also benefit by getting farm fresh milk. A happy customer will be a loyal customer, thus ensuring the sustainability of business. A1 aims to develop a framework that will monitor and ensure the well-being of the livestock cattle and its dairy farmers, ensure sustainability practices that ensure that production is done is an eco-friendly manner. Which scenario best describes this scenario?

   (a) Value chain management

   (b) Upstream supply chain management

   (c) Downstream supply chain management

   (d) Triple bottom line

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): Upstream supply chain management

Reason

The correct answer is 'Upstream Supply Chain Management'. Procurement of good quality milk from dairy farmers refers to procurement of raw materials from suppliers, which is Upstream Supply Chain Management.

2. Option (c): Downstream supply chain management

Reason

The correct answer is 'Downstream Supply Chain Management'. Distribution of milk within expiry date is a post-manufacturing activity that deals with the movement of finished goods to the retailer and therefrom the final customer.

3. Option (a): Value chain management

Reason

The correct answer is 'Value Chain Management'. A1 essentially wants to do *vertical integration* to ensure that the quality of milk produced can be controlled. This decision relates to the procurement function of Porter's Value Chain Analysis.

4. Option (d): Triple bottom line

Reason

The correct answer is 'Triple Bottom Line'. This is framework that organizations can adopt to ensure that their operations are being carried out in sustainable manner with respect to Profit, People and the Planet.

CASE SCENARIO 30

Bluebean coffee wishes to expand into other geographical markets. It has limited cash available and so can only afford a low upfront investment. Bluebean know that this is likely to mean they cannot enter the market as fast as they would like and that they will have to settle for a medium speed entry into the market. However, they have a management team that is experienced in the complexity of market expansion and want to involve them directly in the proposed expansion.

In the context of Bluebean Coffee's expansion plans, performance reports play a vital role in Responsibility Accounting by informing responsibility center managers about budgetary deviations, ensuring accountability in decision-making for market expansion. This allows them to take necessary actions to address these variances and maintain accountability within their respective areas of responsibility. The management of Bluebean Coffee ignored the need for undertaking managerial accountability. The Management is of the view that the performance reports can be reviewed anytime.

While preparing the Bluebean Coffee's performance report, it focused on following aspects:

- aligning objectives with organizational goals
- providing an executive summary
- ensuring the reliability of report details.
- conducting employee training programs

JavaJoy Coffee is a competitor of Bluebean Coffee operating in the same industry. Similar in size and resources, JavaJoy also aims to expand its market reach beyond its current geographical boundaries. However, unlike Bluebean, JavaJoy is more aggressive in its approach to market expansion.

However, what distinguishes JavaJoy from its competitors is its reliance on external consultants and market research firms for guidance in its expansion strategies. While JavaJoy's management possesses industry experience, they prefer to supplement their knowledge with insights from external experts. This approach provides JavaJoy with a broader perspective and access to specialized expertise.

MULTIPLE CHOICE QUESTIONS

1. Which of the following modes of entry is best suited to Bluebean's constraints and requirements?
   (a) Licensing
   (b) Acquisition
   (c) Joint venture
   (d) Strategic alliance
2. What factors most likely contribute to this performance difference between JavaJoy Coffee from Bluebean Coffee?
   (a) Luck and random chance
   (b) Differences in structure, culture, and strategy
   (c) Government regulations
   (d) Actions of individual employees
3. How does the issuance of performance reports align with Responsibility Accounting in Bluebeans Coffee?
   (a) By informing responsibility center managers of deviations from budgets
   (b) By solely focusing on financial performance metrics
   (c) By undertaking performance evaluation through internal management team
   (d) By ignoring the need for managerial accountability
4. Which aspect should typically not be involved in the preparation of performance reports of Bluebeans Coffee?
   (a) Establishing objectives aligned with organizational goals.
   (b) Adding an Executive Summary for a brief overview.
   (c) Cross-checking details for report reliability.
   (d) Conducting employee training programs.

5. According to you, can the performance reports be reviewed anytime?

   i. The performance reports can be reviewed anytime after receipt of the same.

   ii. The performance reports needs to be reviewed within a month after receipt of the same.

   iii. The performance reports can be reviewed within a quarter after receipt of the same.

   iv. The performance reports can be reviewed within a year after receipt of the same.

   Options

   (a) i

   (b) ii,iii

   (c) ii,iii,iv

   (d) iii,iv

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (d): Strategic alliance

Reason

This option is correct because a strategic alliance allows a medium speed of entry to the market, involves managerial complexity but has the advantage of a low upfront investment. (note Strategic Alliance is less complex and less binding than a joint venture).

Option (a) is incorrect because licensing requires low managerial complexity and will not provide the opportunity to leverage the skills of their experienced management team.

Option (b) is incorrect because they have limited funds. Acquiring a company has a faster speed of entry than forming an alliance.

Option (c) is incorrect because a joint venture requires a medium up-front investment which Bluebean do not have, involves managerial complexity.

2. Option (b): Differences in structure, culture, and strategy

Reason

Despite two businesses operating in the same industry, even at the same level and with the same set of resources, there is surely a difference in their performance level. The reason behind such a difference is the structure, culture, and strategy of said businesses.

The same factors mentioned above contribute to the difference in performance between JavaJoy and Blue Beans Coffee.

3. Option (a): By informing responsibility center managers of deviations from budgets.

Reason

Responsibility Accounting is implemented by issuing performance reports at frequent intervals that inform responsibility centre managers of the deviations from budgets for which they are accountable and required to take action.

4. Option (d): Conducting employee training programs.

Reason

The aspects involved in the Preparation of Performance Reports:

- Have a clear idea about the need and use-case for the user/ receipt.
- Establishment of Objectives in light of Organisational Objectives (Vision or Mission)
- Add an Executive Summary
- The Real Stuff - Performance Assessment

Thus, conducting employee training is not mentioned as an aspect in the preparation of performance reports of Bluebeans Coffee.

5. Option (c): ii,iii,iv

Reason

Once the performance reporting has been established by the organization for its activities or for a specific project, the next step is to analyse the

information and take the required corrective (including preventive as well as feed-forward) action. This task typically rests with senior managers or experts who understand business intelligence.

The data that needs to be analysed can be quantitative, such as sales and marketing results, or qualitative, such as customer survey responses. Whatever the type, a structure is required to detail the process, beginning with goal setting and ending with an action plan.

It is critical but equally important that the entity set a time frame for analysis, whether it is a month, quarter, or annual report. This timeframe allows to identify trends.

Thus, based on above, the performance reports should be reviewed by setting a time frame -monthly, quarterly or annually.

CASE SCENARIO 31

Ceber, the ride-sharing company, has been hit by various scandals that have led to the co-founder having to resign as CEO, Board members resigning and significant public relations damage. These issues directly impact Ceber's revenue, profitability, and possibly shareholder value. The scandals and negative publicity may have led to reduced revenue, increased costs due to legal fees or operational changes and decreased profitability. The new CEO of Ceber Mr. Tim has a big job on his hands. Therefore, Mr. Tim needs to focus on measures which will result into the success and sustainability for the organization.

These issues necessitate a focused approach from Mr. Tim to stabilize the company and restore shareholder confidence.

In this context, Economic Value Added (EVA) emerges as a crucial tool for Mr. Tim. EVA goes beyond traditional financial metrics. This metric enables Mr. Tim to evaluate the efficiency of Ceber's capital utilization and to prioritize investments that promise to maximize shareholder value.

Ceber reported the following financial data for the year:

- Net Operating Profit Before Interest & Taxes: $50,000
- Depreciation Expenses: $10,000
- Change in Net Working Capital: $5,000
- Capital Expenditure: $20,000
- Total Invested Capital: $150,000
- Weighted Average Cost of Capital (WACC): 12%
- Corporate Tax Rate: 30%

Mr. Tim is dedicated to assembling a staff that is committed to enhancing the organization's success and sustainability.

MULTIPLE CHOICE QUESTIONS

1. In terms of McKinsey's 7-S framework, which of the following describes structure dimension as he implements change at the company?

   (a) Consider whether the decentralised model for Ceber should be moved to one that is more centralised.

   (b) Resolve inter-group conflicts and build a consensus for change that is embedded with effective communication.

   (c) Improve the speed of feedback from customers to better understand which strategies need to be modified.

   (d) Remove obstacles that are causing Ceber staff to resist or ignore the change process that needs to be implemented.

2. According to you, which of the following perspectives of the balanced scorecard will Mr. Tim need to focus in order to improve Ceber's revenue, profitability and shareholder value.?

   (a) Financial.

   (b) Customers.

   (c) Business processes.

   (d) Learning and growth.

3. Calculate Ceber's Economic Value Added (EVA) for the year.

   (a) $17000

   (b) $6,200

   (c) $3,200

   (d) ($3,200)

4. Economic Value Added (EVA) is a metric used to assess:

   (a) Accounting profit adjusted for tax benefits

   (b) Shareholder wealth creation beyond the cost of capital

   (c) Operating profit before interest and taxes

   (d) Net profit after tax adjusted for depreciation

5. Which of the following activities are considered primary activities in Ceber's value chain?

   (a) Human Resources and Training

   (b) Upgrading Caber App

   (c) Vehicle Maintenance and Inspection

   (d) Legal and Regulatory Compliance

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): Consider whether the decentralised model for Ceber should be moved to one that is more centralised.

Reason

Option (a) is correct as it directly addresses the **structure** dimension of McKinsey's 7-S framework, which focuses on the organizational hierarchy and decision-making model.

Evaluating whether Ceber should transition from a decentralized to a centralized model is critical for aligning the structure with the company's strategic goals during this period of change.

2. Option (a): Financial

Reason

Financial performance measures indicate whether the company's strategy implementation and execution are contributing to its revenue and earnings.

Thus, Mr. Tim will need to focus on financial perspective.

3. Option (a): $17000

Reason

To calculate EVA, we need to follow these steps:

Calculate NOPAT = $50,000 - $15,000 = $35,000

Calculate Capital Charge: = $150,000 * 12% = $18,000

Calculate EVA: EVA = $35,000 - $18,000 = $17,000

4. Option (b): Shareholder wealth creation beyond the cost of capital

Reason

EVA measures the value created by a company by subtracting the cost of capital (both equity and debt) from its net operating profit after tax (NOPAT), reflecting shareholder wealth creation.

Option (a) is incorrect. EVA does not directly adjust accounting profit for tax benefits but rather assesses economic profit by subtracting the cost of capital.

Option (c) is incorrect. EVA is not based on operating profit before interest and taxes but uses NOPAT in its calculation.

Option (d) is incorrect. EVA is not based on net profit after tax adjusted for depreciation but rather focuses on economic profit adjusted for the cost of capital.

5. Option (c): Vehicle Maintenance and Inspection

Reason

Value chain comprises the activities in two sets, the first being primary activities (vertical) which are directly involved in the transformation of products or provisioning of services.

Primary activities in Ceber's value chain directly contribute to the creation and delivery of its ride-sharing service. Options (a), (b) and (d) are support activities that facilitate the smooth operation of the business but are not directly involved in the core service of transporting passengers. Option (c), Vehicle Maintenance and Inspection, is crucial as it ensures the quality and safety of the vehicles used in providing the ride-sharing service, thereby directly impacting service delivery and customer satisfaction.

CASE SCENARIO 32

Fresh Milk Enterprises (FME) stands as a distinguished leader in the dairy industry, renowned for its unwavering commitment to delivering exceptional quality dairy products sourced directly from trusted farms. With a steadfast focus on providing premium milk that embodies freshness and purity, FME has garnered a robust reputation among health-conscious consumers and discerning gourmet chefs alike.

At the core of FME's success are several components that have underpinned its market leadership:

1. Quality: Central to FME's ethos is an uncompromising dedication to quality. Each product undergoes rigorous scrutiny to ensure it meets the highest standards of freshness, purity, and nutritional integrity.
2. Customer Satisfaction: FME prides itself on consistently meeting the stringent expectations of its diverse clientele. Whether it's health-conscious consumers seeking nutritious options or gourmet chefs demanding impeccable taste and consistency, FME's products are tailored to satisfy even the most discerning palates.
3. Supply Chain Efficiency: By maintaining direct relationships with reliable farms, FME ensures a seamless supply chain that prioritizes freshness and quality control at every stage. This direct sourcing approach not only guarantees the traceability of ingredients but also reinforces FME's ability to respond swiftly to market demands while upholding its stringent quality standards.
4. Brand Reputation: Synonymous with excellence, FME's brand is a hallmark of premium quality and reliability in the dairy industry. Upholding this esteemed reputation requires continuous vigilance and adherence to stringent quality assurance protocols, thereby reinforcing consumer confidence and loyalty.
5. Innovation: Committed to continual improvement, FME embraces innovation across its operations, from state-of-the-art packaging

solutions that preserve freshness to efficient distribution channels that ensure timely delivery.

Recently, FME has encountered market pressures to reduce prices in order to compete more aggressively and increase market share. Management is considering the implications of this decision on their overall corporate strategy.

The Management has predicted following variances if the decision to lower prices is undertaken:

Variance Type	Amount (Favourable /Adverse)
Sales Volume Variance	15,000 (F)
Sales Mix Variance	7,500 (A)
Direct Material Price Variance	9,200 (F)
Direct Labor Rate Variance	6,800 (A)
Variable Overhead Efficiency Variance	4,300 (F)

Based on above, the Management will take a decision whether to reduce the prices or not.

MULTIPLE CHOICE QUESTIONS

1. What is the primary Critical Success Factor for Fresh Milk Enterprises (FME)?
   (a) Price competitiveness
   (b) Supply chain efficiency
   (c) Quality
   (d) Customer base expansion
2. Why might FME face pressures to lower prices despite its focus on quality?
   (a) To attract high-end restaurants
   (b) To increase profitability

(c) To meet customer demand for variety

(d) To expand into price-sensitive markets

3. The Sales Mix Variance for Fresh Milk Enterprises (FME) is 7,500 (A). What does this variance signify?

(a) FME sold more products than anticipated, leading to higher overall revenue.

(b) There was a shift in the proportion of product sales compared to the budgeted mix, resulting in lower revenue than expected.

(c) Operating costs related to sales activities exceeded budgeted amounts.

(d) The efficiency of variable overhead costs improved due to enhanced production methods.

4. The Direct Labor Rate Variance for FME is 6,800 (A). What does this variance primarily indicate?

(a) FME experienced higher-than-expected labour costs per unit of production.

(b) There was an increase in labour efficiency, resulting in lower overall labour costs.

(c) The actual number of labour hours used exceeded the budgeted amount.

(d) Direct labour costs were lower due to reduced overtime expenses.

5. The Variable Overhead Efficiency Variance for FME is 4,300 (F). What does this variance suggest about FME's operations?

(a) FME incurred higher-than-expected variable overhead costs due to increased production.

(b) There was an improvement in the efficiency of using variable overhead resources compared to the standard.

(c) Variable overhead costs were exactly as budgeted, with no deviations.

(d) FME's variable overhead costs were lower due to renegotiated supplier contracts.

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (c): Quality

Reason

FME's reputation and success are built on providing premium quality dairy products. This factor is critical as it distinguishes FME from competitors and attracts health-conscious consumers and gourmet chefs who prioritize freshness and purity. All the others are secondary.

2. Option (d): To expand into price-sensitive markets

Reason

FME may face competitive pressures to enter new market segments that prioritize lower prices over premium quality. This strategy aims to capture market share from more price-sensitive consumers and increase overall sales volume.

3. Option (b): There was a shift in the proportion of product sales compared to the budgeted mix, resulting in lower revenue than expected.

Reason

Sales Mix Variance indicates how changes in the proportion of products sold (compared to the budgeted mix) impact overall revenue. A negative (adverse) variance suggests that the actual mix led to lower revenue compared to what was budgeted.

4. Option (a): FME experienced higher-than-expected labour costs per unit of production.

Reason

Direct Labor Rate Variance reflects the difference between the actual labour rate paid per hour and the standard rate. An adverse variance indicates that the actual rate was higher than the standard rate, leading to increased labour costs per unit of production.

5. Option (b): There was an improvement in the efficiency of using variable overhead resources compared to the standard.

Reason

Variable Overhead Efficiency Variance measures how efficiently FME utilized variable overhead resources compared to the standard. A favorable (positive) variance indicates that the actual usage was more efficient than expected, leading to lower variable overhead costs.

CASE SCENARIO 33

Akanksha Foundation is a non-profit organization dedicated to transforming the lives of children from low-income communities in India through education. They operate from a strategic location where big business hubs are situated. Established with the mission to provide quality education, Akanksha operates schools and centers that cater to underserved children, focusing on academic excellence, character development, and holistic growth. The foundation believes in nurturing talent and empowering children to reach their full potential, equipping them with the skills and opportunities needed to break the cycle of poverty. Through innovative educational initiatives and partnerships, Akanksha Foundation strives to create positive, sustainable change in the lives of students and their communities.

The government's policies, funding allocations, and support for education initiatives directly impact the foundation's ability to achieve its mission. The state or government's commitment includes not only financial support but also regulatory frameworks that affect educational standards, curriculum approvals, and operational permissions for educational institutions. Akanksha Foundation secures funding from both local and international sources consistently each year. The donor base remains largely stable over time, providing a reliable stream of financial support. To ensure accountability and transparency towards their contributors, Akanksha Foundation measures its performance to demonstrate the effective use of funds. Akanksha Foundation measures the performance as under:

- They assess the percentage of students who demonstrate improved academic performance and character development after participating in their programs.
- They analyze the cost-effectiveness of their initiatives, such as calculating the cost per student educated or per program implemented. By leveraging technology and innovative teaching methods, Akanksha maximizes the impact of every rupee spent, ensuring that resources are used efficiently to deliver high-quality education to a large number of students.

- They negotiate favorable terms with suppliers for educational materials and services. They also collaborate with local communities and businesses to access discounted or donated resources, minimizing operational costs while expanding their educational reach.

However, the Management of Akanksha Foundation wants your guidance as to how to analyse and accordingly implement the necessary action points after understanding the outcome of above performance measures.

MULTIPLE CHOICE QUESTIONS

1. Which of the following performance measures would be most appropriate for the Akanksha Foundation to utilize?
   (a) Financial Statements
   (b) Internal Communications
   (c) Staff Turnover Rate
   (d) Board Meeting Frequency
2. The performance of not-for-profit organizations like Akanksha Foundation largely depends on what factor?
   (a) The commitment of donors
   (b) The commitment of the state (or government)
   (c) The international support
   (d) The location of operations
3. Which model has Akanksha Foundation used to measure the performance?
   (a) Value for Money Framework
   (b) Adapted Balanced Scorecard
   (c) Theory of Change
   (d) Outcome Mapping

4. The outcome of the performance measurement by Akanksha Foundation is called as _____.

   (a) Performance Report

   (b) Impact Assessment

   (c) Results Evaluation

   (d) Effectiveness Analysis

5. What action does the person who receives the above outcome of the performance measurement should undertake?

   (a) To take action in case of unfavourable variance.

   (b) To take action in case of both favourable and unfavourable variance.

   (c) Share the results with stakeholders

   (d) Publish the findings in academic journals

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): Financial Statements

Reason

Financial statements are crucial for NPOs to demonstrate fiscal responsibility and transparency. They provide detailed information on how funds are utilized, ensuring accountability towards contributors.

Internal communications [Option (b)] are important but primarily focus on organizational efficiency rather than directly demonstrating the use of funds. Staff turnover rate [Option (c)] and board meeting frequency [Option (d)] are indicators of organizational health and governance but do not directly measure the use of funds for the stated purpose. Therefore, financial statements are the most appropriate measure to ensure contributors' confidence.

2. Option (b): The commitment of the state (or government)

Reason

The performance of not-for-profit organizations is significantly affected by the commitment and performance of the state or government in similar sectors. (Specifically in food security, education and health)

3. Option (a): Value for Money Framework

Reason

Akanksha Foundation used VFM Framework to measure the performance. VFM framework can be used for measurement of performance in the not-for-profit sector because Not-for-profit organisations are expected to provide the best possible value from available money (usually limited). VFM framework ensures–

- Effectiveness (spend wisely) (an output measure, the goal approach) whether the organisation has achieved its desired mission and objectives?
- Efficiency (spend well) (a link between input and output factor, as a process approach) → Whether the resources and funds available to the organisation have been efficiently utilised i.e., maximum output has been obtained with minimum input?
- Economy (spend less) (as an input measure, the resource approach) Whether the appropriate quantity and quality of inputs are available at the lowest cost?

4. Option (a): Performance Report

Reason

A performance report is a document that addresses the outcome of an activity or the work of an individual.

5. Option (a): To take action in case of unfavourable variance

Reason

The recipient of a performance report is expected to take action when there is an unfavourable variance.

CASE SCENARIO 34

Vinotech Inc. (hereinafter referred to as "the company") is renowned for its high-quality wines and operates vineyards across several regions. Seeking to strengthen its supply chain efficiencies and ensure consistent product quality, Vinotech Inc. acquired wines stores located in prime grape-growing regions, thus controlling the entire process.

Vinotech Inc. has acquired vineyards of competitors, ensuring a consistent and quality grape supply for its winemaking operations, thereby enhancing control over its production process and supply chain. Vinotech partnered with luxury food company to offer exclusive wine and food pairing experiences, diversifying its business into related industries and integrated marketing, sales, and production departments to streamline operations and improve collaboration.

The company aims to ensure efficient resource utilization and optimize operational performance. The company understands that minimizing waste throughout the production process is essential for maximizing efficiency and profitability. By identifying areas where waste occurs, such as in raw materials, labor, or energy usage, the company can implement strategies to mitigate these losses. Additionally, reducing production costs without compromising on quality enables Vinotech Inc. to remain competitive in the market while meeting consumer demands.

While competitive analysis is essential for Vinotech Inc.'s strategic positioning, it diverges from direct engagement in operational tactics. Instead, Vinotech primarily relies on tools like value analysis, sustainable farming practices, and target costing to refine its production processes and ensure optimal resource utilization. These methods contribute to Vinotech's commitment to excellence and efficiency in its operations, aligning with its overarching goals for quality and sustainability.

The company aims to maintain profitability by employing advanced agricultural techniques to optimize vineyard conditions, ensuring abundant grape harvests, leveraging digital platforms and innovative marketing strategies, by diversifying its distribution channels, reaching a broader audience of wine enthusiasts

worldwide. Vinotech Inc. meticulously crafts its wines, allowing them to mature in carefully selected barrels, imparting complex flavors and aromas.

Within Vinotech Inc., effective delegation of authority and accountability for costs is fundamental. This practice ensures that managers take ownership of cost centers, fostering a culture of responsibility and enabling efficient cost management throughout the organization's operations.

By investing in state-of-the-art aging facilities and employing skilled enologists, Vinotech Inc. ensures that each wine undergoes a meticulous aging process, resulting in exceptional quality and character.

The company recognizes the pivotal role of customer satisfaction in sustaining long-term success. The company endeavors to discern customer preferences and allocate resources efficiently to meet or exceed expectations. In order to achieve the same, the company is seeking some advice from a professional consultant as to which of the following action points needs to be implemented as per Kano's model:

- Introduce new varieties of products.
- Attending to customer complaints and gathering data from the same can lead to innovation.
- Improving every aspect of a product will lead to improved customer satisfaction outcomes.
- To innovate because customers switching costs are low.

The company is already implementing following action plans since last 2 years:

- Launching expensive marketing campaigns.
- Setting ambitious sales targets.
- Investing in high-end packaging materials.

MULTIPLE CHOICE QUESTIONS

1. Which of the following is the best example of forward vertical integration?
   (a) The company acquiring other vineyards of competitors
   (b) The company selling wines to its wine stores

(c) The company partners with luxury food company to offer exclusive wine and food pairing experiences, diversifying its business into related industries.

(d) The company integrates marketing, sales, and production departments to streamline operations and improve collaboration.

2. Which of the following describes the underlying idea behind Kano's model?

(a) Customer satisfaction decays over time so companies must continually release new products

(b) Customer complaints are a source of data that often results in companies delivering innovation

(c) Improving every aspect of a product doesn't necessarily lead to improved customer satisfaction outcomes

(d) The only action that will improve the bottom line is innovation because customers switching costs are low

3. According to you, which of the action points mentioned below signifies cost control undertaken by Vinotech Inc.?

(a) Maximizing grape yields

(b) Minimizing waste and reducing production costs

(c) Expanding distribution channels

(d) Enhancing wine quality through aging processes

4. Which tool or technique is NOT commonly associated with cost reduction efforts at Vinotech Inc.?

(a) Value Analysis

(b) Implementing sustainable farming practices

(c) Target Costing

(d) Competitive Analysis

5. Which of the following is a prerequisite for effective cost control within Vinotech Inc. according to industry standards?

   (a) Launching expensive marketing campaigns

   (b) Setting ambitious sales targets

   (c) Delegating authority and assigning responsibility for costs

   (d) Investing in high-end packaging materials

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): The company selling wines to its wine stores

Reason

The company selling wines to its wine stores - This is an example of forward vertical integration, as it involves expanding into the distribution and retail stage.

2. Option (c) - Improving every aspect of a product doesn't necessarily lead to improved customer satisfaction outcomes

Reason

Option (c) is correct because Kano was challenging the notion that if you improve all the key attributes of a product, it will lead to improved customer satisfaction outcomes.

Option (a) is incorrect because customer satisfaction may decay over time, but this is not the point of Kano's observations.

Option (b) is incorrect because customer complaints are not a key factor for delivering innovation.

Option (d) is incorrect because innovation is not always the answer to an improvement in the bottom line - it is one option an organisation can consider.

3. Option (b): Minimizing waste and reducing production costs

Reason

Cost control would primarily focus on minimizing waste and reducing production costs to improve profitability while maintaining quality standards. This ensures efficient resource utilization and optimal operational performance.

4. Option (d): Competitive Analysis

Reason

While competitive analysis is important for strategic decision-making, it is not directly associated with cost reduction efforts. Tools like value analysis, target costing, and implementing sustainable farming practices are more commonly used by company to reduce production costs and improve efficiency. Cost Control does competitive analysis of actual results with established standards.

5. Option (c): Delegating authority and assigning responsibility for costs

Reason

Effective delegation of authority and assigning responsibility for costs ensures accountability. This allows managers to take ownership of cost centers and work towards achieving cost control objectives, ensuring that costs are managed effectively at all levels of the organization.

CASE SCENARIO 35

In 2021, Clod Drinks introduced a pioneering protein drink product into the Australian market, achieving remarkable success characterized by robust sales and a dominant market position. During this period, the company operated in an environment marked by minimal competition and a conspicuous absence of substitute products. The Clod Drinks team spent heavily on marketing and advertising and product development to grow their market share.

In 2023, they noticed competitors for protein drink entering the market and eating into their market share. This influx of competitors, along with the emergence of alternative products, notably impacted Clod Drinks' profitability, underscoring the influence of competitive pressures. The role of suppliers became increasingly significant in sustaining their operations and maintaining competitiveness. Suppliers play a crucial role in providing the necessary raw materials and ingredients for Clod Drinks' protein drink production. However, with the influx of rival companies into the market and the emergence of alternative products, Clod Drinks may face challenges related to supplier power. As Clod Drinks faces intensified competition, the demand for raw materials may fluctuate, potentially leading to smaller quantities being purchased. This scenario could bolster the bargaining power of suppliers, enabling them to negotiate more favourable terms or impose higher prices on Clod Drinks.

Moreover, suppliers with limited alternatives may capitalize on their position to exert greater influence during negotiations, especially considering Clod Drinks' reliance on their input for production. Therefore, effectively managing supplier relationships becomes crucial for Clod Drinks to ensure a stable supply chain, mitigate risks associated with changing market dynamics, and sustain competitiveness amidst heightened competition.

In response to the heightened competition and fluctuating market dynamics, Clod Drinks could conduct scenario analysis to anticipate various outcomes and devise strategic responses. By simulating different scenarios, such as changes in market share, pricing strategies, or supplier negotiations, Clod Drinks can proactively identify risks and opportunities to maintain competitiveness and ensure a resilient supply chain. Scenario analysis enables Clod Drinks to make

informed decisions, adapt quickly to evolving market conditions, and safeguard their market position in the face of intensified competition.

Specialized protein isolates, like pea, soy protein, have experienced price fluctuations due to weather conditions affecting crop yields. Droughts, floods, or other extreme weather events disrupted production, leading to increased costs and potential shortages in the market. The price of protein isolates has fallen dramatically in the last few years from over US$15/kg to less than US$7/kg.

Clod Drinks is dedicated to empowering individuals to live more vibrant lives through our science-driven approach to chilled beverages. Clod Drinks website states "Our aim is to help people do more, feel better, and live longer".

MULTIPLE CHOICE QUESTIONS

1. Which of the following should the Clod team have done to combat this threat?

   (a) Raised barriers to entry by threatening legal action against competitors

   (b) Immediately taken out a patent on their process for making protein drink

   (c) Trademark the Clod name and continue to leverage their first mover advantage

   (d) Seek copyright protection for the creation of the Clod protein drink to prevent copies

2. Which of the following statements most accurately captures the relationship between industry profitability in Clod Drinks and Porter's Five Forces model?

   (a) The higher the threat of new entrants, the higher industry profitability is likely to be

   (b) Industry profitability is likely to be lowest when the threat of substitutes is declining

(c) Moderate buyer power and moderate level of rivalry is likely to increase industry profitability

(d) Low levels of rivalry and low supplier power are likely to be associated with higher industry profitability.

3. Which of the following statements about supplier power in Clod Drinks is most likely to be correct?

(a) The higher the threat by suppliers to forward integrate, the lower their power relative to industry rivals.

(b) The smaller the quantities of supplies purchased by companies in the industry, the higher the supplier power.

(c) The higher the number of suppliers, the more power suppliers will have in negotiating prices with companies in the industry.

(d) The higher the importance of the suppliers' input to industry rivals, the more power industry rivals have in negotiating with suppliers.

4. The sharp price fall in the prices of protein isolates has been affected ***most*** by which of the following external factors?

(a) Social

(b) Political

(c) Economic

(d) Environmental

5. Which of the following strategic components best summarises Clod Drinks aim as stated on its website?

(a) Vision

(b) Goals

(c) Values

(d) Mission

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (c): Trademark the Clod name and continue to leverage their first mover advantage

Reason

This is the only option they can reasonably take. Competitors have already entered the market, so they would trademark their name and use their brand strength to grow their market. Trademarks don't protect products from being copied. All the other options are not valid given the question information.

Option (a) is incorrect because they have no basis on which to take legal action.

Option (b) is incorrect because the company would need to do this before competitors come into the market with a similar product. It is too late to attempt to get a patent, which can take years, to protect market share that is already reducing. There is also no evidence they have a process that is unique and could be patented.

Option (d) is incorrect because company can't copyright a process. Copyright is for artistic creations which would not cover a protein drink.

2. Option (d) - Low levels of rivalry and low supplier power are likely to be associated with higher industry profitability

Reason

Industry profitability is likely to be the highest when the power of each of the five forces is low. A low level of rivalry suggests that competitors in the industry do not have to compete away profits in order to attract buyers. Similarly, low supplier power suggests that organisations in the industry are not forced to pay high prices for their purchases. Both features are positive for industry profitability.

Option (a) is incorrect because the threat of new entrants and industry profitability are usually inversely related— that is, the higher the threat the lower the profitability. Note that in a fast-growing industry new entrants often don’t reduce industry profitability at that stage of the

industry life cycle. However, as the industry moves towards maturity, profit margins erode.

Option (b) is incorrect because lower threat of substitutes would give rise to high industry profitability. If there are fewer substitutes to the industry's product there are low alternatives for buyers to purchase and reduced pressure on profitability.

Option (c) is incorrect because only low buyer power and industry rivalry would give rise to higher industry profitability. Moderate levels of these forces would give rise to moderate levels of profitability only.

3. Option (b): The smaller the quantities of supplies purchased by companies in the industry, the higher the supplier power

Reason

If the companies in an industry purchase a low volume of products from suppliers, the industry is relatively unimportant to the suppliers, and companies in the industry are not in a position to bargain down the prices paid for these supplies.

Option (a) is incorrect because the ability for suppliers to forward integrate increases their power relative to the industry.

Option (c) is incorrect because the more suppliers that exist, the more likely industry rivals will hold the negotiating power by having a wider range of supplier choice.

Option (d) is incorrect because the higher the importance of the suppliers' input to industry rivals, the less power industry rivals have in negotiating with suppliers.

4. Option (c): Economic

Reason

These are commodities and are therefore heavily influenced by the market they are traded in and therefore the economic conditions in the countries of buyers and sellers.

Option (a) is incorrect as social norms have little impact on this industry.

Option (b) is incorrect although countries can have a political influence with policy changes, they are not as strong as the economic influences on this market.

Option (d) is incorrect because although the environmental impact is increasing and causing some policy changes this influence is much smaller than the economic one.

5. Option (d): Mission

Reason

The company stated their fundamental purpose, or why they exist (to help people do more, feel better and live longer). This form what is known as the mission.

Option (a) is incorrect because the vision describes what an organisation wishes to achieve—it is not a description of its ideal future state.

Option (b) is incorrect because goals set the desired achievement outcomes for the organisation.

Option (d) is incorrect because values support the mission by guiding behaviour.

CASE SCENARIO 36

In the competitive world of premium watches, Japanese Bugatsune World (BW) located in Northen Japan stands out as a hallmark of quality and tradition. BW is 80% owned by KKR, a private equity fund who is known across the world for strategic investments and involved in the business decisions of their investments.

BW exports its premium watches to select markets worldwide. However, with competitors from countries like Australia gaining traction, BW is determined to expand its market reach while safeguarding its intellectual property. Recognizing the need for strategic expansion, BW explores franchising options in Australia also they were exploring joint venture with a local distribution company in Asia as a potential business model. In the case of BW, an important factor for success in Asia and Australia is its ability to adapt its products and strategies to the preferences and trends of different target markets. This involves understanding the cultural, social, and economic dynamics of each market and tailoring offerings accordingly. To measure BW's effectiveness in this aspect, they can track the rate at which it successfully enters and establishes a presence in new markets. This can be quantified by monitoring the number of new markets penetrated within a given time period and observing the corresponding increase in sales and brand visibility in those markets. Due to their weak financial position, BW is reluctant to incur significant debt. Additionally, BW needs to identify its core competencies to effectively capitalize on its strengths and gain a competitive advantage. With this understanding, BW should assess its core competencies in terms of their relevance and breadth of application. By focusing on core competencies that align with its strategic goals, BW can enhance its market position and successfully expand into new markets while protecting its intellectual property.

MULTIPLE CHOICE QUESTIONS

1. Which of the following advantages mentioned above is true in case of a franchising business model?

   (a) Distributing profits and sharing costs and resources.

(b) Providing your branding and intellectual property to others.

(c) Using a standardised operating model across the business.

(d) Moving part of your operations offshore to deliver lower costs to the business.

2. Considering modes of entry to new markets, which of the following would you recommend for Japanese BW?

(a) Continue to export and approach new markets with low prices and high volumes with the aim to capture market share quickly

(b) Form a joint venture with a target market distribution company who sells the product but is not involved in any other operations

(c) Make the investment in a wholly owned operation with extensive marketing and promotion to grow customer awareness and sales

(d) License their production processes with contracts including high damages payments if intellectual property conditions are breached

3. KKR, a private equity fund has both high interest and power over BW's strategy, which of the following techniques would you use to interact with them?

(a) Keep them both updated on any strategic changes and empowered to steer the direction of change

(b) Keep these stakeholders satisfied.

(c) Keep these stakeholders informed

(d) Spend time to manage the expectations of this stakeholder group even if doesn't coincide with the company's goals.

4. Which of the following is a Key Success Factor (CSF) relevant to BW's expansion into new markets?

(a) Product Quality

(b) Intellectual Property Protection

(c) Market Adaptability

(d) Brand Reputation

5. Which of the following statements best describes a core competency for BW?

   (a) A core competency is any skill or capability that a company possesses

   (b) A core competency is a unique proposition that provides value to customers and is easy for competitors to copy

   (c) A core competency is a skill or capability that strongly influences customers to choose a company's product or service, is difficult to imitate, and opens up potential markets for growth

   (d) A core competency is a broad set of skills possessed by a company, regardless of their relevance to the market

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (c): Using a standardised operating model across the business

Reason

Using a standardised operating model across the business is characteristics of franchise operation.

Option (a) is incorrect because this is a characteristic of a joint venture model.

Option (b) is incorrect because this is a characteristic of a licensing model.

Option (d) is incorrect because this is a characteristic of offshoring.

2. Option (b): Form a joint venture with a target market distribution company who sells the product but is not involved in any other operations

Reason

Option (b) is correct because a joint venture enables them to achieve more market penetration than they have now. A local partner could assist them in selling the product and growing the customer base. By limiting the partner to those functions, they hope to limit the technology leakage.

Option (a) is incorrect because continuing to export is not going to increase their market penetration enough. Lowering prices might assist

(noting that gross margins will decline); however, option (b) is likely to be more successful.

Option (c) is incorrect because the question states they have some capital but are not willing to take on significant debt. Wholly owned operations are likely the most expensive option for market entry which means they are unlikely to pursue this option.

Option (d) is incorrect because licensing has one of the highest risks for technology leakage and would be a risky option to undertake.

3. Option (a): Keep them both updated on any strategic changes and empowered to steer the direction of change

Reason

These will be considered key stakeholders, and a business will need to actively engage this group. This group is likely to have a significant influence; they may be the driver behind the change or strategy. They will likely have the power to stop the change or strategy from going ahead if they are unhappy. This is the group that requires most focus. Keep them both updated on any strategic changes and empowered to steer the direction of change (or at least feel that they have the opportunity to input into the direction of the project).

4. Option (c): Market Adaptability

Reason

Market Adaptability refers to the ability to adjust products and strategies according to the preferences and trends of different target markets. While product quality, intellectual property protection, and brand reputation are important factors, in the context of expanding into new markets, the ability to adapt to the nuances of each market is crucial for success.

5. Option (c): A core competency is a skill or capability that strongly influences customers to choose a company's product or service, is difficult to imitate, and opens up potential markets for growth

Reason

According to the provided information, a core competency must meet three parameters: relevance to customers, difficulty of imitation, and breadth of application. Therefore, option (C) best describes a core competency as it encompasses all three parameters.

CASE SCENARIO 37

In a bustling city, LuxeMart executives wrestled with their performance management system. LuxeMart had a framework of responsibility among managers, clear organizational objectives, periodic performance reviews and enhancing customer satisfaction.

Despite improving operational metrics, financial performance stagnated. CEO Mr. Johnson queried steps to bridge this gap during a boardroom discussion, emphasizing customer satisfaction as crucial for growth. Therefore, maintaining high levels of customer satisfaction was identified as crucial for LuxeMart's continued growth and financial success. LuxeMart measures satisfaction through metrics like NPS, Customer Retention Rate, Repeat Purchase Rate etc.

Luxemart has broken the customer service into following 10 tasks:

1. Greeting Customers

   - Establish a Welcoming Environment: Ensure the physical space is inviting with clear signage and a clean, organized layout.
   - Train Employees on Greeting Standards: Develop specific guidelines for greeting customers, including tone of voice, body language, and timing.
   - Acknowledge Every Customer Promptly: Instruct employees to greet customers as soon as they enter the store, ideally within a few seconds.
   - Personalize Greetings: Encourage employees to personalize greetings based on cues such as customer demeanor or familiarity.
   - Use Professional Language: Provide examples of professional language that employees can use to greet customers respectfully.
   - Offer Assistance: Train employees to offer assistance immediately after greeting, indicating availability to help with product selection or inquiries.

- Smile and Maintain Eye Contact: Emphasize the importance of non-verbal communication, such as smiling and making eye contact during greetings.
- Monitor and Provide Feedback: Implement a system to monitor greetings and provide constructive feedback to employees for improvement.
- Encourage Consistency Across Shifts: Ensure all employees, regardless of shift or location, adhere to the same greeting standards.
- Empower Employees to Enhance Customer Experience: Teach employees how to adapt greetings based on customer feedback or special circumstances, demonstrating flexibility and empathy.

Out of the above smaller tasks, Luxemart finalised Train Employees on Greeting Standards, Personalize Greetings, Use Professional Language, Smile and Maintain Eye Contact and Empower Employees to Enhance Customer Experience.

2. Assisting with Product Selection
3. Handling Inquiries and Requests
4. Processing Transactions
5. Resolving Issues and Complaints
6. Facilitating Returns and Exchanges
7. Promoting Loyalty Programs and Upselling
8. Maintaining Store Appearance and Cleanliness
9. Continued Training and Development

Similar to greeting customers, all the above tasks were also broken down into smaller tasks and the most efficient method was selected.

During the board meeting, LuxeMart discussed venturing into virtual retail and optimizing online platforms. The company prioritizes skilled personnel and a supportive work environment to foster employee engagement and maximize organizational performance.

MULTIPLE CHOICE QUESTIONS

1. Which of the following is NOT a component of Performance Management?
   (a) Establishing responsibility centres
   (b) Setting organizational objectives
   (c) Reviewing performance periodically
   (d) Enhancing total productive maintenance
2. According to Robert S. Kaplan and David P. Norton, what should executives do if improved operational performance doesn't lead to improved financial performance?
   (a) Ignore the operational metrics
   (b) Change the financial reporting standards
   (c) Rethink the company's strategy or implementation plans
   (d) Fire the operational team
3. Which of the following is the Critical Success Factor (CSF) for LuxeMart?
   (a) Customer Retention rate
   (b) Repeat Purchase Rate
   (c) Average Order Value
   (d) Customer Satisfaction
4. What is the name of the process applied by Luxemart in addressing the task of greeting customers?
   (a) McDonaldization
   (b) Change Management
   (c) Performance Management
   (d) Gap analysis

5. Luxemart is following _____ type of control by ensuring that every job in their organisation is given to a person with appropriate skills and a conducive environment is provided to all the employees.

   (a) Behavioural Control

   (b) Personnel and Cultural Control

   (c) Reporting Control

   (d) Soft Control

6. According to you, the virtual organisation on which the Board intends to brainstorm will be _____structure.

   (a) simple business

   (b) complex business

   (c) Hybrid business

   (d) Multi business

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (d): Enhancing total productive maintenance

Reason

Performance Management is considered as key aspect of management accounting, which deals with–

- Determining an appropriate organisation's structure, level of decentralisation, etc.
- Establishing a responsibility centre and assigning responsibility to the manager.
- Establishing a performance measurement system and fixing the yardsticks.
- Reviewing the performance periodically and taking corrective measures where performance is not acceptable.

Total productive maintenance, is a lean technique.

2. Option (c): Rethink the company's strategy or implementation plans

Reason

Robert S. Kaplan and David P. Norton, in 1992 suggested the balanced scorecard that can translate a company's strategy into specific, measurable objectives. Further, both authors also suggested that "a failure to convert improved operational performance, as measured in the scorecard, into improved financial performance should send executives back to their drawing boards to rethink the company's strategy or its implementation plans".

3. Option (d): Customer Satisfaction

Reason

Critical Success Factors (CSF) are specific elements or action areas a business, team, or department must focus on and successfully implement to reach its strategic objectives.

Customer satisfaction is critical for LuxeMart's success as it influences repeat business and brand reputation, directly impacting financial growth.

4. Option (a): McDonaldization

Reason

McDonaldization – Breaking tasks into smallest possible units and rationalising them to find the single most efficient method for completing each task. All other tasks are discarded. standards can be more accurately set and assessed.

Thus, Luxemart used the process of McDonaldization by breaking down tasks into small possible units and then selecting the most efficient method.

5. Option (b): Personnel and Cultural Control

Reason

Management control systems have an important role to play in developing accountability, and in turn, accountability leads to better performance. There are three broad categories of control mechanism which any business can use-

Behavioural Control – to ensure only desired actions take place.

Personnel and Cultural Control – for every job, a person with appropriate skills and a conducive environment is provided.

Thus, Luxemart is following Personnel and Cultural Control by ensuring that every job in their organisation is given to a person with appropriate skills and a conducive environment is provided to all the employees.

6. Option (b): Complex business

Reason

A virtual organisation is also considered as a complex business structure. A virtual organisation that works on the Assets Lite Model which means there are little or no physical premises but where employees and managers work remotely (typically from their own location) and are connected using IT.

CASE SCENARIO 38

'Xu' and 'Yu' are two divisions of the Shenzhen group. The 'Xu' division manufactures electrical components which it sells to other divisions and external customers.

The 'Yu' division has designed a new product, Product B, and has asked 'Xu' to supply the electrical component, Component A, that is needed in the new product. This will be a completely new style of component. Each unit of Product B will require one Component A. This component will not be sold by 'Xu' to external customers. 'Xu' has quoted a transfer price to 'Yu' of ₹ 180 for each unit of Component A.

It is the policy of the Shenzhen group to reward managers based on their individual division's return on capital employed.

Details of the monthly production for each division are as follows:

'Xu' Division

Output	**Component A will be produced in batches of 1,000 units. The maximum capacity is 6,000 components per month.**
Variable Cost	₹ 60 per component
Fixed Costs	₹ 2,00,000 (these are incurred specifically to produce Component A)

'Yu' Division

Output	**Product B will be produced in batches of 1,000 units. The maximum customer demand is 24,000 units of Product B per month.**
Variable Cost	₹ 36 per unit the cost of Component A
Fixed Costs	₹ 3,00,000 (these are incurred specifically to produce Component B)

The relationship between monthly customer demand and the selling price of Product B is shown below:

Demand	Selling Price per unit (₹)
1,000 units	480
2,000 units	440
3,000 units	400
4,000 units	360
5,000 units	320
6,000 units	268

MULTIPLE CHOICE QUESTIONS

1. At a transfer price of ₹ 180 per Component A, how many units of Product B will the 'Yu' division produce to maximize its profit?

   (a) 6,000 units

   (b) 4,000 units

   (c) 8,000 units

   (d) 5,000 units

2. What is the profit for the 'Xu' division when 4,000 units of Component A are sold to the 'Yu' division?

   (a) ₹ 2,80,000

   (b) ₹ 2,76,000

   (c) ₹ 5,56,000

   (d) ₹ 3,76,000

3. What is the maximum monthly profit for the Shenzhen group based on the total marginal costs of the divisions?

   (a) ₹ 11,20,000

   (b) ₹ 11,56,000

   (c) ₹ 6,20,000

   (d) ₹ 9,99,000

4. What is the selling price per unit of Product B when the maximum output is produced for the highest profit?

(a) ₹ 400

(b) ₹ 360

(c) ₹ 320

(d) ₹ 440

ANSWER TO MULTIPLE CHOICE QUESTION

1. Option (b): 4,000 units

Reason

Based on a transfer price of ₹ 180 per component, the total variable cost per unit of Product B will be ₹ 216.

Demand	Selling Price (₹)	Variable Cost (₹)	Contribution (₹)	Total Contribution (₹'000)
1,000 units	480	216	264	264
2,000 units	440	216	224	448
3,000 units	400	216	184	552
4,000 units	360	216	144	576
5,000 units	320	216	104	520
6,000 units	268	216	52	312

'Yu' will produce 4,000 units of Product B and will therefore order 4,000 of Component A from 'Xu'.

2. Option (a): ₹ 2,80,000

Reason

Particulars	Xu (₹'000)	Yu (₹'000)	Group (₹'000)
Revenue	720	1,440	1,440
Less: Variable Costs	240	864	384
Less: Fixed Costs	200	300	500
Profit	280	276	556

3. Option (c): ₹ 6,20,000

Reason

Using the total marginal costs of the divisions: Variable cost per Product B is ₹ 96.

Demand	Selling Price (₹)	Variable Cost (₹)	Contribution (₹)	Total Contribution (₹'000)
1,000 units	480	96	384	384
2,000 units	440	96	344	688
3,000 units	400	96	304	912
4,000 units	360	96	264	1,056
5,000 units	320	96	224	1,120
6,000 units	268	96	172	1,032

The profit maximising output is 5,000 units of Product B. This will earn a total monthly profit for the Shenzhen Group of ₹ 6,20,000 (₹11,20,000 - ₹ 5,00,000).

4. Option (c): ₹ 320

Reason

Demand	Selling Price (₹)	Variable Cost (₹)	Contribution (₹)	Total Contribution(₹'000)
1,000 units	480	96	384	384
2,000 units	440	96	344	688
3,000 units	400	96	304	912
4,000 units	360	96	264	1,056
5,000 units	320	96	224	1,120
6,000 units	268	96	172	1,032

CASE SCENARIO 39

Oxford Medical Care Co. (OMCC) is a pharmaceutical firm, operating its entire business through its four customers Ox_1, Ox_2, Ox_3, and Ox_4. Ox_1 and Ox_2 are small pharmaceutical stores while Ox_3 and Ox_4 are large discount stores with attached pharmacies. OMCC uses discount pricing strategy and prices its products at variable cost plus 25%.

Item	Small Pharmaceuticals		Large Pharmaceuticals		Activity Rate
	Ox_1	Ox_2	Ox_3	Ox_4	
Number of Orders	4	9	6	3	₹750
Order Size	₹40,000	₹20,000	₹4,25,000	₹4,00,000	n/a
Average Discount	4.50%	9.50%	17.50%	11.50%	n/a
Regular Deliveries	4	9	6	3	₹375
Expedited Deliveries	2	0	2	0	₹1,250
General Administration Cost	₹20,250		₹48,375		

MULTIPLE CHOICE QUESTIONS

1. What is the total customer profit for large pharmaceuticals (Ox3 + Ox4)?
   (a) ₹ 63,750
   (b) ₹ 75,630
   (c) ₹ 36,550
   (d) ₹ 1,53,125
2. What is the channel profit for small pharmaceuticals?
   (a) ₹ 6,325
   (b) ₹ 5326
   (c) ₹ 88,425
   (d) ₹ 48,375

3. What is the recommendation for improving the profit from Ox2?
   (a) Increase the order size and reduce the discount
   (b) Decrease the variable costs
   (c) Increase expedited deliveries
   (d) Increase the discount and reduce the order size
4. What is the recommendation for reducing the costs for Ox1?
   (a) Increase the discount
   (b) Reduce expedited deliveries
   (c) Increase the order size
   (d) Increase the discount and reduce the order size

ANSWERS TO THE MULTIPLE CHOICE QUESTIONS

1. Option (d): ₹ 1,53,125

Reason

Particulars	Ox_1	Ox_2	Channel Total	Ox_3	Ox_4	Channel Total
	Small Stores			Large Stores		
Revenue	1,60,000	1,80,000	3,40,000	25,50,000	12,00,000	37,50,000
Discount	7,200	17,100	24,300	4,46,250	1,38,000	5,84,250
Net Revenue	1,52,800	1,62,900	3,15,700	21,03,750	10,62,000	31,65,750
Variable Costs	1,28,000	1,44,000	2,72,000	20,40,000	9,60,000	30,00,000
Contribution Margin	24,800	18,900	43,700	63,750	1,02,000	1,65,750
Order Processing	3,000	6,750	9,750	4,500	2,250	6,750
Regular Deliveries	1,500	3,375	4,875	2,250	1,125	3,375
Expedited Deliveries	2,500	---	2,500	2,500	---	2,500
Customer Profit	17,800	8,775	26,575	54,500	98,625	1,53,125
Channel Cost			20,250			48,375
Channel Profit			6,325			1,04,750

2. Option (a): ₹ 6,325

Reason

Particulars	Ox_1	Ox_2	Channel Total	Ox_3	Ox_4	Channel Total
	Small Stores			Large Stores		
Revenue	1,60,000	1,80,000	3,40,000	25,50,000	12,00,000	37,50,000
Discount	7,200	17,100	24,300	4,46,250	1,38,000	5,84,250
Net Revenue	1,52,800	1,62,900	3,15,700	21,03,750	10,62,000	31,65,750
Variable Costs	1,28,000	1,44,000	2,72,000	20,40,000	9,60,000	30,00,000
Contribution Margin	24,800	18,900	43,700	63,750	1,02,000	1,65,750
Order Processing	3,000	6,750	9,750	4,500	2,250	6,750
Regular Deliveries	1,500	3,375	4,875	2,250	1,125	3,375
Expedited Deliveries	2,500	---	2,500	2,500	---	2,500
Customer Profit	17,800	8,775	26,575	54,500	98,625	1,53,125
Channel Cost			20,250			48,375
Channel Profit			6,325			1,04,750

3. Option (a): Increase the order size and reduce the discount

Reason

Small Pharmaceuticals

Even though Ox_1 has lower sales volume (11% lesser from Ox_2), it is contributing around 67% of small store's profit as its order is for larger quantities and discount offered is very less.

OMCC is only just at breakeven point with small pharmaceuticals. To improve profit OMCC should:

- Coordinate with Ox_2 to increase order size and try to negotiate a smaller discount.
- Try to work with Ox_1 to reduce expedited deliveries.

4. Option (b): Reduce expedited deliveries

Reason

Small Pharmaceuticals

Even though Ox_1 has lower sales volume (11% lesser from Ox_2), it is contributing around 67% of small store's profit as its order is for larger quantities and discount offered is very less.

OMCC is only just at breakeven point with small pharmaceuticals. To improve profit OMCC should:

- Coordinate with Ox2 to increase order size and try to negotiate a smaller discount.
- Try to work with Ox1 to reduce expedited deliveries.

CASE SCENARIO 40

A and B are two customers of XYZ Electronics Ltd., a manufacturer of audio players. Selling price per unit is ₹ 5,400. Its cost of production per unit is ₹ 4,420.

Additional costs are:

Order Processing Cost ₹ 2,000 per order

Delivery Costs ₹ 3,500 per delivery

Details of customers A and B for the period are given below:

	Customer A	Customer B
Audio Players purchased(nos.)	350	500
No. of orders	5 (each of 70 units)	10 (each of 50 units)
No. of deliveries	5	0

The company's policy is to give a discount of 5% on the selling price on orders for 50 units or more, and to further give 8% discount on the undiscounted selling price if a customer uses his own transport of collect the order. Assume that production levels are not altered by these orders.

MULTIPLE CHOICE QUESTIONS

1. What is the net selling price per unit for Customer B after discounts?
   (a) ₹ 4,420
   (b) ₹ 4,698
   (c) ₹ 5,400
   (d) ₹ 5,020
2. What is the total profit for Customer A after additional overheads?
   (a) ₹ 1,19,000
   (b) ₹ 1,20,000
   (c) ₹ 2,21,000
   (d) ₹ 1,39,000

3. What is the profit per unit for Customer A?

   (a) ₹ 278

   (b) ₹ 207

   (c) ₹ 631

   (d) ₹ 525

4. What is the profit per unit for Customer B?

   (a) ₹ 632

   (b) ₹ 238

   (c) ₹ 271

   (d) ₹ 710

5. How much is the delivery discount per unit for Customer B?

   (a) ₹ 432

   (b) ₹ 504

   (c) ₹ 234

   (d) ₹ 405

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): ₹ 4,698

Reason

Particulars	**Customer- A**	**Customer- B**
Sales (units)	**350**	**500**
	(₹)	(₹)
Selling Price per unit	5,400	5,400
Less: Discount (Quantity)	270 (₹5,400 × 5%)	270 (₹5,400 × 5%)
Less: Discount (Delivery)	-	432 (₹5,400 × 8%)
Selling Price (Net of Discounts) per unit	5,130	4,698

2. Option (c): ₹ 2,21,000

Reason

Particulars	**Customer- A**	**Customer- B**
Sales (units)	**350**	**500**
	(₹)	(₹)
Selling Price (Net of Discounts) per unit	5,130	4,698
Less: Variable Cost per unit	4,420	4,420
Contribution per unit	710	278
Total Contribution	2,48,500 (₹710 × 350 units)	1,39,000 (₹278 × 500 units)
Less: Additional Overheads		
Delivery Cost	17,500 (5 × ₹3,500)	-
Order Processing Cost	10,000 (5 × ₹2,000)	20,000 (10 × ₹2,000)
Profit per customer	2,21,000	1,19,000

3. Option (c): ₹ 631

Reason

Particulars	**Customer- A**	**Customer- B**
Sales (units)	**350**	**500**
	(₹)	(₹)
Selling Price (Net of Discounts) per unit	5,130	4,698
Less: Variable Cost per unit	4,420	4,420
Contribution per unit	710	278
Total Contribution	2,48,500 (₹710 × 350 units)	1,39,000 (₹278 × 500 units)
Less: Additional Overheads		

Delivery Cost	17,500 (5 × ₹3,500)	---
Order Processing Cost	10,000 (5 × ₹2,000)	20,000 (10 × ₹2,000)
Profit per customer*	2,21,000	1,19,000
Profit per customer per unit	631.43	238.00

4. Option (b): ₹ 238

Reason

Particulars	**Customer- A**	**Customer- B**
Sales (units)	**350**	**500**
	(₹)	(₹)
Selling Price (Net of Discounts) per unit	5,130	4,698
Less: Variable Cost per unit	4,420	4,420
Contribution per unit	710	278
Total Contribution	2,48,500 (₹710 × 350 units)	1,39,000 (₹278 × 500 units)
Less: Additional Overheads		
Delivery Cost	17,500 (5 × ₹3,500)	---
Order Processing Cost	10,000 (5 × ₹2,000)	20,000 (10 × ₹2,000)
Profit per customer	2,21,000	1,19,000
Profit per customer per unit	631.43	238.00

5. Option (a): ₹ 432

Reason

₹ 432 = ₹ 5,400 × 8%

CASE SCENARIO 41

Osaka Manufacturing Co. (OMC) is a leading consumer goods company. The budgeted and actual data of OMC for the year 2023-24 are as follows:-

Particulars	Budget	Actual	Variance
Sales / Production (units)	2,00,000	1,65,000	(35,000)
Sales (₹)	21,00,000	16,92,900	(4,07,100)
Less: Variable Costs (₹)	12,66,000	10,74,150	1,91,850
Less: Fixed Costs (₹)	3,15,000	3,30,000	(15,000)
Profit	5,19,000	2,88,750	(2,30,250)

The budgeted data shown in the table is based on the assumption that total market size would be 4,00,000 units but it turned out to be 3,75,000 units.

MULTIPLE CHOICE QUESTIONS

1. What is the Sales Volume Contribution Planning Variance?
   (a) ₹ 52,125 (A)
   (b) ₹ 22,125 (A)
   (c) ₹ 52,215 (F)
   (d) ₹ 52,152 (F)
2. What is the Sales Volume Contribution Operational Variance?
   (a) ₹ 93,825 (F)
   (b) ₹ 93,825 (A)
   (c) ₹ 82,582 (A)
   (d) ₹ 82,582 (F)
3. What is the Fixed Cost Expenditure Variance?
   (a) ₹ 16,000 (A)
   (b) ₹ 15,000 (F)
   (c) ₹ 17,000 (A)
   (d) ₹ 15,000 (A)

4. What is the Variable Cost Variance?

(a) ₹ 79,700(A)

(b) ₹ 79,700(F)

(c) ₹ 29,700(A)

(d) ₹ 29,700(F)

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): ₹ 52,125 (A)

Reason

Volume Contribution Planning

= Budgeted Market Share % × (Actual Industry Sales Quantity in units – Budgeted Industry Sales Quantity in units) × (Average Budgeted Contribution per unit)

= 50% × (3,75,000 units – 4,00,000 units) × ₹ 4.17= ₹ 52,125 (A)

2. Option (b): ₹ 93,825 (A)

Reason

Volume Contribution Operational = (Actual Market Share % – Budgeted Market Share %) × (Actual Industry Sales Quantity in units) × (Average Budgeted Contribution per unit)

= (44% – 50 %) × 3,75,000 units × ₹ 4.17= ₹ 93,825 (A)

3. Option (d): ₹ 15,000 (A)

Reason

Fixed Cost Expenditure Variance: = Budgeted Fixed Cost – Actual Fixed Cost

= ₹ 3,15,000 – ₹ 3,30,000 = ₹ 15,000 (A)

4. Option (c): ₹ 29,700(A)

Reason

Variable Cost Variance: = Standard Cost for Production – Actual Cost

= Actual Production × (Standard Cost per unit – Actual Cost per unit

= 1,65,000 units × (₹ 6.33 – ₹ 6.51) = ₹ 29,700(A)

CASE SCENARIO 42

Young Chin Limited uses standard and marginal costing system. It provides the following details for the year 2022-23 relating to its production, cost and sales:

Particulars	Budget	Actual
Sales units	24,000	25,600
Sales value (₹)	6,000	6,784
Materials (₹)	960	1,080
Labour (₹)	1,440	1,664
Variable overheads (₹)	2,400	2,592

The sales budget is based on the expectation of the company's estimate of market share of 12%. The entire industry's sales of the same product for the year 2022-23 is 2,40,000 units. Further details are as follows:

Particulars	Standard (In ₹)	Actual (In ₹)
Material price per kg.	8.00	7.50
Labour rate per hour	6.00	6.40

MULTIPLE CHOICE QUESTIONS

1. What is the sales contribution price variance for Young Chin Limited?
   (a) ₹ 160 (F)
   (b) ₹ 384 (F)
   (c) ₹ 384 (A)
   (d) ₹ 160 (A)
2. What is the budgeted (profit volume ratio) for Young Chin Limited?
   (a) 0.05
   (b) 0.20
   (c) 0.17
   (d) 0.08

3. What is the market size variance for Young Chin Limited?

   (a) ₹ 160 (A)

   (b) ₹ 240 (F)

   (c) ₹ 240 (A)

   (d) ₹ 160 (F)

4. What is the market share variance for Young Chin Limited?

   (a) ₹ 160 (A)

   (b) ₹ 240 (F)

   (c) ₹ 210 (A)

   (d) ₹ 100 (A)

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): ₹ 384 (F)

Reason : Sales Contribution Price Variance= Sales Price Variance= 384 (F)

2. Option (b): 0.20

Reason : Budgeted Profit Volume Ratio= 1,200/6,000 x 100 = 20% = 0.20

3. Option (b): ₹ 240 (F)

Reason : Market Size Variance = (Required Sales Quantity in units –Total Budgeted Quantity in units) × Average Budgeted Contribution per unit

= (28,800 units – 24,000 units) × ₹ 0.05 = ₹ 240 (F)

4. Option (a): ₹ 160 (A)

Reason : Market Share Variance = (Total Actual Quantity in units – Required Sales Quantity in units) × Average Budgeted Contribution per unit

= (25,600 units – 28,800 units) × ₹ 0.05 = ₹ 160 (A)

CASE SCENARIO 43

The following figures are available. Find out the missing figures, giving appropriate formulae:

		₹
Budgeted profit		15,000
Less:	Adverse variances:	
	Contribution price variance	10,600
	Direct materials variance	1,000
	Fixed overhead variance	600
Add:	Favourable variances:	
	Contribution quantity variance	1,800
	Direct wages variance	600
	Variable overhead variance	1,800
	Actual profit	7,000

There is no inventory. Production units equals to Sales units for both actual and budget.

Standard selling price	₹ 18 / unit
Standard variable cost	₹ 15 / unit
Budgeted sales	10,000 units
Actual selling price	₹ 17 / unit

Standard material cost per unit ₹ 1 (which is 5 kg. @ ₹ 20 Paise/kg.)

Material usage variance ₹ 400 (A)

Actual labour hours @ actual rate ₹ 63,000

Actual labour hours @ standard rate ₹ 61,950

Variable overhead standard rate ₹ 2

Standard hours of production	4 per unit
Variable overhead at standard rate	₹ 84,800
Variable overhead expenditure variance	₹ 400 (A)
Budgeted fixed overhead	₹ 15,000

MULTIPLE CHOICE QUESTIONS

1. What are the actual sales units?
   (a) 12,400
   (b) 11,500
   (c) 10,600
   (d) 10,700
2. What is the actual quantity of raw materials used?
   (a) 50,000 kg
   (b) 51,000 kg
   (c) 55,000 kg
   (d) 57,000 kg
3. What is the actual variable overhead in rupees?
   (a) ₹ 85,400
   (b) ₹ 84,400
   (c) ₹ 83,000
   (d) ₹ 84,400
4. What are the actual fixed overheads?
   (a) ₹ 15,700
   (b) ₹ 16,700
   (c) ₹ 15,800
   (d) ₹ 15,600

5. What is the operating profit variance? If budgeted profit is considered-

   (a) ₹ 8,000 (F)

   (b) ₹ 10,000 (A)

   (c) ₹ 8,000 (A)

   (d) ₹ 11,000 (A)

6. What is the operating profit variance? If standard profit is considered:

   (a) ₹ 7,000 (A)

   (b) ₹ 8,000 (A)

   (c) ₹ 5,200 (A)

   (d) ₹ 9,800 (A)

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (c): 10,600

Reason

Computation of Actual Sales (units)	
Budgeted Contribution (₹ 15,000 + ₹ 15,000)	₹ 30,000
Add: Contribution Quantity Variance	₹ 1,800
Total Standard Contribution	₹ 31,800
Standard Contribution per unit	₹ 3
Actual Sales Volume (₹ 31,800 / ₹ 3)	10,600 units

2. Option (c): 55,000 kg

Reason

Computation of Actual Quantity of Raw Materials (used)	
Standard Consumption (10,600 units x 5 kg.)	53,000 kgs.
Add: Material Usage Variance [400 (A) / ₹ 0.20]	2,000 kgs.
Actual Consumption	55,000 kgs.

3. Option (c): ₹ 83,000

Reason

Computation of Actual Variable Overhead (₹)

Standard Variable Overheads for Output	₹ 84,800
Less: Variable Overhead Variance	₹ 1,800
Actual Variable Overhead	₹ 83,000

4. Option (d): ₹ 15,600

Reason

Actual Fixed Overheads (₹ 15,000 + ₹ 600) = 15,600

5. Option (c): ₹ 8,000 (A)

Reason

Operating Profit Variance:

If budgeted profit is considered (₹ 15,000 – ₹ 7,000) = ₹ 8,000 (A)

6. Option (d): ₹ 9,800 (A)

Reason

Operating Profit Variance:

If standard profit is considered (₹ 16,800 – ₹ 7,000) = ₹ 9,800 (A)

CASE SCENARIO 44

Zed company manufactures two types of flooring rolls. Budgeted and actual data for 2023 are-

	Static Budget			Actual Result		
	Industrial	**Domestic**	**Total**	**Industrial**	**Domestic**	**Total**
Unit Sales in Rolls ('000)	200	600	800	252	588	840
Contribution Margin (₹ in Lacs)	100.00	240.00	340.00	119.70	246.96	366.66

In late 2022, a marketing research estimated industrial volume for industrial and domestic flooring at 80 Lacs Rolls. Actual industry volume for 2023 was 70 Lacs Rolls.

MULTIPLE CHOICE QUESTIONS

1. What is the sales mix variance for Domestic flooring rolls?
   (a) ₹ 16,80,000 (A)
   (b) ₹ 12,00,000 (A)
   (c) ₹ 13,00,000 (A)
   (d) ₹ 14,00,000 (A)
2. What is the sales quantity variance for Industrial flooring rolls?
   (a) ₹ 6,00,000 (F)
   (b) ₹ 5,00,000 (F)
   (c) ₹ 7,00,000 (F)
   (d) ₹ 5,00,000 (A)

3. What is the market size variance?

   (a) ₹ 21,50,000 (A)

   (b) ₹ 50,50,000 (A)

   (c) ₹ 42,50,000 (A)

   (d) ₹ 42,50,000 (F)

4. What is the market share variance?

   (a) ₹ 40,10,000 (F)

   (b) ₹ 19,50,000 (A)

   (c) ₹ 59,50,000 (A)

   (d) ₹ 59,50,000 (F)

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): ₹ 16,80,000 (A)

Reason

Domestic = ₹ 40 × (5,88,000 – 6,30,000) = ₹ 16,80,000 (A)

2. Option (b): ₹ 5,00,000 (F)

Reason

Industrial = ₹ 50 × (2,10,000 – 2,00,000) = ₹ 5,00,000 (F)

3. Option (c): ₹ 42,50,000 (A)

Reason

= 10% × (70,00,000 Rolls – 80,00,000 Rolls) × ₹ 42.50 = ₹ 42,50,000 (A)

4. Option (d): ₹ 59,50,000 (F)

Reason

= (12% – 10 %) × 70,00,000 Rolls × ₹ 42.50 = ₹ 59,50,000 (F)

CASE SCENARIO 45

7 Star Sports Co. (7SSC) is engaged in the manufacture of cricket bats. Following table shows the budgeted figures for the coming year:

Particulars		₹ per unit
Selling Price		4,800
Less:	Components (1 Set)	1,200
	Assembling Costs	2,000
	Delivery Cost	800
Contribution		800

Components like willow, rubber grip and handle bar in a set, are bought in and an assembling process carried out to transform them into a single bat. Market is intensely competitive where 7SSC currently holds 30% market share. Annual demand of these bats is 1,00,000 units.

On reviewing previous performance it is revealed that 3% of the bats supplied to customers were returned for free replacement because of faults. Defective components, which are initially bought in to assembling process, are held responsible for this. These returned bats cannot be repaired and have no scrap value. Supply of faulty bats to customers could be eliminated by implementing an inspection process immediately before the goods are delivered. This would improve customer perception thus resulting in an increase of 5% in current market share (making in all a total share of 35%).

MULTIPLE CHOICE QUESTIONS

1. What is the total quality non-conformance cost for the coming year?

   (a) ₹ 72,16,000

   (b) ₹ 27,55,000

   (c) ₹ 12,10,000

   (d) ₹ 35,40,000

2. What is the additional contribution expected due to the increase in market share after implementing the inspection process?

   (a) ₹ 24,00,000

   (b) ₹ 30,00,000

   (c) ₹ 35,04,000

   (d) ₹ 40,00,000

3. How much will 7SSC save in delivery costs on the 928 faulty bats if the inspection process is implemented?

   (a) ₹ 7,42,400

   (b) ₹ 5,16,000

   (c) ₹ 6,20,000

   (d) ₹ 7,26,000

4. What is the total increase in profit expected due to the implementation of the inspection process?

   (a) ₹ 35,04,400

   (b) ₹ 7,46,500

   (c) ₹ 46,05,000

   (d) ₹ 42,46,400

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): ₹ 72,16,000

Reason

Calculation of Quality Non- Conformance Cost

Annual Sales = 1,00,000 × 30% = 30,000 units

Number of returned bats which are replaced free of cost

= 30,000x3/97 = 928 units

Cost of 928 units that are replaced free of charge

= 928 × ₹ 4,000 = ₹ 37,12,000 (A)

Contribution Lost (Market Share) due to faulty bats = ₹ 35,04,000 (B)

So, Total Quality Non-Conformance Cost [(A) + (B)] = ₹ 72,16,000

Statement Showing "Contribution Lost (Market Share) due to faulty bats"

Particulars	**₹ '000**
Sales (5,000 units × ₹ 4,800)	24,000
Less: Variable Cost [(₹ 1,200 units + ₹ 2,000 + ₹ 800) × 5,000 units)]	20,000
Less: Relevant Cost of faulty bats 155x (2,000+1,200)	496
Contribution	3,504

No. of Faulty Bats = 155 (5000x3/97)

2. Option (c): ₹ 35,04,000

Reason

Additional Contribution due to *increase in market share* = ₹ 35,04,000

3. Option (a): ₹ 7,42,400

Reason

Saving in the Delivery Cost on 928 faulty bats = 928 units × ₹ 800 = ₹ 7,42,400

4. Option (d): ₹ 42,46,400

Reason

Additional Contribution due to *increase in market share* = ₹ 35,04,000

Saving in the Delivery Cost on 928 faulty bats

= 928 units × ₹ 800 = ₹ 7,42,400

Total Increase in Profit = ₹ 42,46,400

CASE SCENARIO 46

M. India Ltd. (MIL) is an automobile manufacturer in India and a subsidiary of Japanese automobile and motorcycle manufacturer Leon. It manufactures and sells a complete range of cars from the entry level to the hatchback to sedans and has a present market share of 22% of the Indian passenger car markets. MIL uses a system of standard costing to set its budgets. Budgets are set semi-annually by the Finance department after the approval of the Board of Directors at MIL. The Finance department prepares variance reports each month for review in the Board of Directors meeting, where actual performance is compared with the budgeted figures. Mr. Neeraj Thakur, group CEO of the Leon is of the opinion that Kaizen costing method should be implemented as a system of planning and control in the MIL.

MULTIPLE CHOICE QUESTIONS

1. Under Kaizen Costing, what is emphasized?
   (a) Large one-time improvements
   (b) Radical changes in the process
   (c) Sporadic improvements
   (d) Small but continuous improvements
2. What is one key change required to implement Kaizen Costing at MIL?
   (a) From Standard Cost Control System to Cost Reduction System
   (b) From Cost Reduction System to Standard Cost Control System
   (c) From Activity-Based Costing to Job Order Costing
   (d) Value Engineering in the current costing system
3. How frequently should cost reduction targets be set under the Kaizen Costing system?
   (a) Annually
   (b) Semi-annually

(c) Quarterly

(d) Monthly or weekly

4. Who should participate in setting standards under the Kaizen Costing system?

(a) Only the Finance Department

(b) Only the Board of Directors

(c) External consultants

(d) Workers and executives involved in the manufacturing process

5. Which of the following key changes is vital for MIL's planning and control system to support the adoption of Kaizen Costing Concepts?

(a) Transition from a Cost Reduction System to a Standard Cost Control System

(b) Increase the periodicity of setting standards from semi-annually to annually

(c) Include participation of workers and executives in setting standards

(d) Eliminate variance reports from the review process

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (d): Small but continuous improvements

Reason

Refer Reason of Last MCQ

2. Option (a): From Standard Cost Control System to Cost Reduction System

Reason

Refer Reason of Last MCQ

3. Option (d): Monthly or weekly

Reason

Refer Reason of Last MCQ

4. Option (d): Workers and executives involved in the manufacturing process

Reason

Refer Reason of Last MCQ

5. Option (c): Eliminate variance reports from the review process

Reason (All MCQs)

Kaizen Costing emphasizes on *small but continuous improvement*. Targets once set at the beginning of the year or activities are *updated continuously* to reflect the improvement that has already been achieved and that are yet to be achieved.

The suggestive changes which are required to be adopted Kaizen Costing concepts in MIL are as follows:

Standard Cost Control System to Cost Reduction System: Traditionally Standard Costing system assumes stability in the current manufacturing process and standards are set keeping the normal manufacturing process into account thus the whole effort is on to meet performance cost standard. On the other hand, Kaizen Costing believes in continuous improvements in manufacturing processes and hence, the goal is to achieve cost reduction target. The first change required is the standard setting methodology i.e. from earlier Cost Control System to Cost Reduction System.

Reduction in the periodicity of setting Standards and Variance Analysis: Under the existing planning and control system followed by the MIL, standards are set semi-annually and based on these standards monthly variance reports are generated for analysis. But under Kaizen Costing system cost reduction targets are set for small periods say for a week or a month. So the period covered under a standard should be reduced from semi-annually to monthly and the current practice of generating variance reports may be continued or may be reduced to a week.

Participation of Executives or Workers in standard setting: Under the Kaizen Costing system participation of workers or executives who are actually involved in the manufacturing process are highly appreciated while setting standards. So, the current system of setting budgets and standards by the Finance department with the mere consent of Board of Directors required to be changed.

CASE SCENARIO 47

NEC Ltd. manufactures two parts 'P' and 'Q' for Computer Industry.

P : Annual production and sales of 1,00,000 units at a selling price of ₹100.05 per unit.

Q : Annual production and sales of 50,000 units at a selling price of ₹150 per unit.

Direct and Indirect costs incurred on these two parts are as follows:

(₹in thousand)

Particulars of Costs	**P**	**Q**	**Total**
Direct Material Cost (Variable)	4,200	3,000	7,200
Labour Cost (Variable)	1,500	1,000	2,500
Direct Machining Cost (See Note)*	700	550	1,250
Indirect Costs			
Machine Setup Cost			462
Testing Cost			2,375
Engineering Cost			2,250

Note: Direct machining costs represents the cost of machine capacity dedicated to the production of each product. These costs are fixed and are not expected to vary over the long-run horizon.

Additional information is as follows:

	P	**Q**
Production Batch Size	1,000 units	500 units
Set-up Time per batch	30 hours	36 hours
Testing Time per unit	5 hours	9 hours
Engineering Cost incurred on each product	8.40 lakhs	14.10 lakhs

A foreign competitor has introduced product very similar to 'P'. To maintain the company's share and profit, NEC Ltd. has to reduce the price to ₹86.25. The company calls for a meeting and comes up with a proposal to change design of product 'P'. The expected effect of new design is as follows:

- Direct Material cost is expected to decrease by ₹5 per unit.
- Labour cost is expected to decrease by ₹2 per unit.
- Machine time is expected to decrease by 15 minutes, previously it took 3 hours to produce 1 unit of 'P'. The machine will be dedicated to the production of new design.
- Set up time will be 28 hours for each set up.
- Time required for testing each unit will be reduced by 1 hour.
- Engineering cost and batch size will be unchanged.

MULTIPLE CHOICE QUESTIONS

1. Company management identifies that cost driver for Machine set-up costs is 'Set up hours used in batch setting' and for testing costs is 'testing time'. Engineering costs are assigned to products by special study. The full cost per unit for 'P' and 'Q' using Activity-Based Costing:

   (a) P- ₹87.00; Q- ₹146.74

   (b) P- ₹146.74; Q- ₹87.00

   (c) P- ₹78.00; Q- ₹146.47

   (d) P- ₹90.00; Q- ₹87.74

2. Mark-up on full cost per unit of P:

   (a) 10%

   (b) 15%

   (c) 20%

   (d) 25%

3. The Target Cost per unit in ₹ for new design to maintain the same markup percentage on full cost per unit as it had earlier:

   (Assume cost per unit of cost drives for the new design remains unchanged)

   (a) 86.25

   (b) 11.25

   (c) 75.00

   (d) 15.25

4. Which of the following statements is correct?

   (a) The target cost is ₹75 p.u. and estimated cost (new design) is ₹77.36 p.u. The new design does not achieve the target cost set by NEC Ltd. Hence the target mark- up shall not be achieved.

   (b) The target cost is ₹75 p.u. and estimated cost (new design) is ₹87.36 p.u. The new design does not achieve the target cost set by NEC Ltd. Hence the target mark- up shall not be achieved.

   (c) The target cost is ₹77.36 p.u. and estimated cost (new design) is ₹75.00 p.u. The new design does not achieve the target cost set by NEC Ltd. Hence the target mark- up shall be achieved.

   (d) The target cost is ₹75 p.u. and estimated cost (new design) is ₹88.96 p.u. The new design does not achieve the target cost set by NEC Ltd. Hence the target mark- up shall not be achieved.

5. Which of the following is NOT a possible management action that NEC Ltd. should take regarding the new design?

   (a) Value engineering and value analysis to reduce the direct material costs.

   (b) Exploring possibility of cost reduction in direct machining cost by using appropriate techniques.

   (c) The expected selling price based on estimated cost of ₹77.36 per unit is ₹98.96. Introduce pareto/ sensitivity analysis after

implementation of new design to study the sales quantity changes in the price range of ₹86.25 to ₹98.96.

(d) Identification of non-value added activities and eliminating them in order to reduce overheads

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): P- ₹87.00; Q- ₹146.74

Reason

Statement Showing "Cost *per unit*- Activity Based Costing"

Particulars of Costs	Basis	P	Q
Direct Material	Direct	42,00,000	30,00,000
Direct Labour	Direct	15,00,000	10,00,000
Direct Machine Cost	Direct	7,00,000	5,50,000
Machine Setup Cost	3,000 hrs. @ ₹70	2,10,000	----
	3,600 hrs. @ ₹70	----	2,52,000
Testing Cost	5,00,000 hrs. @ ₹2.50	12,50,000	----
	4,50,000 hrs. @ ₹2.50	----	11,25,000
Engineering Cost	Allocated	8,40,000	14,10,000
Total Cost (₹)		87,00,000	73,37,000
Cost *per unit* (₹)		87.00	146.74

Working Notes

Particulars		P	Q
(a)	Production / Sales Quantity (units)	1,00,000	50,000
(b)	Batch Size (units)	1,000	500
(c)	No. of Batches (a ÷ b)	100	100

(d)	Setup Time per Batch (hours)	30	36
(e)	Total Setup Hours (hours) (c × d)	3,000	3,600
(f)	Machine Setup Cost ₹4,62,000		
(g)	Cost Driver per Machine Setup Hour = 4,62,000/6,600 = 70		
(h)	Testing Time per Unit (hours)	5	9
(i)	Total Testing Time (hours) (a × h)	5,00,000	4,50,000
(j)	Testing Cost ₹23,75,000		
(k)	Cost Driver per Testing Hour = 23,75,000/ 9,50,000 = 2.50		

2. Option (b): 15%

Reason

Statement Showing "Mark-up *(full cost basis)*- Product P"

Particulars	**Per unit**
Selling Price	100.05
Less: Full Cost	87.00
Markup	13.05
Percentage of Markup on Full Cost [13.05/ 87.00 x 100]	15%

3. Option (c): 75

Reason

Statement Showing "Target Cost of Product P" (After New Design is Implemented)

Particulars	**(₹)**
Target Price (given)	86.25

Mark-up (86.25/ 115 x 15)	11.25
Target Cost *per unit*	75.00

4. **Option (a): The target cost is ₹75 p.u. and estimated cost (new design) is ₹77.36 p.u. The new design does not achieve the target cost set by NEC Ltd. Hence the target mark- up shall not be achieved.**

Reason

Statement Showing "Cost of P (New Design)"

Particulars of Costs	**Basis of Costs**	**Rate***	**Total Cost**
Direct Material	Decrease by ₹5 p.u.	37.00	37,00,000
Direct Labour	Decrease by ₹2 p.u.	13.00	13,00,000
Direct Machining Cost	No Change as Machine is Dedicated	7.00	7,00,000
Machine Setup Cost	100 Setup × 28 hrs. × ₹70	1.96	1,96,000
Testing Cost	1,00,000 units × ₹2.50 × 4 hrs.	10.00	10,00,000
Engineering Cost	No Change	8.40	8,40,000
Total Cost		77.36	77,36,000

* Rate per unit

The target cost is ₹75 p.u. and estimated cost (new design) is ₹77.36 p.u. The new design does not achieve the target cost set by NEC Ltd. Hence the target mark- up shall not be achieved.

5. **Option (c): The expected selling price based on estimated cost of ₹77.36 per unit is ₹98.96. Introduce pareto analysis after implementation of new design to study the sales quantity changes in the price range of ₹86.25 to ₹98.96.**

Reason

The expected selling price based on estimated cost of ₹77.36 per unit is (₹77.36 +15%) ₹88.964. Introduce pareto/ sensitivity analysis after implementation of new design to study the sales quantity changes in the price range of ₹86.25 to ₹98.96.

CASE SCENARIO 48

Great Eastern Appliances Ltd. (GEAL) manufactures consumer durable products in a very highly competitive market. GEAL is considering launching a new product 'Kitchen Care' into the market and gathered the following data:

Expected Market Price	₹ 5,000 per unit
Direct Material Cost	₹ 1,850 per unit
Direct Labour Cost	₹ 80 per hour
Variable Overhead Cost	₹ 1,000 per unit

Packing Machine Cost (specially to be purchased for this product), ₹ 5,00,000

GEAL expects the selling price for the new product will continue throughout the product's life and a total of 1,000 units can be sold over the entire lifetime of the product.

Direct labour costs are expected to reduce as the volume of output increases due to the effects of 80% learning curve (index is -0.3219). The expected time to be taken for the first unit is 30 hours and the learning effect is expected to end after 250 units have been produced. Units produced after first 250 units will take the same time as the 250^{th} unit.

MULTIPLE CHOICE QUESTIONS

1. What is the total time required for producing 250 units?
   (a) 1,268.25 hours
   (b) 5.073 hours
   (c) 1,264.67 hours
   (d) 3.58 hours
2. What is the time required for producing 250^{th} unit?
   (a) 5.073 hours
   (b) 8.073 hours
   (c) 7.073 hours
   (d) 3.58 hours

3. What is the profitability of the product 'Kitchen Care' that GEAL will earn over its lifetime?

   (a) 31,66,260

   (b) 13,33,740

   (c) 42,00,000

   (d) 18,33,740

4. What is the average target labour cost per unit over the lifetime of the product if GEAL requires an average profit of ₹ 800 per unit to achieve its long-term objectives?

   (a) 1,000

   (b) 1,850

   (c) 800

   (d) 850

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): 1,268.25 hours

Reason

The average time per unit for 250 units is

$Y_x = ax^b$

$Y_{250} = 30 \times 250^{-0.3219}$

$Y_{250} = 30 \times 0.1691$

$Y_{250} = 5.073$ hours

Total time for 250 units = 5.073 hours × 250 units = 1,268.25 hours

2. Option (d): 3.58 hours

Reason

The average time per unit for 249 units is

$Y_{249} = 30 \times 249^{-0.3219}$

$Y_{249} = 30 \times 0.1693$

$Y_{249} = 5.079$ hours

Total time for 249 units = 5.079 hours × 249 units = 1,264.67 hours

Time for 250th unit = 1,268.25 hours – 1,264.67 hours = 3.58 hours

3. Option (b): 13,33,740

Reason

Profitability of the Product 'Kitchen Care'

Particulars	**Amount (₹)**	**Amount (₹)**
Sales (1,000 units)		50,00,000
Less: Direct Material	18,50,000	
Direct Labour (3,953.25 hours × ₹ 80)	3,16,260	
Variable Overheads (1,000 units× ₹ 1,000)	10,00,000	31,66,260
Contribution		18,33,740
Less: Packing Machine Cost		5,00,000
Profit		13,33,740

4. Option (d): 850

Reason

Average 'Target Labour Cost' *per unit*

Particulars	**Amount (₹)**
Expected Sales Value	50,00,000
Less: Desired Profit (1,000 units × ₹ 800)	8,00,000
Target Cost	42,00,000
Less: Direct Material (1,000 units × ₹ 1,850)	18,50,000
Variable Cost (1,000 units × ₹ 1,000)	10,00,000
Packing Machine Cost	5,00,000
Target Labour Cost	8,50,000
Average Target Labour Cost *per unit* (₹ 8,50,000 ÷ 1,000 units)	850

CASE SCENARIO 49

Hindustan Bikes Ltd. (HBL) formerly known as HELCO is an Indian multinational company. It's headquarter is located in Bengaluru, India. It has been founded in the year 1990 as a manufacturer of locomotives. The company is presently listed locally as well as in international stock market. HBL's parent company is Hindustan Group. The management of HBL recognizes the need to establish a culture at the company so that -

"Do the right things, right the first time, every time".

Management has provide you following actual information for the most recent month of the current year:

Cost Data (₹)

Customer Support Centre Cost	35 per hr.
Equipment Testing Cost	18 per hr.
Warranty Repair Cost	1,560 per bike
Manufacturing Rework Cost	228 per bike

Volume and Activity Data

Bikes Requiring Manufacturing Rework	3,200 bikes
Bikes Requiring Warranty Repair	2,600 bikes
Production Line Equipment Testing Time	1,600 hrs.
Customer Support Centre Time	2,000 hrs.

Additional information

HBL carried out a quality review of its existing suppliers to enhance quality levels during the month at a cost of ₹ 1,25,000. Due to the quality issues in the month, the bike production line experienced unproductive 'down time' which cost ₹ 7,70,000.

MULTIPLE CHOICE QUESTIONS

1. Prevention Costs_____.

   (a) 1,25,000

   (b) 28,800

   (c) 7,70,000

   (d) 7,29,600

2. Appraisal Costs_____.

   (a) 1,25,000

   (b) 28,800

   (c) 7,29,000

   (d) 40,56,000

2. Internal Failure Costs_____; External Failure Costs_____.

   (a) 7,29,000; 7,70,000

   (b) 28,800; 70,000

   (c) 14,99,600; 41,26,000

   (d) 40,56,000; 7,19,600

4. Total Quality Costs_____.

   (a) 14,29,000

   (b) 40,56,000

   (c) 56,40,000

   (d) 57,79,400

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): 1,25,000

Reason

Statement Showing "Total Quality Cost"

Particulars of Costs	**₹**
Prevention Costs	
Supplier Review	1,25,000

2. Option (b): 28,800

Reason

Particulars of Costs	**₹**
Appraisal Costs	
Equipment Testing (₹ 18 × 1,600 hrs.)	28,800

3. Option (c): 14,99,600; 41,26,000

Reason

Particulars of Costs	**₹**
Internal Failure Costs	
Down Time	7,70,000
Manufacturing Rework (₹ 228 × 3,200 bikes)	7,29,600
External Failure Costs	
Customer Support (₹ 35 × 2,000 hrs.)	70,000
Warranty Repair (₹ 1,560 × 2,600 bikes)	40,56,000

4. Option (d): 57,79,400

Reason

Particulars of Costs	**₹**
Prevention Costs	
Supplier Review	1,25,000
Appraisal Costs	
Equipment Testing (₹ 18 × 1,600 hrs.)	28,800
Internal Failure Costs	
Down Time	7,70,000
Manufacturing Rework (₹ 228 × 3,200 bikes)	7,29,600
External Failure Costs	
Customer Support (₹ 35 × 2,000 hrs.)	70,000
Warranty Repair (₹ 1,560 × 2,600 bikes)	40,56,000
Total Quality Costs	**57,79,400**

CASE SCENARIO 50

Computer Tec a manufacturing firm, has entered into an agreement of strategic alliance with Comp Inc. of United States of America for the manufacture of Super Computers in India. Broadly, the terms of agreement are:

(i) Comp Inc. will provide Computer Tec with kits in a dismantled condition. These will be used in the manufacture of the Super Computer in India. On a value basis, the supply, in terms of the FOB price will be 50% thereof.

(ii) Computer Tec will procure the balance of materials in India.

(iii) Comp Inc will provide to Computer Tec with designs and drawings in regard to the materials and supplies to be procured in India. For this, Computer Tec will pay Comp Inc. a technology fee of ₹ 8 crores.

(iv) Comp Inc. will also be entitled total royalty at 10% of the selling price of the computers fixed for sales in India as reduced by the cost of standard items procured in India and also the cost of imported kits from Comp Inc.

(v) Computer Tec will furnish to Comp Inc. detailed quarterly returns.

Other information available:

- FOB price agreed $2,040. Exchange rate to be adopted $1 = ₹ 55.00
- Insurance and freight – ₹ 2,000 per imported kit;
- Customs duty leviable is 200% of the CIF prices; but as a concession, the actual rate leviable has been fixed at 40% of CIF.
- The technology agreement expires with the production of 8,00,000 computers;
- The quoted price on kits includes a 25% margin of profits on cost to Comp Inc.
- The estimated cost of materials and supplies to be obtained in India will be 150% of the cost of supplies made by Comp Inc.
- 50% of the value in rupees of the locally procured goods represent cost of the standard items.

- Cost of assembly and other overheads in India will be ₹ 8,000 per Super Computer

MULTIPLE CHOICE QUESTIONS

1. What will be the FOB price of the dismantled kit in ₹ ?

   (a) 1,12,200

   (b) 67,320

   (c) 89,760

   (d) 58,100

2. What is the cost of a dismantled kit to Company Inc in ₹ ?

   (a) 1,12,200

   (b) 67,320

   (c) 56,100

   (d) 89,760

3. What is the landed cost of a dismantled kit in ₹ ?

   (a) 56,100

   (b) 58,100

   (c) 23,240

   (d) 81,340

4. Calculate the selling price, of a personal computer in India bearing in mind that Computer Tec Ltd has targeted a profit of 20% to itself on the selling price.

   (e) 1,56,600

   (f) 1,56,660

   (g) 1,66,011

   (h) 2,07,514

5. What is the royalty payment per computer in ₹ ?

(a) 81,340

(b) 2,07,514

(c) 9,251

(d) 23,240

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): 1,12,200

Reason

FOB Price of Dismantled Kit:

FOB Price of Dismantled Kit - $2,040

FOB Price of dismantled Kit [$2,040 × 55] - ₹ 1,12,200

2. Option (d): 89,760

Reason

Cost of Dismantled Kit to Comp Inc. (100 / 125 × 1,12,200) = ₹ 89,760

3. Option (d): 81,340

Reason

	(₹)
FOB Price (50% × 1,12,200) (Refer to Working Note-1)	56,100
Add: Insurance & Freight	2,000
CIF Price	58,100
Add: Customs Duty (40% × 58,100)	23,240
Landed Cost of a Dismantled Kit	81,340

4. Option (d): 2,07,514

Reason

Statement Showing "Selling Price of a Super Computer in India"

		(₹)
A.	Landed Cost of a Dismantled Kit	81,340
B.	Cost of Local Procurement	67,320
C.	Cost of Assembly and Other Overheads *per computer*	8,000
D.	Total Cost of Manufacture (A + B + C)	1,56,660
E.	Technology Fee *per computer* (8,00,00,000 / 8,00,000 Computer)	100
F.	Royalty Payment *per unit*	9,251
G.	Total Cost (D + E+ F)	166,011
H.	Profit (20% on Selling Price of 25% of Total Cost)	41,503
I.	Selling Price *per computer*	207,514

5. Option (c): 9,251

Reason

Royalty Payment per computer:

Let X = Selling Price *per unit of Super Computer*

Y = Royalty Paid *per computer*

Since 20% is the Margin of Profit on Selling Price. It means Margin of 25% on Cost Price.

Therefore, we have

$X = 1.25 \times (81,340 + 67,320 + 8,000 + 100 + Y)$

$Y = 10\% \times \{X - (33,660 + 81,340)\}$

On solving the above equations we get:

X = 2,07,514 (Approx)

Y = 9,251(Approx)

CASE SCENARIO 51

B-Parts Inc., USA based firm, has just invented a new part 'B-20'. New part has a budgeted total profit of ₹ 75,000 from the first 256 parts. The time taken to produce the first part was 112.50 hours. The labour rate is ₹ 20 per hour. A 90% learning curve is expected to apply indefinitely.

MULTIPLE CHOICE QUESTIONS

1. What is the revised labor cost (₹) required to achieve zero profit?

   (a) 3,22,961.60

   (b) 2,47,961.60

   (c) 3,22,960.61

   (d) 2,47,960.61

2. What is the cumulative average time (Revised) required per part for producing 256 parts based on MCQ-1?

   (a) 48.43 hrs.

   (b) 63.80 hrs.

   (c) 63.08 hrs.

   (d) 43.48 hrs.

3. The sensitivity of the budgeted total profit from the first 256 parts to changes in the learning rate_____.

   (a) 93.02%

   (b) 3.36%

   (c) 7.76%

   (d) 56.07%

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (a): 3,22,961.60

Reason

Cumulative Average Time for 256 parts = 48.43 hrs. [112.50 × (0.90^8)]

Total Time for 256 parts = 12,398.08 hrs. [48.43 hrs.× 256 parts]

Total Labour Cost of 256 parts = 2,47,961.60 [12,398.08 hrs.× 20]

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

2. Option (c): 63.08 hrs.

Reason

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

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

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

3. Option (b): 3.36%

Reason

$63.08 = 112.50 \times (256)^{b}$

$0.5607 = 2^{8b}$

$\log 0.5607 = \log 2^{8b}$

$\log 0.5607 = 8 \times b \times \log 2$

$\log 0.5607 = \log r^{8}$

$0.5607 = r^{8}$

Learning Rate (r) = 93.02%.

Sensitivity = 3.02/90 = 3.36%

CASE SCENARIO 52

The chief officer at manufacturing plant of Boeing 777-200LR aircraft observed that workers performing manufacturing operations at the plant showed signs of a definite learning pattern. He noted that most aircraft manufacturing tasks experienced what he called an 80 percent learning rate, meaning that workers need 20 percent fewer hours to make a part each time their cumulative experience making that part doubled. Thus, if the first part took 100 minutes, the second would require 80 minutes, the fourth would require 64 minutes, and so on.

[Note: learning coefficient is -0.322 for learning rate of 80%, log2=0.30103, log3=0.47712, log5=0.69897, Antilog of 1.484 =30.48, Antilog of 1.4274 =26.75]

MULTIPLE CHOICE QUESTIONS

1. What is the total time required to produce 40 parts?
   (a) 30.81 minutes
   (b) 30.48 minutes
   (c) 1,219 minutes
   (d) 1,291 minutes
2. What is the total time required to produce 60 parts?
   (a) 26.75 minutes
   (b) 1,219 minutes
   (c) 1,605 minutes
   (d) 38.74 minutes
3. Now, calculate the time required for parts 41 to 60.
   (a) 386 minutes
   (b) 388 minutes
   (c) 883 minutes
   (d) 683 minutes

4. Which of the following is NOT a limitation of a learning curve?

   (a) All activities of a firm are not subject to learning effect

   (b) More productive equipment are designed and used to make the product

   (c) Difficulty arises in obtaining valid data that will form basis for computation of learning effect

   (d) Even slight change in circumstances quickly renders the learning curve obsolete

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (c): 1,219 minutes

Reason

Calculation of total time for 40 part

$y = 100 \times (40)^{-0.322}$

$\log y = \log 100 - 0.322 \times \log 40$

$\log y = \log 100 - 0.322 \times [3 \times \log 2 + \log 5]$

$\log y = 2 - 0.322 \times [3 \times 0.30103 + 0.69897]$

$\log y = 1.484$

y = antilog of 1.484

y = 30.48 minutes

Total time for 40 Parts = 40 Parts × 30.48 minutes = 1,219 minutes

2. Option (c): 1,605 minutes

Reason

Calculation of total time for 60 parts:

$y = 100 \times (60)^{-0.322}$

$\log y = \log 100 - 0.322 \times \log 60$

$\log y = \log 100 - 0.322 \times [2 \times \log 2 + \log 5 + \log 3]$

log y = 2 − 0.322 × [2 × 0.30103 + 0.69897 + 0.47712]

log y = 1.4274

y = antilog of 1.4274

y = 26.75 minutes

Total Time for 60 Parts = 60 Parts × 26.75 minutes = 1,605 minutes

3. Option (a): 386 minutes

Reason

Calculation of total time for 41 to 60 parts : = 1,605 minutes –1,219 minutes = 386 minutes

4. Option (b): More productive equipment are designed and used to make the product

Reason

Limitations of Learning Curve are:

(i) All activities of a firm are not subject to learning effect. (Activities that have not been performed in the present operational mode, those performed by new or unfamiliar employees are subjected to learning effect, while those performed by familiar or experienced workmen will not be subjected to learning effect)

(ii) It is correct that learning effect does take place and average time taken is likely to reduce. But in practice it is highly unlikely that there will be a regular consistent rate of decrease. Therefore any cost prediction based on conventional learning curves should be viewed with caution.

(iii) Considerable difficulty arises in obtaining valid data that will form basis for computation of learning effect.

(iv) Even slight change in circumstances quickly renders the learning curve obsolete. While the regularity of conventional learning curves can be questioned, it would be wrong to ignore learning effect altogether in predicting costs for decision purposes.

CASE SCENARIO 53

A company which has developed a new machine has observed that the time taken to manufacture the first machine is 600 hours. The actual learning curve rate is 80%.

MULTIPLE CHOICE QUESTIONS

1. Average time taken to produce two machines:
   (a) 600 hours
   (b) 480 hours
   (c) 960 hours
   (d) 360 hours
2. Cumulative time taken to produce two machines:
   (a) 600 hours
   (b) 480 hours
   (c) 960 hours
   (d) 360 hours
3. Time taken to produce the second machine:
   (a) 600 hours
   (b) 480 hours
   (c) 960 hours
   (d) 360 hours
4. What is NOT a primary application of the learning curve?
   (a) Budgeting and profit planning
   (b) Pricing
   (c) Setting standards
   (d) Kano's performance attributes

5. Time which the company will take to manufacture the second machine if the actual learning curve rate is 90%:

   (a) 600 hours

   (b) 540 hours

   (c) 1,080 hours

   (d) 480 hours

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. Option (b): 480 hours

Reason

Average time taken to produce two machines = 600 x 80% hours = 480 hours.

2. Option (c): 960 hours

Reason

Cumulative time taken to produce two machines = 480 x 2 hours = 960 hours

3. Option (d): 360 hours

Reason

Time taken to produce the second machine = (960 - 600) hours = 360 hours

4. Option (d): Kano's performance attributes

Reason

- Knowledge of learning curve can be useful both in planning and control. Standard cost for new operations should be revised frequently to reflect the anticipated learning pattern. The main applications are summarised below:
- Helps to analyse CVP relationship during familiarisation phase: Learning curve is useful to analyse cost-volume-profit relationship during familiarisation phase of product or process and

thus it is very useful for cost estimates. Learning curve can be used as a tool for forecasting.

- Helps in budgeting and profit planning: Budget manager should select those costs which reflect learning effect and then he should be able to incorporate this effect in process of developing budgets or in the exercises relating to project planning.
- Helps in pricing: The use of cost data adjusted for learning effect helps in development of advantageous pricing policy.
- Design makers: It helps design engineers in making decisions based upon expected (predictable from past experience) rates of improvement.
- Helps in negotiations: It is very useful to Government in negotiations about the contracts.
- Helps in setting standards: The learning curve is quite helpful in setting standards in learning phase.

5. Option (d): 480 hours

Reason

Average time taken to produce two machines

= 600 x 90% hours = 540 hours

Cumulative time taken to produce two machines

= 540 x 2 hours = 1,080 hours

Time taken to produce the second machine

= (1,080 - 600) hours = 480 hours

SCENARIOS

1. Out of following statements which are correctly depicts the features of Strategic Cost Management (SCM)-

   i. SCM is use-case of cost information for decision making

   ii. SCM is reactive approach

   iii. Scope of SCM is wide enough to allow it to emphasis on product differentiation apart from cost containment

   Option

   (a) i and ii only

   (b) i and iii only

   (c) ii and iii only

   (d) All of i, ii, and iii

   ANSWER

   Option (b) i and iii only

   Reason: Strategic Cost Management (SCM) is application of cost management techniques so that they simultaneously improve the strategic position of a firm and reduce costs. Hence SCM is use-case of cost information for decision making, rather than a cost recording or reporting framework. Scope of Strategic Cost Management is indeed wider than traditional cost management that emphasis on cost control and reduction only. SCM considers the non-cost factors that are strategic (undoubtedly these facts having cost or value implications) such as product differentiation, apart from cost containment SCM is proactive and dynamic approach opposite to traditional cost management that considered to be reactive approach.

2. Out of followings which are the aspects that Traditional Cost Management failed to address–

   i. Use-case of cost information

ii. Activity Based Costing

iii. Qualitative aspects of cost management

Options

(a) i and ii only

(b) i and iii only

(c) ii and iii only

(d) All of i, ii, and iii

ANSWER

Option (c) ii and iii only

Reason: Traditional Cost Management also use cost information to make decision but consider only quantitative information, therefore ignore the quality aspects. More-so-over typically it assigns/apportions overhead cost to product cost based on an arbitrary average rate, rather than allocating overhead costs by assigning them to activities more precisely using ABC.

3. Correctly match the items of following sets i.e. evolution of cost and objective thereof –

i.	Cost Ascertainment	A.	Cost Reduction
ii.	Cost Control	B.	Recoding of Cost
iii.	Traditional Cost Management	C.	Aligning costs to strategies
iv.	Strategic Cost Management	D.	Containment of Cost

Options

(a) i- A, ii-B, iii-C, and iv-D

(b) i- C, ii-A, iii-B, and iv-D

(c) i- B, ii-A, iii-D, and iv-C

(d) i- B, ii-D, iii-A, and iv-C

ANSWER

Option (d) i- B, ii-D, iii-A, and iv-C

Reason: Cost Ascertainment - Recoding of Cost; Cost Control - Containment of Cost; Traditional Cost Management - Cost Reduction; Strategic Cost Management - Aligning costs to strategies.

4. Strategic Cost Management (SCM) is the implementation of cost management techniques to sustain and improve the company's strategic position as well as reduce costs. The three important pillars of SCM are –

   (a) Strategic positioning, value chain analysis and business environment analysis

   (b) Cost driver analysis, strategic positioning and value chain analysis

   (c) Value chain analysis, strategic positioning and performance analysis

   (d) Strategic positioning, value proposition analysis and business environment analysis

ANSWER

Option (b) Cost driver analysis, strategic positioning and value chain analysis

Reason: Strategic cost management has three important pillars, viz., strategic positioning, cost driver analysis and value chain analysis. The relation among pillars can be viewed as 'understanding value chain will helps in defining the optimal strategic position (Positioning Strategy), and eventually both help in identifying relevant cost drivers'.

5. Wonder electronics limited is enthuse to create market space for its products, not through only cost leadership or differentiation; but through combination of both. The strategic choice made by wonder electronics is termed by Michael Porter as –

   (a) The road of dilemma

   (b) The kiss of death

   (c) The slippery slope

   (d) The tunnel vision

ANSWER

Option (b) The kiss of death

Reason: Firstly student must acknowledge that It's possible to compete on low cost and be differentiated at the same time, but the companies that try to be all things to all customers can wind up getting stuck in the middle, a strategic mistake that Michael Porter calls "the kiss of death." Hence option b is correct here.

6. Out of followings which are the correct statements about Osterwalder's Business Model Canvas –

   i. Business's value propositions shall be oriented to the capabilities of business

   ii. Key activates are critical for absorbing the cost of supporting activities.

   iii. Key resources has implication in determining activity level

Option

(a) i and ii only

(b) i and iii only

(c) ii and iii only

(d) All of i, ii, and iii

ANSWER

Option (c) ii and iii only

Reason: Business's value propositions shall be oriented to customers' need and problem, not the capabilities of business. Key activates become basis for determination of cost drivers for absorbing the cost of supporting activities. Key resources are critical in planning, budgeting and determine the activity level. In some cases, these may be Key factor (or limiting factor).

7. Modern Furniture Limited (MFL) is considering the need, resource outlay and expected benefit to draw the value proposition canvas for its business. Since MFL is already using business model canvas hence the

proposer try to convince the board by emphasis that the value proposition canvas is _____ to the business model canvas.

(a) Substitute

(b) Extension

(c) Plugin

(d) New Version

ANSWER

Option (c) Plugin

Reason: The value proposition canvas is the tool that will help the organisation to design, test, build and manage the great customer value propositions. It's like a plugin to the business model canvas.

8. The concept of industry is _____ than segment and concept of sector is _____ then industry.

(a) Narrower, Narrower

(b) Narrower, Wider

(c) Wider, Narrower

(d) Wider, Wider

ANSWER

Option (d) Wider, Wider

Reason: An industry is a group of companies that are relatively comparable based on their primary business activities. There are segments inside the industry. To illustrate passenger vehicle and commercial vehicle (now SUVs/MUVs as well) are segments of automobile industry. Industry classifications are typically grouped into larger categories called sectors. To illustrate BFSI sector comprises of Banking Industry, Financial Services and Insurance Industry

9. An argument is ongoing in board room of Indorama Plastics that which of the model is best fit for industry analysis, chief strategist name the Porter's five force model because it is _____ model wherein all the

five forces _____ determine the intensity of industry competition and profitability.

(a) Static, Collectively

(b) Static, Discretely

(c) Dynamic, Collectively

(d) Dynamic, Discretely

ANSWER

Option (c) Dynamic, Collectively

Reason: All five competitive forces jointly determine the intensity of industry competition and profitability, and the strongest force or forces are governing and become crucial from the point of view of strategy formulation. The five forces enumerated by Porter's five force model are keep-on changing, this make model a dynamic analytical tool.

10. Jim-jam Power Limited is working on project of designing low cost lithium ion battery for electric vehicle, as a vendor (for manufacturing and delivery) for such batteries to the largest e-vehicle producer of the country. It has been decide that Critical Success Factors shall be used to strategically manage the project and cost thereof. When assessing the use of critical success factors, which one of the following would demonstrate they are being used correctly?

(a) Critical success factors remain fixed throughout the project

(b) Critical success factors are used as measure, if the project is either leading or lagging in performance

(c) Critical success factors are derived from key performance indicators to measure if the project is achieving strategic goals

(d) Critical success factors are directly aligned to both organisational and project objectives

ANSWER

Option (d) Critical success factors are directly aligned to both organisational and project objectives

Reason: Essentially, critical success factors or CSFs are the elements of an organization or project that are vital to its success. Critical success factors should be developed to link and align with the strategic goals of a company. They are used to determine how a project, business unit, department, or function can reach its specific goals and facilitate forward progress toward the organization's strategic goals. Students are advised to take note that KPIs are derived from or in context of CSFs.

11. A fast food restaurant chain "Wish-a-Dish" launched its app for placing order online. Order placed through app will be delivered in 30 minutes to customer without any delivery charge if delivery address lies within 5 KM, nominal charges applies above that. The launch of app will result in which of following force –

(a) Increased threat of new entrants

(b) Increased threat of substitute

(c) Increased customer power

(d) Increased barriers to entry

ANSWER

Option (d) Increased barriers to entry

Reason: Since Wish-a-Dish offering app to place order online, hence any new player that willing to operate in same market segment or space also have to offer online facility through app to its customers (prospective) to woe them. Hence lead high initial investment therefore the action of lunching app by wish-a-dish leads to increase barriers to entry.

12. **Assertion** - Management accountants being a leader, need to be proficient in decisions-making as well as making communications in process of crafting plans and ensuring precise execution

Reason - The role of management has been changed drastically in correspondence to change in business environment and dynamics.

(a) Both are correct statements but reason is not correct explanation to assertion

(b) Both are correct statements and reason is correct explanation to assertion

(c) Only assertion is correct

(d) Only reason is correct

ANSWER

Option (b) Both are correct statements and reason is correct explanation to assertion

Reason: Undoubtedly the role of management has been changed drastically in correspondence to change in business environment and dynamics. Management accountants being a leader, need to be proficient in decisions-making as well as making communications in process of crafting plans and ensuring precise execution; usually across several divisions and departments of a company. He should observe the professional and business ethics to lead by an example. Both are correct statements and reason is correct explanation to assertion.

13. Management Accountant expected to make ethical decision and effective communication in role of leader. Identify the correct set of reasons out of following why do Management Accountant make irrational decisions –

i. Not listening to others (& their perspective)

ii. Enthusiasm to quickly get to the end of the analysis process

iii. Changing business dynamics

iv. Superficial understanding of facts

Option

(a) i, ii, and iii

(b) ii, iii, and iv

(c) iii, iv, and i

(d) iv, i, and ii

ANSWER

Option (d) iv, i, and ii

Reason: The list of prominent reasons why do Management Accountant make irrational decisions includes – Enthusiasm to quickly get to the end of the analysis process i.e. Jump straight from analysis to recommendation without considering any other alternatives; Not listening to others (& their perspective); Error in forecasting and determining the affecting factors; Readily agreeing with the leader's proposal; Superficial understanding of facts; Judgement error or lack of expertise; Carrying pre-notions - having prior views about the 'best' solution. Note – Changing business dynamics are beyond control of management accountant, undoubtedly change as a factor shall be considered while making decision; hence if it was failing to consider or ignoring the changing business dynamics then this shall also a correct reason.

14. Technological advancement, especially digital technologies has capability to change business model in addition substantial bearing on cost. Correctly match the items of following sets i.e., technological advancement and scope thereof –

i. Automation	A. Using technology to perform new task or process
ii. Extension	B. Use of technology that revamp the products and services in addition to its process and culture
iii. Transformation	C. replacement of humans with technology
iv. Revolution	D. Use of new technology that revamp the products and services in addition to its process and culture

Option

(a) i- C, ii-A, iii-D, and iv-B

(b) i- C, ii-A, iii-B, and iv-D

(c) i- B, ii-A, iii-D, and iv-C

(d) i- B, ii-D, iii-A, and iv-C

ANSWER

Option (b) i- C, ii-A, iii-B, and iv-D

Reason: Change in business model on account of technological advancements can be classified into following categories – Automation is mere replacement of humans with technology, without impacting organisational culture and business processes. Installation of passbook updation kiosk in bank lounge. Extension is using technology to perform extended (new) task or process that enhance the functions or utility of product/service. Mobile Banking as an extension of internet banking. Transformation is use of technology that not only revamp the product or services that an organisation offers but also its process and culture. Installing ATM across the towns and villages (Withdrawal of cash, print of mini-statement of transactions and balance enquiry, etc. can be made out of banking hours as well), digital clearing system etc. Transformation some time referred as to Revolution, especially when technology is also new. Use of fin-tech such as blockchain etc.

15. As a management consultant for guiding a company on analysing its competitive position in the market, you wish to present the business activities and processes of the business using Porter's Value Chain Analysis.

What are the benefits of using Porter's value chain model for analysing competitive advantage?

i. Management can better insights on how to push for low cost leadership strategy or product differentiation strategy

ii. Enables the company to identify how value can be created, sustained and maximized, a thrust that sparks innovation

iii. Enables the company to understand the inter-linkages between various processes and how the change in one process can impact another

iv. Builds efficiency by enabling the company to identify and discontinue nonvalue adding processes

Option

(a) i and iii only

(b) i and iv only

(c) i, ii and iv only

(d) all of the above

ANSWER

Option (d) all of the above

Reason: Using this model, the management gets a deeper understanding of what the organization does and helps to identify key processes of the business. These interlinkages help the management take decisions on how to gain a competitive edge (cost leadership or product differentiation). Other than this, by eliminating nonvalue added processes, the profit margins of the company can improve.

16. Which of the following is not part of Operations activity of Porter's Value Chain Analysis?

(a) Machining

(b) Equipment maintenance

(c) Assembly

(d) Order processing and scheduling

ANSWER

Option (d) Order processing and scheduling

Reason: Order processing and scheduling is part of outbound logistics activity. The others relate to activities that transform inputs into outputs.

17. Which of the following are the disadvantages of traditional cost management?

i. It ignores competition, market growth and customer requirement

ii. Excessive focus on cost reduction, broad cost reduction leads to inferior quality

iii. Relies only on financial data (historic in nature), hence dynamics of marketing and economics are ignored

iv. Reactive in approach, it serves a corrective function instead of preventive function

Option

(a) i, ii and iv

(b) i and ii only

(c) ii and iii only

(d) All of the above

ANSWER

Option (d) All of the above

All of the above are all disadvantages of traditional cost management.

18. Which of the following statements is correct about Strategic Cost Management?

(a) Allocation of cost is based on volume (per unit produced)

(b) Has a short term focus, with the main objective being cost control and reduction

(c) Based on analysis of internal and external factors, a proactive and dynamic approach to gain competitive advantage while containing costs

(d) Focuses reviews and investigation of variances and deviations that are only quantitative in nature

ANSWER

Option (c). Based on analysis of internal and external factors, a proactive and dynamic approach to gain competitive advantage while containing costs

Reason: Strategic Cost Management is the application cost management techniques to simultaneously improve the strategic position of the firm while also reducing cost. It is the assimilation of cost information into

strategy and vice versa, in order to gain a sustainable competitive advantage. Since it is linked to strategy, is a perpetual exercise and has a long term outlook. This approach to cost management is proactive where decisions are taken based on the strategic objectives of the company. Detailed cost analysis is driven by Value Chain Analysis, Cost Driver Analysis and Strategic Positioning Analysis, hence both quantitative and qualitative information is used in decision making. Allocation of cost is based on cost drivers (Cost Driver Analysis) and not just volume of production. It considers information from external and internal environment. The other points relate to Traditional Cost Management techniques.

19. Identify the false statement regarding cost leadership strategy –

(a) Standard cost for assessing performance assessment is very important for cost leadership

(b) Importance of meeting budgets is very important for cost leadership

(c) Market research to know customer perception about the product is very important for cost leadership

(d) Product cost as an input for pricing decision is important for cost leadership

ANSWER

Option (c) Market research to know customer perception about the product is very important for cost leadership

Reason: Market research to know customer perception about the product is very important for cost leadership is false. Market research information is very important for product differentiation strategy.

20. Value chain analysis is aimed at which of the following?

i. Eliminate costs

ii. Reduce costs

iii. Increase quantity sold

iv. Increase sales price

v. Identify opportunities for product differentiation

Option

(a) i, ii, and v

(b) iii and iv

(c) iii, iv, and v

(d) None of the above

ANSWER

Option (a) i, ii, and v

Reason: Value chain analysis is a framework that helps companies to identify opportunities to gain competitive advantage either by adopting cost leadership strategies (eliminating costs and reducing costs) or by product differentiation strategy (identify opportunities for product differentiation providing the customer something that the rival competitors do not). This analysis does not analyse the quantity sold or selling price of products and service.

21. The board of Modern Furniture Limited considering the need of strategies for Information related aspects. Chief Information and Technology officer made a statement "Information Technology (IT), Information System (IS) and Information Management (IM), all three are inter-connected; but not same. Information technology techniques are used as part of information system to manage information". He further highlights the nature of IT/ IS/ IM strategies and suggests–

i. IT strategy is supply-oriented

ii. IS strategy is demand-oriented

iii. IM Strategy is dimension-oriented

Which of the above specified statements are incorrect?

Option

(a) i only

(b) iii only

(c) i and ii only

(d) i and iii only

ANSWER

Option (b) iii only

Reason: IM strategy trying to put management into IT by defining the role and structure of the IT activities in the organisation. It is concerned with the management controls for IT, management responsibilities, performance measurement and management processes. Here it is decided who can assess the data and who cannot. It formulated at organisation wide level. It deals with control over the layout of IT uses in organisation. Hence IM strategy is relationship oriented.

22. Ali Fabrics Limited (AFL) has recently decided to invest in an Electronic Data Interchange system that will enable the AFL to automatically place orders with its major suppliers. Currently, AFL purchasing department staff have to place orders using postal mails and telephone to the company's suppliers, which is slow and inefficient.

Which activity within AFL's value chain will the new EDI system improve?

(a) Infrastructure

(b) Inbound Logistic

(c) Procurement

(d) Outbound Logistic

ANSWER

Option (c) Procurement

Reason: The EDI system will improve the system for sourcing and purchasing materials. This is procurement. Note that inbound logistics refers to inventory management - not the purchasing of inventory itself.

23. Ms. Angel, Chief Management Accountant and advisor to CEO of Avantha Holdings Inc. considering the value proposition canvas as tool to respond to aspects highlighted by customer profile analysis. You (cost trainee) recently join Avantha, Ms. Angel asked to appraise the following statement to pick the correct statement regarding value proposition map –

(a) Pain relievers and gain creators counter each other's effects

(b) Pain relievers and gain creators are the one and same thing

(c) Pain relievers are different from gain creators

(d) Either one of pain relievers or gain creator can be part of value proposition map

ANSWER

Option (c) Pain relievers are different from gain creators

Reason: Pain relievers and gain creators both create value for the customer in different ways. The difference is that the former specifically addresses pains in the customer profile, while the latter specifically addresses gains. It is okay if either of them addresses pains and gains at the same time, The main goal of these two areas is to make the customer value creation of your products and services explicit.

24. The technique of "Management by wandering around" is concerned with which of following leadership aspects of management accountant.

i. Communication

ii. Decisions Making

Option

(a) Both of i and ii

(b) Only with i

(c) Only with ii

(d) None of i and ii

ANSWER

Option (b) Only with i

Reason: Management by wandering/walking around (MBWA) is helpful in making communications and supporting TQM. MBWA refers to a style of business management which involves managers wandering around, in an unstructured manner, through the workplace(s), at random (rather than a plan where employees expect a visit from managers at more systematic, pre-approved or scheduled times), to check with employees, equipment, or on the status of ongoing work. The expected benefit is that a manager,

by random sampling of events or employee discussions, is more likely to facilitate improvements to the morale, sense of organizational purpose, productivity and total quality management of the organization, as compared to remaining in a specific office area and waiting for employees.

25. Technology is dynamic in nature and has significant bearing on activities that create value for customers. Your organisation is considering introducing RFID, as technological breakthrough. RFID is capable to revamp which of following primary activities (to generate scope of value) –

i. Inbound logistic

ii. Outbound logistic

iii. Sales and Marketing

iv. After-Sale Services

Option

(a) iii and iv only

(b) ii and iii only

(c) i and iii only

(d) i and ii only

ANSWER

Option (d) i and ii only

Reason: RFID (Radio-frequency identification uses electromagnetic fields to automatically identify and track tags attached to objects. An RFID system consists of a tiny radio transponder, a radio receiver and transmitter) can be used to track items in trading concerns throughout the supply chain. It is calibre to positively influence inbound and outbound logistic.

26. A Business model should contain which three components out of those stated below –

i. Customer value proposition

ii. Profit formula

iii. Impact factor

iv. Key resources and processes

Option

(a) i, ii and iii only

(b) i, ii and iv only

(c) i, iii and iv only

(d) ii, iii and iv only

ANSWER

Option (b) i, ii and iv only

Reason: In 2008, Johnson along with Christensen and Kaggerman extended the scope of business model to what was earlier proposed by Margretta and proposed that a business model also needs a value proposition, therefore business model should contain three components- 1. Customer value proposition, 2. Profit formula, 3. Key resources and processes.

27. Shri Krishna Bearing Ball Trading Limited is considering the proposal to enter into trading of casting iron as well. Mr. DK, chief strategic enumerate the entry exist barriers of proposed business line and called a review meeting at request of CEO to consider final advice of C-suite. You (Chief Cost Advisor) also attended the meeting and suggested that barriers have influence on profitability (rate as well as nature). Mr. DK told SKBBT expected that there will be high entry and exit barriers you are advised to tell nature and margin rate in context of five force model.

(a) Low margin with stable return

(b) Low margin with Risky return

(c) High margin with Risky return

(d) High margin with stable return

ANSWER

Option (c) High margin with Risky return

Reason: For Impact of exit and entry barriers on profitability (margin) refer exit and entry barriers matrix.

28. John W Fabrics considering the decisions regarding segmentation. Management Accountant raised and said it was acknowledged that managerial discretion and judgment determine which markets are selected and targeted and which others are ignored. In order for market segmentation to be effective, all segments must be –

(a) Distinct, Artistic, Measurable and Profitable

(b) Distinct, Accessible, Measurable and Profitable

(c) Desperate, Accessible, Many, and Profitable

(d) Distinct, Accessible, Measurable and Popular

ANSWER

Option (b) Distinct, Accessible, Measurable and Profitable

Reason: In order to be recognised as segment, the following criteria shall be satisfied the segment should be homogeneous internally, heterogeneous externally (distinct), identifiable (measurable), shall be reasonable if not substantial (profitable), and must be responsive (accessible).

29. Freshfood is a large supermarket chain operating in 45 different Indian cities that include the large Tier 1 and Tier 2 cities. Yummy Foods is a consumer goods company that produces products ranging from ketchup, jam, squash etc. Yummy Foods operates at a large scale and has considerable presence in the consumer goods industry. Yummy Foods has a 2 year contract with Freshfood to stock its products in its stores. Freshfood has similar contracts with other consumer goods companies that produce similar products to Yummy Food. These companies are competitors of Yummy Foods, operating at the same scale and margin. Due to the generic nature of their products, there can be no patent filed for them.

Freshfood plans to integrate its supply chain and plans to produce its own brand of consumer goods which will be similar to the products produced by Yummy Foods. This has caused uncertainty at Yummy Foods as their two year contract is now close to expiry after which prices have to be renegotiated with Freshfood.

Which ONE of the following statements relating to Porter's five forces model is correct in relation to Yummy Food's industry?

i. It has high barriers to entry

ii. It has high supplier bargaining power

iii. It has high buyer bargaining power

iv. It has threat of generic substitution of its products.

Option

(a) i and ii

(b) i and iii

(c) iii and iv

(d) ii and iv

ANSWER

Option (c) iii and iv

Reason: Statement iii – It has high buyer bargaining power since Freshfood has alternate suppliers who produce similar goods at the same scale and margin as Yummy Foods.

Statement iv – It has threat of generic substitution of its products since there are other companies that produce similar goods. The goods produced are generic and cannot be patented. Hence, the threat of generic substitution, where consumers do not see much difference in the various brands, is more.

Statement i – The barriers of entry are not high since a company like Freshfood, a supermarket chain, can enter the market with its own brand of similar products.

Statement ii – Not much information is available about the bargaining power of Yummy Foods, it is only given that it has considerable market presence.

30. Freshfood is a large supermarket chain operating in 45 different Indian cities that include the large Tier 1 and Tier 2 cities. Yummy Foods is a consumer goods company that produces products ranging from ketchup, jam, squash etc. Yummy Foods operates at a large scale and has considerable presence in the consumer goods industry. Yummy Foods has a 2 year contract with Freshfood to stock its products in its stores. Freshfood has similar contracts with other consumer goods companies that produce similar products to Yummy Food. These companies are competitors of Yummy Foods, operating at the same scale and margin. Due to the generic nature of their products, there can be no patent filed for them.

Freshfood plans to integrate its supply chain and plans to produce its own brand of consumer goods which will be similar to the products produced by Yummy Foods. This has caused uncertainty at Yummy Foods as their two year contract is now close to expiry after which prices have to be renegotiated with Freshfood.

What impact will be decision of Freshfood integrating its supply chain to produce its own brand of consumer goods have at the time of renewal of the contract with Yummy Foods?

(a) Freshfood may order lesser quantity of consumer goods from Yummy Foods

(b) Freshfood can bargain to lower the procurement cost of products from Yummy Foods

(c) Freshfood can increase its profit margins by offering its own brand of consumer goods that are similar to Yummy Foods

(d) Freshfood can offer its products at deep discounts to the customers and thereby gain market share

ANSWER

Option (b) Freshfood can bargain to lower the procurement cost of products from Yummy Foods

Reason: The correct answer is – Freshfood can bargain for a lower procurement cost from Yummy Foods because it has substitutes in the form of its own brand of products as well as has contracts with other suppliers of similar goods.

It is not necessary that Freshfood may reduce the quantity of consumer goods stocked from Yummy Foods, further not much information in this regard to draw this conclusion.

Also, no information is given about the cost of production of its own brand of consumer goods. Hence, no conclusion can be drawn about the profit margin or cost of production of Freshfood's own brand.

Similarly, the ability of Freshfood to offer its products at deep discounts will depend on partly on its cost of production and profit margin. This information is not available.

31. Using Porter's Five Forces model, which of the following will be evidence of high supplier power?

i. Buyers are aware of quality of products of supplier and supplier's competitors

ii. Ability to reach out to final customers is high (forward integration)

iii. Cost of switching suppliers is high for the buyer

iv. Products in the industry are homogenous in nature with not much differentiation

Option

(a) i and ii

(b) i and iii

(c) ii and iv

(d) ii and iii

ANSWER

Option (d) ii and iii

Reason: Statement ii – Ability to reach out to final customers is high (forward integration). When the suppliers have the ability to circumvent the buyer (say the retailer) and reach out to the final customers directly, they have more power due to forward integration.

Statement iii – When the cost of switching suppliers is high for the buyer, there would be a tendency to stick to the supplier. Hence, supplier gets more power.

Statement i – When buyers have information about the quality difference between the supplier and products of suppliers' competitors, it will add to the buyer's negotiating power.

Statement iv – Product differentiation adds to supplier power. Hence, where there is homogeneity of products supplier power is lesser.

32. Value Proposition canvas is based on which of the following elements of the business model canvas?

(a) Customer Segment, Key Activities

(b) Customer Segment, Channel

(c) Value Proposition, Cost Structure

(d) Value Proposition, Customer Segment

ANSWER

Option (d) Value Proposition, Customer Segment

Reason: The answer is based on the value proposition element and customer segment element of the business model canvas. It is a tool that enables companies design, test, build and manage customer value propositions. It shows how a company can try to fit the value it offers (value proposition) with the needs of the customer (customer segment).

33. Which of the following is not a part of the customer segment profile that is done as part of the value proposition canvas –

(a) Customer Jobs

(b) Customer Profitability

(c) Customer Pains

(d) Customer Gains

ANSWER

Option (b) Customer Profitability

Reason: Customer profitability is not part of the value proposition canvas. Value proposition is a tool that enables companies design, test, build and manage customer value propositions. It shows how a company can try to fit the value it offers (value proposition) with the needs of the customer (customer segment). Customer profitability analysis, a financial measure, is not done as part of value proposition canvas.

34. Which of the following is not a component of external environment? Use the STEEPLE Framework –

(a) Ethics

(b) Legal

(c) Environment

(d) Economies of scale

ANSWER

Option (d) Economies of scale

Reason: The correct answer is Economies of Scale which is determined by the strategic decisions taken by the management of the company. STEEPLE stands for Social, Technology, Environment, Economy, Political, Legal and Ethics.

35. Which of the following is poses Opportunities and Threats to a company?

(a) Internal Resources

(b) Core Competencies

(c) Government Policies only

(d) External Environment

ANSWER

Option (d) External Environment

Reason: The correct answer is External Environment. Government policies do pose opportunities and threats but is not the only factor. There are many social, economic, technology factors also pose opportunities and threats.

36. To cope with hyper competition, companies need to develop which of the following –

i. Speed and flexibility in strategic decision making

ii. Creating sustainable competitive advantage

iii. Making unexpected decisions that were not anticipated by the market

iv. Shift the rules of the market by making fundamental changes to its working

Option

(a) i and ii

(b) i and iii

(c) i, ii and iii

(d) i, iii and iv

ANSWER

Option (d) i, iii and iv

Reason: The correct answer is i, iii and iv.

Robert D'Aveni's 7S framework helps companies navigate the hyper competitive market. These include Stakeholder's satisfaction; Strategic soothsaying; Speed; Surprise; Signals; Shifting the rules of a market; and Simultaneous and sequential thrust.

Statement i is the speed and flexibility of strategic decision making.

Statement iii is the surprise element in the decisions taken that gives the company an edge since this was not an anticipated move and therefore gives a temporary competitive advantage.

Statement iv is making fundamental changes to the industry's working; this will cause disruption that will provide competitive advantage.

37. Which of the following is not critically important for cost leadership?

(a) Importance of competitor cost analysis

(b) Importance of product cost as an input for pricing decision

(c) Importance of marketing cost analysis

(d) Importance of standard costs in assessing performance

ANSWER

Option (c) Importance of marketing cost analysis

Reason: The correct answer is – for cost leadership marketing cost analysis is not very important. It determines the risks and possible gains from various marketing activities. While it will be looked into for efficiency of costs, it is not a critically important for cost leadership. It is very important for product differentiation, where the success of the differentiating factor depends on making the customer aware of this unique feature of the product.

Competitor cost analysis compares the cost structure of the company with that of its rivals. It will help identify areas where better cost control can lead to cost leadership.

Product cost the most important cost component for pricing decision and hence plays an important role in cost leadership.

Standard cost provides the benchmark based on which performance of various cost categories can be assessed.

38. Which of the following is a question relating to value proposition?

(a) Which of the customer's problems are we helping to solve?

(b) For whom are we creating value?

(c) How do we reach out to the customer and increase their awareness?

(d) What are the customers currently paying for?

ANSWER

Option (a) Which of the customer's problems are we helping to solve?

Reason: The correct answer is – Which of the customer's problems are we helping to solve? A value proposition creates value for the customers by satisfying their needs. The value proposition may be quantitative (for example price, performance, timeliness of delivery etc.) or qualitative (for example brand value, design, convenience, novelty etc.).

39. Using Mendelow's Matrix for stakeholder influence, match the type of stakeholder to level of power and interest that can influence the objectives of an organization.

Type of Stakeholder	Power and Interest
i. Influential	(a) Low Power, High Interest
ii. Marginal Player	(b) High Power, Low Interest
iii. Key Player	(c) Low Power, Low Interest
iv. Affected	(d) High Power, High Interest

Option

(a) i- d, ii- a, iii- b, iv- c

(b) i- d, ii- c, iii- b, iv- a

(c) i- b, ii- c, iii- d, iv- a

(d) i- b, ii- a, iii- d, iv- c

ANSWER

Option (c) i- b, ii- c, iii- d, iv- a

Reason: Influential Stakeholder – High Power Low Interest

Marginal Player – Low Power Low Interest

Key Player – High Power High Interest

Affected – High Power Low Interest

40. Using Mendelow's Matrix for stakeholder influence, match the type of stakeholder to the response to be provided to each type of stakeholder.

Type of Stakeholder	Response to Stakeholder
i. Influential	a. Manage closely
ii. Marginal Player	b. Keep informed
iii. Key Player	c. Keep satisfied
iv. Affected	d. Monitor

Option

(a) i- c, ii- d, iii- a, iv- b

(b) i- d, ii- c, iii- b, iv- a

(c) i- b, ii- c, iii- d, iv- a

(d) i- b, ii- a, iii- d, iv- c

ANSWER

Option (a) i- c, ii- d, iii- a, iv- b

Reason: Influential stakeholder – Keep Satisifed

Marginal Player – Monitor

Key Player – Manage Closely

Affected – Keep Informed

41. XYZ Hospitals has emerged as Europe's foremost integrated healthcare services provider and has a robust presence across the healthcare ecosystem. Which one of the following is more likely to relate to XYZ's Value Statement?

(a) To bring healthcare of International Standards within the reach of every individual

(b) Be the global leader in cutting-edge Robotic Surgery

(c) Develop innovative programs and services to meet the unique needs of patients

(d) Practice the safest, most equitable and effective medical care

ANSWER

Option (d) Practice the safest, most equitable and effective medical care

Reason: A value statement is a set of ideals that explain what a company believes in and how it operates. Practice the safest, most equitable and effective medical care is the Value Statement.

42. A product that holds high market share in a market experiencing high rates of growth would be considered what type of product according to the BCG matrix?

(a) Star

(b) Cash Cow

(c) Dog

(d) Question mark

ANSWER

Option (a) Star

Reason: "Star" products are those that hold a high market share and are in a market that is experiencing high rates of growth.

43. One of the biggest pharmaceutical businesses in the world is Az. Which of the following sums up a competitive advantage's reasons the best?

(a) Az is a big business that can outwit smaller rivals

(b) Az makes significant investments in the research and creation of novel products

(c) Az enjoys a good reputation because it hasnt experienced a significant product recall in more than five years

(d) Az obtains patents on significant medication breakthroughs in order to safeguard its intellectual property

ANSWER

Option (d) Az obtains patents on significant medication breakthroughs in order to safeguard its intellectual property

Reason: As a patent gives a distinct competitive advantage that keeps rivals from duplicating/ copying a product for a set amount of time.

44. Which of the following statements outlines major limitations of traditional cost management?

i. Traditional cost management overlooks factors such as competition, market growth, and customer requirements as it primarily deals with quantitative aspects within the organization.

ii. Traditional cost management places excessive emphasis on cost reduction, potentially forgoing strategic cases, leading to lower quality.

iii. Traditional cost management is static and historical, neglecting the dynamics of marketing and economics, relying on financial accounting data.

iv. Traditional cost management has broad focus on reviewing quantitative variances and deviations, considering behavioural aspects also.

Option

(a) (ii), and (iii)

(b) (i), (ii), and (iii)

(c) (ii), (iii) and (iv)

(d) (i), (ii), (iii), and (iv)

ANSWER

Option (b) (i), (ii), and (iii)

Reason:

i. Traditional cost management ignores competition, market growth, and customer requirements, because it is largely concerned with the quantitative factors inside the organisation.

ii. Traditional cost management places excessive focus on cost reduction. It ignores the strategic importance of individual cases. Broad cost reduction leads to inferior quality.

iii. Traditional cost management ignores the dynamics of marketing and economics because it relies on financial accounting data that is static and historical in nature.

iv. Traditional cost management has a limited focus on review and investigation, only of those variances and deviations that are quantitative in nature.

45. Which of the following is not the aim of strategic supply chain management?

(a) Develop a supplier network that can cater to raw material requirements with minimum lead time

(b) Focus on customers whose lifetime value is very profitable

(c) Ensuring proper communication and information systems that will ensure robust functioning of the organization

(d) Frequent changing of suppliers and sales dealerships

ANSWER

Option (d) Frequent changing of suppliers and sales dealerships

Reason: Strategic supply chain management tends to encourage long term relationships with partner organizations both on the supply and demand side. The company can generate sustainable value only from having such synergic relationships. Frequent changing of suppliers and sales dealerships does not support this objective.

46. Which of the following best describes Total Quality Management?

(a) Identifying the cost drivers for a company's major activities

(b) Applying "zero-defect" philosophy aimed at embedding awareness of quality in all organizational processes

(c) Tracking costs and revenues attributable to each product over its life cycle

(d) Measuring how low the costs of a product need to be by reducing the desired profit margin from the expected selling price

ANSWER

Option (b) Applying "zero-defect" philosophy aimed at embedding awareness of quality in all organizational processes

Reason: The correct answer is (B) Total Quality Management (TQM) is the planning and controlling of all business functions so that products or services are produced to meet the expectations of the customer. It aims at improving the quality of a company's output through continuous improvement of internal practices. Zero-Defect philosophy aims at embedding awareness of quality in all organizational processes. Option (A) describes activity based costing, Option (C) lifecycle costing and Option (D) target costing.

47. Value chain analysis is aimed at which of the following?

i. Eliminate costs

ii. Reduce costs

iii. Increase quantity sold

iv. Increase sales price

Option

(a) Identify opportunities for product differentiation

(b) i, ii, and v iii and iv

(c) iii, iv, and v

(d) None of the above

ANSWER

Option (a) Identify opportunities for product differentiation

Reason: Value chain analysis is a framework that helps companies to identify opportunities to gain competitive advantage either by adopting cost leadership strategies (eliminating costs and reducing costs) or by product differentiation strategy (identify opportunities for product differentiation providing the customer something that the rival competitors do not). This analysis does not analyse the quantity sold or selling price of products and service.

48. Medicare produces specialized medical equipment used by a number of medical practitioners. It has identified a Critical Success Factor (CSF) "Customers should find zero defects with the medical equipment. Aim for zero defective sale units."

The Critical Success Factor identified above aims to reduce which of the following Cost of Quality (COQ) to the very minimum:

(a) Cost of External Failure

(b) Cost of Internal Failure

(c) Preventive Cost

(d) Appraisal Cost

ANSWER

Option (a) Cost of External Failure

Reason: Medicare aims to have zero defective unit sales. This implies that they wish to reduce cost of sale returns, warranty costs, cost of product recalls and any other cost incurred due to a complaint from the customer.

The other costs namely internal failure costs, preventive costs and appraisal costs are costs incurred at the discretion of Medicare.

Taking sufficient preventive and appraisal measures and also ensuring that defects are detected before the products reach customers by reworking on defects or scrapping them altogether, would all put together ensure that cost incurred on defective goods due to customer complaints is kept at minimum.

49. Hcare produces specialized medical equipment used by a number of medical practitioners. It has identified a Critical Success Factor (CSF) "Customers should find zero defects with the medical equipment. Aim for zero defective sale units."

Which of the following would be a Key Performance Indicator that directly relates the "zero defective sale "CSF identified above?

(a) Training hours imparted to manufacturing staff about in quality control for manufacturing process

(b) Cost of product returns and replacement cost

(c) Cost of inspection and testing

(d) Quality certifications from external agencies

ANSWER

Option (b) Cost of product returns and replacement cost

The correct option is cost of product returns and replacement. Where the sales to customers are expected to be of zero defects, there should ideally be no cost of product returns and replacement cost. Any such incidence captured in the KPI Dashboard should then be investigated by Medicare to detect any weakness in the area identified as critical to success. Training hours imparted to manufacturing staff about quality control is a preventive cost, not directly related to zero defective sales, although it aims at reducing defects by imparting appropriate training to the staff. Cost of inspection and testing aims to find out defects before the product reaches the customer, it is an appraisal cost. Quality certifications from external agencies is an appraisal cost incurred to improve customer perception about the quality of the product. Quality certification by itself does not prevent defects or ensures zero defective sales.

50. A company wants to implement Just in Time Manufacturing (both for procurement and production). Which of the following would not be required to be Critical Success Factors (CSFs) required to be met in order to ensure the success of the JIT project?

(a) Accuracy of demand prediction and close links with suppliers supply of raw materials

(b) Agile production lines that are flexible to meet the change in demands

(c) Low set up time and cost each time there is change in the production line

(d) Have sufficient storage space to keep excess inventory

ANSWER

Option (d) Have sufficient storage space to keep excess inventory

Reason: Sufficient storage space to keep excess inventory is not need in JIT system of procurement and production because it is based on pull type supply chain management. Hence production and procurement take place only after an actual order is received from the customer. Since there is no buffer stock between production levels and customer demand, the accuracy of demand prediction is very important (CSF). Also, the suppliers have to supply raw material of the appropriate quality on time for the production to begin. Hence close links and communication with supplier is also important (CSF). Production lines have to be flexible enough to be able to produce the product as per customer requirements (CSF). High set up time and cost each time there is a change in production, will lower profitability and productivity. Hence agility of production is a CSF.

51. Which of the following is false about Kaizen costing?

(a) It uses target costing to set the required planned cost of the product

(b) Continuous improvement is aimed at producing new products

(c) The purpose is to build the idea of continuous improvement in the production process

(d) Focuses on elimination of waste and improving productivity

ANSWER

Option (b) Continuous improvement is aimed at producing new products

Reason: The statement continuous improvement is aimed at producing new products is false. Kaizen costing primarily aims to improve the existing production process. It may only indirectly give impetus or enable innovation, the improvement is not directly aimed at making innovative product.

52. Which one is not a benefit of Shine?

(a) Less production downtime

(b) Happier employees

(c) Improved quality

(d) Inventory reduction

ANSWER

Option (d) Inventory reduction

Reason: It is necessary to keep the work area clean and safe. Shining is also an inspection process for the area, i.e., is everything in good condition? This leads to less production time, happier employees by reducing their stress levels, and improved quality. Inventory reduction is not among the benefits of shine.

53. Which of the following does Kaizen improvement process not focus on?

(a) Poka-Yoke

(b) 5S

(c) Improvement by innovation

(d) Just-in-time principles

ANSWER

Option (c) Improvement by innovation

Reason: Kaizen is lean thinking and structured around the core premise of continuous improvement rather innovation hence Kaizen focuses on (A), (B) and (D) options only.

54. What will be overall equipment effectiveness, if second is ideal cycle time; planned production time is 7 hour and out of total count of 19,240 units, the good count are 18,848 units.

(a) 97.96%

(b) 76.35%

(c) 74.79%

(d) 74.97%

ANSWER

Option (c) 74.79%

Reason: Formula for calculating Overall Equipment Effectiveness (OEE) can be either of Availability × Performance × Quality or (Good Count × Ideal Cycle Time) / Planned Production Time – (18,848 units × 1.0 seconds) / (420 minutes × 60 seconds) = 0.7479 (74.79%).

55. Which of the following is not a prerequisite for an effective JIT system?

(a) Lesser set up time

(b) Total quality management

(c) Varying demand patterns

(d) Multi skilled labour force

ANSWER

Option (c) Varying demand patterns

Reason: The correct answer is varying demand patterns are not helpful in JIT systems, the demand should be predictable since the company operates without inventory.

Lesser set up time that makes batch production economical. Total quality management that enables quick elimination of defects. Multi skilled labour force can perform different activities including repairs and maintenance, which reduces idle time.

56. A company follows Just in Time system for material procurement and production. An accountant finds difference between the accounting records of the company and the actual inventory on hand. The company uses backflushing system of accounting to track inventory. Possible reasons for this would be:

i. Inaccurate production figures entered by production staff due to lack of training

ii. Abnormal loss during production is not tracked by production staff

iii. Back flushing transaction posting utilization of raw material inventory happens only at the end of the day when the production is complete

iv. Back flushing costing records components used for work in progress while inventory is accounted for at the end of the day by the production staff

Option

(a) i, ii and iv

(b) i, ii and iii

(c) i, iii and iv

(d) i, ii, iii and iv

ANSWER

Option (b) i, ii and iii

Reason: The correct answer is (i), (ii) and (iii) are possible reasons for difference between accounting records maintained under backflush costing and actual inventory.

Back flush costing transaction for inventory is posted only once production is complete and is consolidated entry. Hence, back flush costing records do not record components issued that are in work in progress.

57. How is target cost calculated?

(a) Desired selling price – actual profit margin

(b) Market price – desired profit margin

(c) Desired selling price – desired profit margin

(d) Market price – standard profit margin

ANSWER

Option (b) Market price – desired profit margin

Reason: Market price less desired profit margin. The product cost estimate is arrived at by subtracting the desired profit margin from a

competitive market price. Option (C) is incorrect since the selling price should be one that the current market commands, not one that the company desires.

58. SW is selling an electronic product that is aiming at a customer base who are early adopters. Their market share in the current year has been growing rapidly and consequently profits are also increasing rapidly. Market competition is increasing with a growing number of competitors for SW.

For this electronic product, which stage of product life cycle is SW experiencing?

(a) Introduction

(b) Growth

(c) Maturity

(d) Decline

ANSWER

Option (b) Growth

Reason: SW has a customer base for its product who are early adopters. Early adopters are those who embrace new technology, although their risk taking appetite is lower than that of innovators (typically customers of the introduction stage of product life cycle). Increased competition, growing market share and growth in profits are characteristics of growth phase of product life cycle.

59. IEE is selling an electronic product that is aiming at a customer base who are early adopters. Their market share in the current year has been growing rapidly and consequently profits are also increasing rapidly. Market competition is increasing with a growing number of competitors for IEE.

Which strategy should IEE not adopt at this stage?

(a) Strategy shifts from acquisition to retention of customers

(b) Development of long term relationships with customers

(c) Leverage the product's perceived differential advantage to secure a strong market position

(d) Build selective distribution channels to target niche customers only

ANSWER

Option (d) Build selective distribution channels to target niche customers only

Reason: Build selective distribution channels to target niche customers only is a strategy followed during the decline stage of product life cycle when the product is being phased out and is made available only to its loyal, niche customer base. IEE (currently in the growth phase) should build a very intensive distribution system in order to reach out to the masses and increase market share. The customer base is given to be that of early adopters, that is they are already aware of the product and its features. Hence, IEE should now try to capture market share through retention of customers. IEE should build relationships through offering product extensions, service and warranty to develop long term relationships with customers. Perceived differential advantage should be used to increase its market position.

60. The management of a company are spending huge money on distribution and promotion of Product Z. Huge efforts are being made to reach out to customers through various marketing channels and promotional events. Decisions are being taken about Product branding, packaging and labelling. This is despite Product Z having low sales volume, yielding negative profits. There are few competitors for Product Z.

Which life cycle characteristics does Product Z show?

(a) Introduction

(b) Growth

(c) Maturity

(d) Decline

ANSWER

Option (a) Introduction

Reason: The correct answer is Introduction stage of life cycle of a product where Product Z seems to be a new product that is being launched in the market. The products at this stage are novel and there is minimal awareness about it, hence the huge spend on advertising and promotional events. Generally. customers are innovators who are being enticed to try out the product.

61. Which of the characteristics and strategies in the growth phase of a product's life cycle?

i. Offer a product with extensions, service and warranty

ii. High R&D spend, to improve or enhance product features to differentiate the product from that of the competitors

iii. Shift from product awareness to product conviction

iv. Build intensive distribution channels to handle additional volumes and new market

Option

(a) i, ii and iii

(b) i, iii and iv

(c) ii, iii, and iv

(d) i, ii, iii, and iv

ANSWER

Option (b) i, iii and iv

The correct answer is (i), (iii) and (iv).

Reason: In growth phase, sales are increasing rapidly due to greater customer awareness. Competitors enter the market and hence competition increases. To differentiate, the basic product should now be offered with product extensions, service and warranty. This will help build product conviction and a loyal customer base for the product. Since sales are increasing, the product availability should be made through multiple

retailers over different sales channels. This will increase market reach and market share.

Statement (ii) High R&D spend, to improve or enhance product features to differentiate the product from that of the competitors relates to maturity phase.

62. In WM Ltd. the 'OB' equipment is about to be replaced either by 'CF' system or by an 'OF' system. Finance costs 12% a year and the other estimated costs are as follows:

	CF	OF
Initial Cost	28,000	40,000
Annual Operating Costs	24,000 p.a.	18,000 p.a.

If the company expected the new system (either CF or OF) to last at least for 12 years, which system should be chosen?

(a) CF since the life cycle cost is ₹ 1,72,049 which is lower as compared to OF having a cost of ₹ 2,86,748

(b) CF since the life cycle cost is ₹ 5,13,253 which is lower as compared to OF having a cost of ₹ 7,27,952

(c) OF since the life cycle cost is ₹ 1,49,151 which is lower as compared to CF having cost of ₹ 1,51,492

(d) OF since the life cycle cost is ₹ 1,51,492 which is lower as compared to CF having cost of ₹ 1,76,656

ANSWER

Option (d) OF since the life cycle cost is ₹ 1,51,492 which is lower as compared to CF having cost of ₹ 1,76,656

Reason:

Calculation of Life-cycle Costs

	CF (₹)	OF (₹)
Initial Cost	28,000	40,000

Add: Present value of annual operating costs over the lifetime	1,48,656 (₹ 24,000 x 6.194)	1,11,492 (₹ 18,000 x 6.194)
Total Life Cycle Costs	1,76,656	1,51,492

The annuity factor of 12% finance costs for 12 years is 6.194.

63. In the industry life cycle, which of the following best characterizes an industry in the growth stage?

(a) New goods are being created all the time

(b) A select few companies control the majority of the market

(c) There is little threat from substitutes and few competitors

(d) There is no pressing need for competitive differentiation

ANSWER

Option (d) There is no pressing need for competitive differentiation

Reason: There is no pressing need for competitive differentiation- is correct in the sense that there is "enough room for everyone" in the industry, and as the industry expands, competitive differentiation is not currently critical. When new players enter a growing industry, competition intensifies during the growth phase. Due to a constant supply shortage, competition in the industry is low and buyers' power is still relatively low. Most organizations can survive with rapid growth. Rather than focusing on the future, organizations' main concern will be meeting the demand as it arises.

64. The selling price of Product X is set at $275 for each unit and sales for the coming year are expected to be 400 units. A return of 30% on the investment of $1,25,000 in Product X will be required in the coming year.

What is the target cost for each unit of Product X?

(a) $181.25

(b) $165.00

(c) $187.50

(d) $362.50

ANSWER

Option (a) $181.25

Reason: Return: $1,25,000 × 30% = $37,500

Total sales revenue = $275 × 400 = $1,10,000

Therefore, total cost = $1,10,000 – $37,500 = $72,500

Unit cost = $72,500/ 400 = $181.25

65. A business ecosystem is a _____of organizations that are involved in the delivery of a specific product or service through both competition and_____.

(a) Identical group and Co-operation

(b) Identical group and rivalry

(c) Network and Co-operation

(d) Network and rivalry

ANSWER

Option (c) Network and Co-operation

Reason: A business ecosystem is a network of organizations (such as suppliers, distributors, customers, competitors, government agencies, and so on) that are involved in the delivery of a specific product or service through both competition and cooperation.

66. Care Beauty Products Limited planning to launch Deodorant Spray 'Fresh'. It conducted market study and found that there are –

i. High entry barriers, not easily allowing new players to enter and challenge existing companies

ii. Strong bargaining power of buyer (with fragmented preferences)

Based upon the above two findings the Chief Strategist concluded there is hyper-competition, while marketing VP holds a different opinion. You are require to identify which of the above stated two findings correctly represent hyper-competition.

(a) Both i and ii

(b) Only i

(c) Only ii

(d) None of i and ii

ANSWER

Option (c) Only ii

Reason: Hyper competition witness low entry barriers, allowing new players to enter and challenge existing companies; that make competition further stiffer.

67. Which of following are the components of Disruptive Innovation –

i. Enabling Technology

ii. Innovative Business Model

iii. Sustainability

iv. Coherent Value Network

Option

(a) i, ii, and iii

(b) ii, iii and iv

(c) i, iii, and iv

(d) i, ii, and iv

ANSWER

Option (d) i, ii, and iv

Reason: There are three main components of disruptive innovation- Enabling Technology - Innovation requires the ability to create a better product. The transistor radio used the broadcast network to create a low-cost portable radio. Disruptive or Innovative Business Model - In order for a disruptive business to succeed, it must use a new business model that targets new or low-end customers within a given industry. This is what distinguishes a disruptive innovation from a standard innovation. Even if they are unique, not all innovations are disruptive. Coherent Value

Network - For a disruptive innovation to take root, it must be accepted across a coherent value network, which includes suppliers.

68. Lean start-up saves the cost and enhance efficiency because it helps entrepreneurs to navigate extreme uncertainties by testing_____.

(a) Scientific hypotheses with a minimal viable product using waterfall development

(b) Business plan with a minimal viable product using waterfall development

(c) Scientific hypotheses with a minimal viable product using agile engineering

(d) Business plan with a minimal viable product using agile engineering

ANSWER

Option (c) Scientific hypotheses with a minimal viable product using agile engineering

Reason: Eric Ries explains lean start-up help entrepreneurs to navigate extreme uncertainties by testing scientific hypotheses (statistical assumptions based upon which, strategic options are driven) with a minimal viable product (MVP). On basis of engineering opposite to traditional engineering that is based upon the agile or waterfall development the lean start-up relied upon agile development (i.e. build the product iteratively & incrementally).

69. Lean start-up, Agile and Design thinking are emerging and prominent aspects of Changing Business Environment. _____ is the common core of the Lean start-up, Agile and Design thinking.

(a) Scientific hypotheses

(b) Innovation

(c) Creativity

(d) Technical Solution

ANSWER

Option (b) Innovation

Reason: Innovation is the Core of the Design Thinking, Lean Start-up and Agile. Innovation happens when the creative solutions and the technical capabilities come together. Combining these three methodologies really drives the innovative process by involving the technical team as early as possible.

70. A start-up go through three main phases while transforming into Unicorn (and then into Incumbent), each phase involves a unique sort of fitment to be ensured, which of following are not among such fitments.

(a) Scale Fit

(b) Problem-Solution Fit

(c) Scope Fit

(d) Product-Market Fit

ANSWER

Option (c) Scope Fit

Reason: There are three main stages start-ups go through - Pre-start-up stage - This is the problem-solution FIT stage. Vision and idea are conceptualized, while considering – a. Who will be the customers? b. Which of their problems to be solved and c. How these will be solved? Start-up stage - This is the product-market FIT stage. It starts showing commitment. Intended to have customer validation that product offered is market valuable product. Testing is also performed to get feedback from clients, and iterate the process accordingly. Scale-up - This is the scale-FIT stage. It start establishing growth, trying to get to profitable cash flow. They are creating bigger customer bases and aim to come close to unicorn.

71. Manager market the viable products into market, while inventor work on idea in search of viable product. Who among the following bridge the gap between inventors and managers?

(a) Investor

(b) Industrialist

(c) Intrapreneur

(d) Entrepreneur

ANSWER

Option (c) Intrapreneur

Reason: Intrapreneur is an employee who is entrusted with creating an innovative idea with an organization. One of the main objective of intrapreneur is to strengthen the company's sustainability. An intrapreneur will continue to receive payment in the form of salary, even if the product does not reach the production level, unlike entrepreneur who takes personal risk when a product does not generate revenue.

72. Which of following two statements are incorrect –

i. Incubator is different from accelerator

ii. Accelerator offers structured, collaborative program whereas Incubator replies upon the short term program

Option

(a) Both i and ii

(b) i only

(c) ii only

(d) None of the i and ii

ANSWER

Option (c) ii only

Reason: Incubator also referred to as startup hubs i.e., the places that aim to provide the ideal conditions for founders to quickly grow their young businesses; through a structured, collaborative program. Whereas as accelerators accelerate growth by removing some of the risk and uncertainty involved, through a short term program usually for start-ups that already have a Market Viable Product (MVP).

73. Supply chain innovation have evolved in response to customer needs and desires. Correctly match the items of following sets i.e., broad approaches to supply chain innovation and focus thereof –

i.	Rapid	A.	Respond to changes
ii.	Agile	B.	Waste elimination
iii.	Lean	C.	Speed and efficiency

Option

(a) i- C, ii-B, and iii-A

(b) i- C, ii-A, and iii-B

(c) i- B, ii-C, and iii-B

(d) i- B, ii-A, and iii-C

ANSWER

Option (b) i- C, ii-A, and iii-B

Reason: Three broad approaches to supply chain innovation have evolved in response to customer needs and desires, namely- (i) Rapid supply chains that prioritize speed and efficiency. (ii) Agile supply chains that emphasize a company's ability to respond to changes in demand (volume and variety). (iii) Lean supply chains that prioritize waste elimination (including time).

74. Out of followings which are the correct statements about the hyper-disruptive Business Models –

i. The pyramid model also referred to as servitisation model

ii. The access-over-ownership model provides permanent access to goods and services traditionally only available through purchase

Option

(a) Both i and ii

(b) i only

(c) ii only

(d) None of i and ii

ANSWER

Option (d) None of i and ii

Reason: Subscription models are also referred to as servitisation models, servitisation has no nexus with pyramid model. The access-over-ownership model provides temporary access to goods and services traditionally only available through purchase.

75. Out of followings which are the incorrect statements about the models relevant to Sustainability –

i. Gift economy is an extreme form of sharing economy

ii. Closed-loop production is when the materials used to make a product are recycled at last stage of the manufacturing process

Option

(a) i only

(b) ii only

(c) Both of i and ii

(d) None of the i and ii

ANSWER

Option (b) ii only

Reason: The Sharing Economy is sort of participatory sharing schemes provide timely access to resources, allowing for more efficient use of otherwise idle resources. Whereas gift economy makes use of voluntary donations, such as 'pay what you want,' and capitalizes on social sustainability concerns. A gift economy is opposed to the commodification of resources and labor exchange through monetary transactions. Therefore, gift economy is an extreme form of sharing economy. Closed-loop production is when the materials used to make a product are recycled throughout the manufacturing process. The premise of circular models is minimising or eliminating waste and maximising resource efficiency in production - consumption systems. It is frequently referred to as 'cradle to cradle' production or 'industrial symbiosis'.

76. Uni-Gel Pens recently entered in hyper-competition market of ball and gel pens; the strategic focus of Uni-Gel Pens shall be on _____ of _____ advantages –

(a) One shot of windfall advantage

(b) Continuity of sustainable advantages

(c) Prefect mix of short term and long term advantages

(d) Series of short term advantages

ANSWER

Option (d) Series of short term advantages

Reason: In a highly competitive market, companies frequently aggressively challenge their competitors not to maintain a competitive advantage, but to maintain value creation. Organizations strive for a series of short-term advantages based on market disruption, once such disruption matures, the organization will shift to another disruption. It is worth noting for students that those companies which failed to innovate constantly or at short interval, may become irrelevant in market.

77. Grammarly is an American cloud-based typing assistant. It reviews spelling, grammar, punctuation, clarity, engagement, and delivery mistakes in English texts, detects plagiarism, and suggests replacements for the identified errors. It also allows users to customize their style, tone, and context-specific language. It offers two plans for individuals.

Free for individuals, that offers basic writing suggestions and tone detection (Grammar, Spelling, Punctuation, Conciseness, and Tone detection)

Premium plan for individual that offers Clarity, vocabulary, and tone improvements (Everything in Free, Full-sentence rewrites, Word choice, Tone suggestions and Citations).

Grammarly business relying on which of following business models –

(a) Free

(b) Premium

(c) Subscription

(d) None of these

ANSWER

Option (d) None of these

Reason: Model adopted by Grammarly is Freemium, wherein essential services or product is offered free and for premium services or more quantum you have to pay (yes, payment can be further based upon either subscription model or pay as per use model).

78. Disruptive innovations can be classified in following categories:

(a) Low end disruption and new product disruption

(b) Low end disruption and new market disruption

(c) High end disruption and new product disruption

(d) High end disruption and new market disruption

ANSWER

Option (a) Low end disruption and new product disruption

Reason: Christensen explains that there are two types of disruptive innovation: low-end and new-market. Low-end disruption is when a company uses a low-cost business model to enter at the bottom of an existing market and claim a segment. New-market disruption is when a company creates a new segment in an existing market with a low-cost version of a product.

79. Which of the following category of technological advancement best describe installing passbook update kiosk at bank?

(a) Transformation

(b) Extension

(c) Automation

(d) Revolution

ANSWER

Option (c) Automation

Reason: Change in business model on account of technological advancements can be classified into automation, extension or

transformation. Automation is the use of technologies for performing any function or process digitally which was earlier performed by humans. Installing passbook updation kiosk is mere automation, where installing ATM can be seen as transformation.

80. Which of the following category of technological advancement best describe installing Automated Teller Machine (ATM) that allow the banks' customer to withdraw cash, print of mini statement of transactions and balance enquiry, etc. out of banking hours as well.

(a) Automation

(b) Transformation

(c) Extension

(d) Revolution

ANSWER

Option (b) Transformation

Reason: Change in business model on account of technological advancements can be classified into automation, extension or transformation. Transformation is the use of technology that not only revamps the product or services that an organisation offers but also its process and culture. Installing ATM can be seen as transformation.

81. Which of the following is not true about Hyper competition?

i. Competitive advantage is permanent with focus on sustaining value creation

ii. Weak bargaining power of buyers in the market

iii. Low entry barriers, allowing new players to enter and challenge existing companies

iv. Strategic maneuvers occur in a structured and gradual manner

Option

(a) ii and iii

(b) i, ii and iii

(c) ii, iii and iv

(d) i, ii and iv

ANSWER

Option (d) i, ii and iv

Reason: Statement i – competitive advantage is temporary, since competition is so intense that the market landscape is constantly changing.

Statement ii – Bargaining power of buyers is high since they have a variety of substitutes to choose from, they can demand quality products at a lower price.

Statement iv – Strategic manoeuvres occur in a very occur at a quick, intense and unexpected pace. The idea is to keep sustaining value and remaining ahead of rivals by creating temporary advantages, before it is copied in turn by the rivals.

82. An industry characterized by high instability frequent disruptions from rapid technological growth, ability of buyers to switch between substitutes and profiting from temporary competitive advantage can be classified as –

(a) Disruption

(b) Monopolistic Competition

(c) Hyper Competition

(d) Monopoly

ANSWER

Option (c) Hyper Competition

Reason: Hyper Competition, a market place with intense competition, where rivals out do each other by frequently disrupting the market in order to get a temporary competitive advantage over others. It is characterized by rapid technological growth, high buyer bargaining power and availability of substitutes.

83. To cope with hyper competition, companies need to develop which of the following –

i. Speed and flexibility in strategic decision making

ii. Creating sustainable competitive advantage

iii. Making unexpected decisions that were not anticipated by the market

iv. Shift the rules of the market by making fundamental changes to its working

Option

(a) i and iii

(b) i and ii

(c) i, iii and iv

(d) i, ii and iii

ANSWER

Option (c) i, iii and iv

Reason: Robert D'Aveni's 7S framework helps companies navigate the hyper competitive market. These include Stakeholder's satisfaction; Strategic soothsaying; Speed; Surprise; Signals; Shifting the rules of a market; and Simultaneous and sequential thrust.

Statement i is the speed and flexibility of strategic decision making.

Statement iii is the surprise element in the decisions taken that gives the company an edge since this was not an anticipated move and therefore gives a temporary competitive advantage.

Statement iv is making fundamental changes to the industry's working; this will cause disruption that will provide competitive advantage.

84. Which are the features of traditional business models?

i. Speed of implementation is rapid and is often based on good enough data

ii. Development of a new product happens through Product Management

iii. Organization structure is defined customer driven and agile teams

iv. Management reporting is primarily based on accounting and financial information

v. Failure is considered an exception

Option

(a) i, ii and iv

(b) i, iii and iv

(c) ii, iii and v

(d) ii, iv and v

ANSWER

Option (d) ii, iv and v

Reason: Speed of implementation is measured and operate on complete data. Organization structure is driven based on the functions performed within the organization.

85. Which are the features of Lean Start Up business?

i. It begins with a business plan prepared beforehand and is driven towards its implementation

ii. New product development process is based on the build-measure-learn-feedback loop. Development is based on customer needs.

iii. Speed of implementation is measured and operate on complete data

iv. Management reporting is primarily based on accounting and financial information

v. Failure is expected, it is fixed by iterating on the idea and pivoting away from ones that do not work

Option

(a) (i) and (v)

(b) (ii) and (iv)

(c) (ii) and (v)

(d) (iii) and (v)

ANSWER

Option (c) (ii) and (v)

Reason: Lean start-ups do not have a business plan beforehand. Instead, they begin their search for a business model. Speed of implementation is rapid and operates on good enough data. Management reporting is primarily based on metrics like customer acquisition cost, customer lifetime value and other that may not necessarily be accounting based.

86. Which are the features of Start-ups?

i. Temporary organization designed to look for a business model that is repeatable and scalable

ii. Stable processes for operations and risk management.

iii. Majority communication using expensive, traditional media channels

iv. Customer focus and innovation is focussed to carve out new, niche categories to address unmet demand

v. Seldom profitable in the initial years

Option

(a) i, iv and v

(b) i, ii and v

(c) ii, iv and v

(d) i, iii and iv

ANSWER

Option (a) i, iv and v are features of start-ups

Reason: Incumbents have a stable process for operations and risk management. Start Ups generally do not have a formal process in place for operations and risk management.

Incumbents have majority communication using expensive, traditional media channels. Start-ups use less expensive, digital media channels for communications.

87. Which are the features of Incumbents?

i. Permanent organization designed to execute a business model that is repeatable and scalable

ii. Innovations supported by tech behemoths or angle investor

iii. Drive true sense technological change by exploiting it to commercial level

iv. Production can start small, without an expectation of minimum viable market size

v. Dynamic, individualistic, entrepreneurial culture

Option

(a) i and ii

(b) i and iii

(c) ii and v

(d) i, iv and v

ANSWER

Option (b) i and iii are features of incumbents

Reason: Start-ups have their innovations supported by tech behemoths or angle investors. Start-ups can afford to start their production small, without an expectation of minimum viable market size. Incumbents require estimated market is of a minimum viable size. Star ups have a dynamic, individualistic, entrepreneurial culture.

88. Which categories describe changes in a business model due to technological advancements?

(a) Automation, Extension, Transformation

(b) Replacement, Enhancement, Revamping

(c) Substitution, Expansion, Overhaul

(d) Mechanization, Augmentation, Revolution

ANSWER

Option (a) Automation, Extension, Transformation

Reason: Automation: Involves the replacement of humans with technology without impacting organizational culture or business processes. Example: Installing a passbook update kiosk in the bank lounge.

Extension: Involves using technology to perform extended (new) tasks or processes that enhance the functions or utility of a product or service. Example: Mobile Banking as an extension of internet banking.

Transformation: Involves the use of technology that not only revamps the products or services offered by an organization but also transforms its processes and culture. Example: Installing ATMs across towns and villages, introducing digital clearing systems, etc.

89. Which one of the following statements best describes the term "Transformation" in the context of technological advancements?

(a) It involves the mere replacement of humans with technology, focusing on revamping products and services

(b) It emphasizes the utilization of technology to extend and enhance tasks or processes, contributing to the overall utility of a product or service

(c) It includes the use of technology to completely overhaul not only the products and services but also the processes and culture of an organization, as seen in examples like installing ATMs and implementing a digital clearing system

(d) It refers to the mechanization of tasks through technology, emphasizing the complete revolution of an organizations offerings.

ANSWER

Option (c) It includes the use of technology to completely overhaul not only the products and services but also the processes and culture of an organization, as seen in examples like installing ATMs and implementing a digital clearing system

Reason: This involves the use of technology to comprehensively revamp not only the products or services an organization offers but also its processes and culture. For instance, installing ATMs in towns and villages allows for cash withdrawals, printing mini statements, and checking balances outside of banking hours.

90. Which of the following statements best describes the term "business ecosystem"?

(a) A business ecosystem is a network of organizations involved in the delivery of a specific product or service, emphasizing competition over cooperation

(b) A business ecosystem comprises only suppliers, distributors, and customers, excluding competitors, government agencies, and other entities

(c) A business ecosystem is a network of organizations engaged in the delivery of a specific product or service through both competition and cooperation, leading to the coexistence and co-evolution of organizations

(d) A business ecosystem refers to the isolated evolution of organizations, independent of external interactions and collaborations

ANSWER

Option (c) A business ecosystem is a network of organizations engaged in the delivery of a specific product or service through both competition and cooperation, leading to the coexistence and co-evolution of organizations

Reason: A business ecosystem is a dynamic network that includes various organizations such as suppliers, distributors, customers, competitors, and government agencies. These entities are interconnected and engaged in the delivery of a specific product or service. Importantly, the business ecosystem involves both competition and cooperation among these organizations, contributing to their coexistence and co-evolution over time.

91. What characterizes the condition of hyper-competition in the market?

(a) Reduced instability and increased bargaining power of buyers

(b) Weakened bargaining power of buyers and reduced consumer demand

(c) Intense competition leading to market stability

(d) Intense competition causing market instability and strengthening the bargaining power of buyers

ANSWER

Option (d) Intense competition causing market instability and strengthening the bargaining power of buyers

Reason: Hyper-competition is a condition characterized by intense competition that creates instability in the market. In such a scenario, the bargaining power of buyers strengthens, putting increased pressure on producers. Consumers, with the ability to easily switch to competing products, demand not only higher quality but also lower prices, contributing to the overall competitive and unstable market environment.

92. Differentiate between "transformation" and "disruption" in the business context.

(a) Transformation occurs when a challenger offers greater value to customers, while disruption involves realigning technology and business models

(b) Transformation involves challenging existing industry players, while disruption requires realignment of technology and business models

(c) Transformation is driven by innovation shifting the basis of competition, necessitating realignment or new investment, while disruption occurs when a challenger offers superior value that existing firms cannot directly compete with

(d) Transformation and disruption are interchangeable terms referring to the same concept in the business context

ANSWER

Option (c) Transformation is driven by innovation shifting the basis of competition, necessitating realignment or new investment, while disruption occurs when a challenger offers superior value that existing firms cannot directly compete with

Reason: Correct Answer is transformation is driven by innovation, shifting the basis of competition, and requires realignment or new investment. Disruption, on the other hand, occurs when a challenger provides superior value that existing firms cannot directly compete with.

Transformation involves innovation that shifts the basis of competition, leading to realignment or new investments in technology and business models. Disruption, on the other hand, occurs when a challenger introduces greater value to customers in a way that existing firms cannot compete with directly.

93. Mr. YEE is a management accountant for a not for profit organization that provides subsidized homes for the lower income groups of the society. He is in charge of finance, budgets, and MIS reporting at this organization. In the course of his work, he comes to know that the construction of home is being done with substandard material in order to keep the costs within budgets.

Which of the following is true?

(a) The use of substandard material in construction is not of relevance since it is outside the domain of management accounting

(b) The use of substandard material is relevant since it does affect the customer service quality (the beneficiaries from the lower income groups) whose service is the main objective of not for profit organization. This is a non-financial consideration in MIS reports

(c) The information can be ignored because it does not impact the budgets adversely

(d) The use of substandard material in construction will not have a long term consequence to the organization

ANSWER

Option (b) The use of substandard material is relevant since it does affect the customer service quality (the beneficiaries from the lower income groups) whose service is the main objective of not for profit organization. This is a non-financial consideration in MIS reports

Reason: The correct answer is (B), the use of substandard material is relevant as it affects customer service quality and hence is a non-financial consideration. Even though it does not affect budget adversely, it does have an impact in the operations of the business. The customers perspective will be negatively impacted which can affect funding for the organization. Hence it does have long term consequences for the organization.

94. Cafe coffee hub offer a feature of writing name of customer on the takeaway glass down under the logo of CCH, the size of logo of CCH on glass of coffee is which type of attribute (referring to Kano Model)?

(a) Reversal

(b) Delighter

(c) Performance

(d) Indifferent

ANSWER

Option (d) Indifferent

Reason: The size of logo on the takeaway cup of coffee is not really making any difference to value and utility of product or even value perceived by customer hence it is indifferent attribute. Indifferent qualities are neither good nor bad and have no effect, positive or negative, on customer satisfaction. To illustrate - look of emoticons in messaging apps in phone, placing of logo on phone, size thereof.

95. COO of Modern Furniture Limited heard about Kano Model. MFL decided to use Kano Model to enhance customer satisfaction; but not sure which attribute of Kano Model need to be focused mainly (in priority over others) in order to enhance the customer's willingness to pay.

(a) Reversal

(b) Delighter

(c) Performance

(d) Indifferent

ANSWER

Option (c) Performance

Reason: Most organisations focus on Kanos performance attributes on the basis that the higher the performance attributes, the higher the customers willingness to pay.

96. Match the item of list I with that of list II and suggest correct code –

List I - Pricing Strategy	List II – Explanations
i. Customary Pricing	a. Ending price with 99
ii. Skimming	b. Pricing a product based on perceived expectation of customers
iii. Penetration Pricing	c. Setting a high price which gradually reduces as competitors enter the market
iv. Psychological Pricing	d. Setting a low price for a new product during its initial offering

Option

(a) i- d, ii- a, iii- b, iv- c

(b) i- b, ii- c, iii- d, iv- a

(c) i- c, ii- d, iii- a, iv- b

(d) i- a, ii- b, iii- c, iv- d

ANSWER

Option (b) i- b, ii- c, iii- d, iv- a

Reason: Customary Pricing is value based perception oriented pricing, skimming is pricing strategy wherein prices are reduced gradually to capture each point of price curve (those who need the product early on have to pay more), penetration pricing is charging low price with intent to capture more market share; whereas psychological pricing rest on

triggering psychological effect (known as Bata pricing in India, because Bata bring this trend to India and price their products say pair of shoes for 999 or 1,499 rather 1,000 or 1,500)

97. In a product mix decision, which is the most important factor to consider in order to try to maximise profit?

(a) Profit per unit of the product

(b) Contribution per unit of the product

(c) Profit per unit of a scarce resource used to make the product

(d) Contribution per unit of a scarce resource used to make the product

ANSWER

Option (d) Contribution per unit of a scarce resource used to make the product

Reason: Product mix decision is short term decisions where bottleneck or limiting factor is involved. Short term decisions have two characteristics that make them relatively easier than longer term decisions. Firstly, the time value of money can be ignored, secondly most of the fixed costs will be incurred anyway so can be ignored as not relevant. In such cases the main approach is usually to consider relevant cash flows, which may simplify to looking at the impact of the decision on the contribution. Hence contribution per unit of limiting factor shall be used to make the decisions.

98. Modern Gas Limited deals in liquid nitrogen (a standardised product). NGL pay less attention to its own costs or demands and bases its price largely on competitor's prices. The Pricing method adopted by MGL is –

(a) Value pricing

(b) Psychological Pricing

(c) Going rate pricing

(d) Image pricing

ANSWER

Option (c) Going rate pricing

Reason: Going rate pricing is completion-based pricing method. Going Rate Pricing is a competitive pricing method under which a firm tries to keep its price at the average level charged by the industry. The use of such a practice of pricing is especially useful where it is difficult to measure costs.

99. NZ Mart is a retail chain. Competition is stiff and revolve around the price among the market player in retain chain segment. NZ Mart adopted the practice of pricing some its products below cost, with an intention to destroying the competitor. Such pricing practice/ strategy is referred to as –

(a) Loss leader pricing

(b) Price discrimination

(c) Predatory pricing

(d) Penetration Pricing

ANSWER

Option (c) Predatory pricing

Reason: Predatory pricing (loss leading) is the practice of selling a product or service at a very low price, intending to drive competitors out of the market or create barriers to entry for potential new competitors.

100. Categorize the services based on the nature of service involved –

i. Fitness Centre	(a) Product / possession processing service
ii. Warehousing	(b) Mental stimulus processing service
iii. Advertising	(c) People processing service
iv. Knowledge Processing Offices (KPO)	(d) Information processing service

Option

(a) i- a, ii- b, iii- c, iv- d

(b) i- b, ii- a, iii- c, iv- d

(c) i- a, ii- b, iii- d, iv- c

(d) i- c, ii- a, iii- b, iv- d

ANSWER

Option (d) i- c, ii- a, iii- b, iv- d

Reason: Fitness Centre - People processing service, the customer has to be physically present for the service to be rendered. Here, the customer has to attend the gym to use the fitness centre services. Warehousing - Product/ possession processing service, customer need not be present. However, the service is being worked on a tangible object. Here, the goods being stored in the warehouse (tangible object in the possession of the customer) is now being stored in the warehouse (service being provided on the object). Advertising - Mental stimulus processing service. These services influence the customers behaviour, perception etc. There is no need for physical presence of the customer nor is there any need for a tangible product of the customer to be worked on. The customer only has to experience it, this service will be unique to each customer as each of their perception and behaviour is different. Hence, the delivery of the service will be different for different people. Knowledge Processing Offices (KPO) - Information processing service. Service occurs when information is being processed. The work of the client (information) is being processed and service is being rendered. This could relate to accounting work, legal work, taxation etc.

101. When would you not price a product below marginal cost?

(a) Product is of perishable nature with a very short shelf time remaining

(b) Product manufactured based on customized orders

(c) Popularize a product in a new market

(d) Reduction in price of product can boost the sales of related products that have a larger profit margin

ANSWER

Option (b) Product manufactured based on customized orders

Reason: Products manufactured based on customized orders will be priced on total cost plus mark-up basis, they will not be charged below marginal cost. Products are priced below marginal cost when the product is perishable nature with a short remaining shelf life, during penetration pricing to gain a hold in the new market or to grow the sales volume of another related product.

102. Which of the following is not a promotional pricing that is used to coax buyers to make an early purchase?

(a) Longer payment terms

(b) Special event pricing

(c) Loss leader pricing

(d) Price skimming

ANSWER

Option (d) Price skimming

Reason: Price skimming is charging customers a premium price for a new product when it is initially launched in the market. This does not necessarily coax a buyer to make an early purchase. The terms of promotional pricing are liberal. Longer payment terms give the buyer more credit time to repay, special event pricing aims to attract customers at events using attractive prices, loss leader pricing is lowering the price of well-known brands to stimulate sales growth of other products sold in the shop by making customers visit the location.

103. Match the price discount with their characteristics –

i. Distributor's discount	a. Useful in trades where credit risk is high
ii. Quantity discount	b. Create different prices to different customers on the basis of marketing functions performed by them

iii. Cash discount	c. Channel partners are encouraged to promote company's products (incentive to push a product) to customer
iv. Trade in allowance / promotional allowance	d. Practicable where the commodities are homogeneous or identical in nature, or where they may be measured in terms of truckloads or measured in physical units

Option

(a) i- b, ii- d, iii- a, iv- c

(b) i- c, ii- d, iii- a, iv- b

(c) i-c, ii- d, iii- b, iv- a

(d) i- d, ii- a, iii- b, iv- c

ANSWER

Option (a) i- b, ii- d, iii- a, iv- c

Reason: Distributors Discount- Create different prices to different customers on the basis of marketing functions performed by them. Also known as functional discount. Quantity Discount- Practicable where the commodities are homogeneous or identical in nature, or where they may be measured in terms of truckloads or measured in physical units. Cash Discount- Useful in trades where credit risk is high. Reward for prompt payment. Trade in Allowance/ Promotional Allowance- Channel partners are encouraged to promote companys products (incentive to push a product) to customer. For example, retailers may be allowed advertising allowance that encourage them to advertise the companys products in the local newspapers. The retailer gains by getting some allowance towards advertising expense, while the manufacturer gets the advantage of lower advertising costs that retailers typically get while advertising in papers.

104. A company has used Kano Model to understand the correlation between product features and customer satisfaction. If it is facing a constraint of direct labour hours, in which order should the company include the

feature while manufacturing the product? All features require direct labour hours. Manufacture to include feature i.e., −A company has used Kano Model to understand the correlation between product features and customer satisfaction. If it is facing a constraint of direct labour hours, in which order should the company include the feature while manufacturing the product? All features require direct labour hours. Manufacture to include feature i.e., −

(a) first threshold attribute, second delight attribute, and lastly Indifference qualities

(b) first a performance attribute, second delight attribute, and lastly threshold attribute

(c) first excitement attribute, second threshold attribute, and lastly reverse feature

(d) first reverse feature, second delight attribute, and lastly indifference qualities

ANSWER

Option (a) first threshold attribute, second delight attribute, and lastly Indifference qualities

Reason: Where there is a shortage of direct labour hours, the companys manufacturing plan to include features prioritized based on customer satisfaction. Threshold attribute is a must have feature, the absence of which will cause customer dissatisfaction. Hence, it should be given highest priority as it is a must have in the product. Performance attribute is a feature where the more the availability of the feature, better the customer satisfaction. It is next to threshold attribute in the priority list. Excitement or Delight attribute is an unexpected feature provides satisfaction when they are met but do not cause dissatisfaction when they are not met. Reverse Feature, if present must be removed from the product, rather than include it in the product. This feature when present causes dissatisfaction. Indifference Quality is a lower priority as it does not affect customer satisfaction. Given this, in option where Manufacture to include feature that is first a Threshold attribute, second Excitement or

Delight attribute and lastly Indifference qualities is in appropriate order of priority.

105. How will an exciting or delight attribute help with pricing a product?

i. Provides a justification to charge a premium price for that feature

ii. Build customer loyalty for repeat sales

iii. Helps to grow market share and become a market leader

iv. Provides the basis for product differentiation

Option

(a) ii and iv

(b) i, iii and iv

(c) i, ii and iii

(d) All of the above

ANSWER

Option (d) All of the above

Reason: A feature that sets the product apart by providing high level of customer satisfaction will provide a justification for premium pricing, build customer loyalty, improves market share and is the basis for product differentiation.

106. Which of the following is not a feature of price discrimination?

(a) The market must be capable of being segmented based on customer, product, place or time

(b) The customers should not be able to resell the product at another segment for a higher price

(c) Pricing the product below cost, lower as may be determined by regulations, to reduce or eliminate competition

(d) The chance of competitors' underselling in the segment of higher prices should not be possible

ANSWER

Option (c) Pricing the product below cost, lower as may be determined by regulations, to reduce or eliminate competition

Reason: Pricing the product below cost, lower as may be determined by regulations, to reduce or eliminate competition is predatory pricing, which is illegal as per Competition Act 2002. Price Discrimination is possible only if market segmentation is possible. If customers start buying the product in one segment and trading it in another to earn profit, the usefulness of price discrimination is lost for the company as the customer (trader) and not the company earns the differential profit. Competitors should not be able to sell the product at a price lower than that offered by the company in that segment, since customers would then prefer the competitors cheaper product.

107. Business may charge higher price to enhance their revenue by striving for to include those features which has higher capability to please the customer; while exclude those have negative impact on value perceived.

Correctly match the items of following sets –

i.	Features your product needs to be competitive	a.	Performance attributes
ii.	More investment in these features, more satisfaction the customer gets	b.	Excitement / Delight attributes
iii.	Features provide satisfaction when met but do not provide dissatisfaction when not met	c.	Threshold (Basic) attributes
iv.	Features that have no effect on customer satisfaction	d.	Reverse qualities
v.	Features if present cause customer dissatisfaction	e.	Indifference qualities

Option

(a) i- a, ii- b, iii- c, iv- e, v- d

(b) i- c, ii- a, iii- b, iv- e, v- d

(c) i- c, ii- a, iii- b, iv- d, v- e

(d) i- d, ii- a, iii- e, iv- b, v- c

ANSWER

Option (b) i- c, ii- a, iii- b, iv- e, v- d

Reason: Features your product needs to be competitive - Threshold / Basic attributes. More investment in these features, more satisfaction the customer gets - Performance attributes. Features provide satisfaction when met but do not provide dissatisfaction when not met – Excitement/ Delight attributes. Features that have no effect on customer satisfaction - Indifference qualities. Features if present cause customer dissatisfaction - Reverse qualities.

108. How is the Kano Model useful?

It correlates product features with –

(a) Customer satisfaction

(b) Market segments

(c) Profitability

(d) Innovation

ANSWER

Option (a) Customer satisfaction

Reason: The Kano Model is useful to correlate product features with customer satisfaction. It is important to have a framework that correlates product features with customer satisfaction. Few features would be must haves that are needed to remain competitive, investment in few other features would enhance performance that improves customer satisfaction, few features would surprise the customer that would give very high satisfaction levels. There are also features that do not influence satisfaction and others that are harmful since they cause dissatisfaction. Kano Model is a framework for product teams that will help them

understand these issues before a product launch. A company can then use this information to appropriately price its product.

109. An automobile company is considering the following features in the latest model of car it wants to develop. Classify the features to the customer satisfaction expectation using Kano Model –

i.	Improve engine design that can improve fuel efficiency	a.	Threshold attribute
ii.	Change colour of cables used internally in the bonnet	b.	Performance attribute
iii.	Air bags are provided for passenger safety in crash collision	c.	Excitement / Delight attribute
iv.	Extended warranty on certain spare parts for 3 years instead of the current period of 1 year	d.	Indifferent quality

Option

(a) i- b, ii- d, iii- a, and iv- c

(b) i- c, ii- d, iii- a, and iv- b

(c) i- b, ii- c, iii- a, and iv- d

(d) i- b, ii- a, iii- d, and iv- c

ANSWER

Option (a) i- b, ii- d, iii- a, and iv- c

Reason: Improve engine design that can improve fuel efficiency - More investment in these features, more satisfaction the customer gets (Performance attributes). Change colour of cables used internally in the bonnet - Features that have no effect on customer satisfaction (Indifference qualities). Air bags are provided for passenger safety in crash collision - Features your product needs to be competitive (Threshold/ Basic attributes).. Extended warranty on certain spare parts for 3 years instead of the current period of 1 year - Features provide satisfaction

when met but do not provide dissatisfaction when not met (Excitement / Delight attributes).

110. Identify the attribute that can be classified as indifference attribute to a retail customer of a bank under the Kano Model –

(a) Reduction of limit of a credit card issued by a bank

(b) Ability to receive One Time Password (OTP) reliably on the mobile to execute net bank transactions

(c) Action within an hour on service requests placed online using net banking services of the bank

(d) Cost of embossing the credit card issued by the bank

ANSWER

Option (d) Cost of embossing the credit card issued by the bank

Reason: The cost of embossing (emboss means to carve with a design) the credit card issued by the bank is not linked to customer satisfaction of the retail customer. Hence, it is an indifference attribute/ quality. The other features affect customer satisfaction directly.

111. Identify the attribute that can be classified as reverse attribute to a retail customer of a bank under the Kano Model –

(a) Action within an hour on service requests placed online using net banking services of the bank

(b) Ability to receive One Time Password (OTP) reliably on the mobile to execute net bank transactions

(c) Permanent tracking of a smartphone via banking app

(d) Cost of embossing the credit card issued by the bank

ANSWER

Option (c) Permanent tracking of a smartphone via banking app

Reason: Permanent tracking of a smartphone via banking app is an unwanted feature that decrease customer satisfaction when present. Hence, it is a reverse attribute/ quality. The other features relate to other attributes. Ability to receive One Time Password (OTP) reliably on the

mobile to execute net bank transactions is a threshold attribute. Action within an hour on service requests placed online using net banking services of the bank is an excitement/ delight attribute. The cost of embossing the credit card issued by the bank is not linked to customer satisfaction of the retail customer. Hence, it is an indifference attribute/ quality.

112. A company has used the Kano Model to identify the product features and correlate them to customer satisfaction. It is having a funding constraint for manufacturing the product. Now, it has to decide between investing in Feature 1 and Feature 2, both of which are significant product features. Feature 1 has a threshold attribute while Feature 2 has a performance attribute. The company does not have enough funds to invest in both these features.

How should the company decide to allocate between the features?

(a) It should first invest in Feature 1 and any surplus is invested in Feature 2

(b) It should first invest in Feature 2 and any surplus is invested in Feature 1

(c) It can split between Feature 1 and 2 equally (even if the cost of manufacturing does not sufficiently cover either feature)

(d) It need not invest in either Feature 1 or Feature 2

ANSWER

Option (a) It should first invest in Feature 1 and any surplus is invested in Feature 2

Reason: It should first invest in Feature 1 and any surplus is invested in Feature 2. Feature 1 has a threshold attribute, when it is present in the product it is taken for granted but when absent it causes customer dissatisfaction. This attribute deals with the very basic product features that must be present in order to be competitive. Comparatively, Feature 2 has a performance attribute. The more the investment in this feature the more the customer satisfaction. While it can influence the decision of customers who seek certain features in the product, is not a must have

feature unlike Feature 1 which is a very basic attribute. Hence, given a funding constraint, the company should first invest in Feature 1 and any surplus is invested in Feature 2. The objective of Kano Model is to provide the company a framework to prioritize these features based on customer satisfaction. Investment cannot be split equally in both features given that feature 1 is a must have and has to be part of the product feature. Not investing in Feature 1 will cause customer dissatisfaction and hence the company should avoid this decision.

113. Why would a company want to invest in a feature that has to be classified as having an exciting or delight attribute?

(a) Such a feature is a must have feature which is taken for granted in the product

(b) Such a feature is expected to be present in the product, the more it is available the better the satisfaction

(c) Such a feature is unexpected and spurs the customer to make spot purchases or build customer loyalty for repeat sales

(d) Such a feature is an unspoken expectation from the customer

ANSWER

Option (c) Such a feature is unexpected and spurs the customer to make spot purchases or build customer loyalty for repeat sales

Reason: Such a feature is unexpected and spurs the customer to make spot purchases or build customer loyalty for repeat sales, this feature will not cause dissatisfaction if not present, but if provided it will wow the customer into buying the product or to build customer loyalty for repeat sales. A feature taken for granted or an unspoken expectation from the customer are both threshold / basic attribute, which must be present in the product. The feature where more the better satisfaction has a performance attribute.

114. Sunline is a global mobile phone manufacturer. The company introduces new models of the phone at least once a year. These models are either innovative in their capabilities or have appealing design. The company invests a lot in research and development, sales promotion and

advertising and product distribution. Hence, its production is capital intensive, and the cost of production is high. There is a huge demand whenever Sunline introduces a new model in the market. Over a time period of a year, the demand gradually slows down.

What type of pricing can Sunline adopt to gain maximum profitability during every model launch?

(a) Going rate pricing

(b) Price skimming

(c) Predatory pricing

(d) Cost based pricing

ANSWER

Option (b) Price skimming

Reason: Sunline can charge a premium for its new model since the value perception of the product is very high due to innovative capabilities or design. Since its cost of production is high and the business is capital intensive, it needs to recoup its investment as early as it can. Hence price skimming, charging a premium to the customers will help it earn more profits.

115. Lord is a luxury hotel chain operating out of many tourist destinations, one of which is in a forest area in Uttarakhand. In the last few years, due to severe drought conditions, the forest ecology got affected. Due to this, tourism reduced to a trickle. Most hotels in that area cut their prices to very low rates in each of these years in order to attract the guests with low prices. Instead, the manager at Lord offered guests free pick up and drop to the airport, railway station, discounted spa services, fast internet connectivity, certain complementary gifts to attract customers. At the same time, it maintained its pricing at luxury room rate levels charged earlier when the tourist season was normal.

Which pricing did the manager of Lord follow?

(a) Going rate pricing

(b) Market pricing

(c) Value based pricing

(d) Skimming pricing

ANSWER

Option (c) Value based pricing

Reason: The manager of the hotel chain did not indulge in price wars which hurts profitability in the long run. Instead, the manager followed value based pricing by charging the guests, based on perception of the services offered. Certain low cost services were provided additionally like free pick up and drop, spa services, internet connectivity and gifts. These helped to change the perception of the guests and not reduce the luxury brand image of Lord hotel chain. Therefore, they could justify the higher rates charged to the customer as compared to other hotels in that area.

116. Match the pricing with the scenario in the following cases –

i. Customized product	a. Going rate pricing
ii. Perfect competition	b. Sealed bid pricing
iii. Defence contract work / Infrastructure projects	c. Cost based pricing
iv. Pharma companies, oligopolistic market with few players	d. Collusion pricing

Option

(a) i- c, ii- a, iii- b, and iv- d

(b) i- d, ii- b, iii- c, and iv- a

(c) i- a, ii- c, iii- d, and iv- b

(d) i- c, ii- b, iii- d, and iv- a

ANSWER

Option (a) i- c, ii- a, iii- b, and iv- d

Reason: Customized Product – Cost Based Pricing

Generally, when a product is manufactured based on specific customer requirements, the total cost can be easily traced. Adding the required

mark up, cost based pricing becomes a popular pricing method for customized product.

Perfect Competition – Going Rate Pricing

Firms are price takers in a perfect competition. Hence, they will keep the price at the average industry level irrespective of their cost of production or demand.

Defence Contract Work/ Infrastructure Projects – Sealed Bid Pricing

In these scenarios, normally many firms compete for the project. They submit their bids confidentially; pricing is based on the bidding firm's perception of what its rivals would be charging for the same work. It does not depend *only on* its cost of production or demand.

Pharma Companies in an Oligopolistic Market – Collusion Pricing

With few firms in the business, normally the price is set based on the agreement with other firms. This is done so that there is no direct competition among them at the same time the price is set earn sufficient profitability. Collusion pricing also deters new entrants.

117. Which of the following is not a drawback of cost based pricing approach?

(a) There is no incentive for managers to operate in a cost efficient way

(b) The pricing method does not consider the customers' value perception about the product

(c) It ignores the structure of the market in which the firm operates

(d) It requires market research to understand competitor's strategy

ANSWER

Option (d) It requires market research to understand competitor's strategy

Reason: It is not true that cost based pricing requires market research to understand competitor's strategy. Cost based pricing is based purely on the cost the company incurs and the mark up or profit margin it requires. It does not consider competitors' strategy, market demand, customers' perception, market conditions etc.

118. In which stage of a product life cycle will you use going rate pricing?

(a) Introduction

(b) Growth

(c) Maturity

(d) Decline

ANSWER

Option (c) Maturity

Reason: In the maturity stage of the product, the market is stable, with more competitors selling homogenous product. Hence, the company generally would not charge more than the average industry price. It would adopt going rate pricing.

119. PowerOn manufactures batteries that power medical devices like medical imaging systems, defibrillators, ventilators and monitoring devices. PowerOn has customers who are medical equipment manufacturers who use these while making medical devices and machines. Bataid is the latest model of battery that PowerOn has developed. It is safe, stable and longer lasting. These are very important attributes since the performance of medical devices can get affected by them. PowerOn wishes to arrive at a price for Bataid batteries. The market has many similar batteries available. However, Bataid is of a much higher quality as compared with the rest. The nearest comparable battery is Bat 1.

Particulars	Bataid	Bat 1
Operating cost per hour	₹ 2 per hour	₹ 1 per hour
Probability of battery failing	1%	11%
Price of a battery per unit	?	₹ 20,000

Due to the critical nature of the medical devices in which it is used, the cost of a battery failing to the buyer has been arrived as ₹ 1,00,000. Both batteries Bataid and Bat 1 can be used for an average of 8,000 hours.

Calculate the probable price (in ₹) PowerOn can charge the medical equipment manufacturer based on the True Economic Value method.

(a) 38,000

(b) 18,000

(c) 23,000

(d) 22,000

ANSWER

Option (d) 22,000

Reason: The objective value determined here is from whose viewpoint –

- The medical equipment manufacturer
- PowerOn
- Final customer, the hospitals

The correct answer is ₹ 22,000 per unit of Bat aid. It is calculated as below –

True economic value for a consumer is calculated taking two differentials into consideration:

TEV = Cost of the Next Best Alternative + Value of Performance Differential

Cost of the next best alternative is the cost of a comparable product offered by some other company. Value of performance differential is the value of additional features provided by the seller of a product.

Particulars	Amount ₹
1. Difference in Operating Cost per battery (higher expense incurred by buyer) Bataid = ₹ 2 per hour Bat 1 =₹ 1 per hour For 8,000 hours = 8,000 × (₹ 2 - ₹ 1)	8,000
2. Savings to buyer due to more stable performance of battery Cost of battery failing = ₹ 1,00,000 Difference in probability of battery failure (1% vs 11%) = 10%	10,000

	Lower cost of failure to buyer = 10% × ₹ 1,00,000	
3.	Value Differential of using Bataid (Step 2 – Step 1)	2,000
4.	Price of per unit Bat 1 battery (cost of next best alternative)	20,000
5.	True economic value of per unit Bataid	22,000

True economic value/ Objective value determined here is from the point of view of PowerOn, the battery manufacturer. Objective value is a measure of benefits that a product is *intended to deliver to the consumers relative to the other products* without giving any regard whether the consumer can recognize these benefits or not.

120. Which of the following statements is true?

i. Perceived value of a product is the price the customer is willing to pay for the product

ii. Perceived value of a product is the price the manufacturer wants to charge the customer

iii. Perceived value of a product less the price of the product, benefits the customer

iv. When perceived value is higher than cost of sales, the manufacturer can derive profits

Option

(a) i and iii

(b) ii and iii

(c) i, iii and iv

(d) i, ii and iii

ANSWER

Option (c) i, iii and iv

121. What are the disadvantages of total cost based pricing for products?

i. Does not consider if the customer is willing to pay as per value of product

ii. Requires budgeting of production output volume to determine allocation of overheads, this may not always be accurate

iii. Surplus generated from sales cannot completely cover the replacement cost of fixed assets in an inflationary economic condition

iv. Pricing using this method is difficult to arrive at due to lack of information

Option

(a) i and ii

(b) i, ii and iii

(c) i, iii and iv

(d) i, ii, iii and iv

ANSWER

Option (b) i, ii and iii

Reason: Statement 1 – Pricing based on total cost with an added mark-up may not always be helpful in generating demand. This method does not take into account the potential customers' preference to buy the product at the determined price (by understanding the perceived value).

Statement 2 – Overhead allocation is a cost used to arrive at the total cost for the product, it is allocated to each produce based on the budgeted production volume. Hence, there may be under or over recovery of overhead if the budgeted production is not accurate enough.

Statement 3 – Sale price is dependent on total cost, for which depreciation is calculated on historic prices of fixed assets. In case the cost of fixed assets remains stable, then the surplus generated using such a sale price will cover the replacement cost of the fixed asset at the end of its useful life. However, in inflationary economic conditions, the cost of fixed assets increase. Hence, the surplus generated from the sale price based on historic costs will not be sufficient to fund the replacement of the fixed asset at the end of its useful life.

Statement 4 – Total cost method is simple to follow with a defined set of steps. The company will have complete information of its costs hence there is no lack of information.

122. A company which has developed a new machine has observed that the time taken to manufacture the first machine is 600 hours.

Calculate the time which the company will take to manufacture the second machine if the actual learning curve rate is 80%.

(a) 480 hours

(b) 960 hours

(c) 360 hours

(d) 540 hours

ANSWER

Option (c) 360 hours

Reason: Actual learning curve rate is 80%

Time taken to produce the first machine	= 600 hours
Average time taken to produce two machines	= 600 x 80% hours
	= 480 hours.
Cumulative time taken to produce two machines	= 480 x 2 hours
	= 960 hours
Time taken to produce the second machine	= (960-600) hours
	= 360 hours

123. The Gifts Company makes mementos for offering chief guests and other dignitaries at functions. A customer wants 4 identical pieces of hand-crafted gifts for 4 dignitaries invited to its function.

For this product, the Gifts Company estimates the following costs for the 1st unit of the product –

Particulars of Costs	₹/ unit
Direct Variable Costs (excluding labour)	2,000
Direct Labour (20 hours @ ₹ 50 hour)	1,000

90 % learning curve ratio is applicable, and one labourer works for one customer's order.

Calculate price per piece (in ₹) to be quoted for this customer if the targeted contribution is ₹ 1,500 per unit?

(a) 4,310

(b) 4,400

(c) 17,240

(d) 17,600

ANSWER

Option (a) 4,310

Reason:

	₹/ u **Avg. / unit (4 units)**
Variable Cost	2,000
Labour	810
Target Contribution	1,500
Price to be Quoted	4,310

124. XL Polymers, located in Sahibabad Industrial Area, manufactures high quality industrial products. AT Industries has asked XL Polymers for a special job that must be completed within one week.

Raw material R_1 (highly toxic) will be needed to complete the AT Industries' special job. XL Polymers purchased the R_1 two weeks ago for ₹ 7,500 for a job 'A' that recently was completed. The R_1 currently in stock is the excess from that job and XL Polymers had been planning to dispose of it. XL Polymers estimates that it would cost them ₹ 1,250 to dispose of the R_1. Current replacement cost of R_1 is ₹ 6,000.

Special job will require 250 hours of labour G_1 and 100 hours of labour G_2. XL Polymers pays their G_1 and G_2 employees ₹ 630 and ₹ 336 respectively for 42 hours of work per week. XL Polymers anticipates having excess capacity of 150 [G_1] and 200 [G_2] labour hours in the coming week. XL

Polymers can also hire additional G_1 and G_2 labour on an hourly basis; these part-time employees are paid an hourly wage based on the wages paid to current employees.

Suppose that material and labour comprise XL Polymers's only costs for completing the special job.

'Minimum Price' in ₹ that XL Polymers should bid on this job –

(a) 250

(b) 500

(c) 1,500

(d) 1,750

ANSWER

Option (a) 250

Reason: Opportunity Cost of Labour - The G_2 labour has zero opportunity cost as there is no other use for the time already paid for and is available. However, XL Polymers needs to pay an additional amount for G_1 labour. This amount can be save if the special job were not there.

G_1 labour:

Hours Required	250
Hours Available	150
Extra Hours Needed	100
Cost per hour (₹ 630/ 42hrs)	₹ 15
Opportunity Cost	₹ 1,500

Thus, the 'Opportunity Cost of Labour' for completing the special job is ₹ 1,500.

Opportunity Cost of Material – XL Polymers has no alternative use for the R_1, they must dispose of it at a cost of ₹ 1,250. Thus, XL Polymers actually saves ₹ 1,250 by using the materials for the AT Industries' special job. Consequently, the 'Opportunity Cost of Material' is - ₹ 1,250 (i.e., the opportunity cost of this resource is negative).

The minimum price is the price at which XL Polymers just recovers its 'Opportunity Cost'. XL Polymers's 'Total Opportunity Cost' is ₹ 250 (₹ 1,500 – ₹ 1,250). Accordingly, minimum Price for the Special Job is ₹ 250.

125. S Limited is engaged in manufacturing activities. It has received a request from one of its important customers to supply a product which will require conversion of material 'M', which is a non-moving item.

The following details are available:

Book value of material 'M'	₹ 60
Realisable value of material 'M'	₹ 80
Replacement cost of material 'M'	₹ 100

It is estimated that conversion of one unit of 'M' into one unit of the finished product will require one labour hour. At present, labour is paid at the rate of ₹ 20 per hour. Other costs are as follows:

Out-of-pocket expenses	₹ 30 per unit
Allocated overheads	₹ 10 per unit

The labour will be re-deployed from other activities. It is estimated that the temporary redeployment will not result in loss of contribution. The employees to be re-deployed are permanent employees of the company.

The minimum price (in ₹) to be charged from the customer so that the company is not worse off by executing the order –

(a) 90

(b) 110

(c) 120

(d) 140

ANSWER

Option (b) 110

Reason: Relevant Cost of Producing One Unit of the Finished Product –

	(₹)
Cost of Material 'M' (Realisable Value)	80

Cost of Labour (Being Sunk Cost)	0
Out-of-Pocket Expenses	30
	110

Allocated Overhead is not relevant for the decision. The customer should be charged ₹ 110 per unit.

126. The cost of production and sales of 80,000 units per annum of product Q are:

Material	₹ 4,80,000	Labour	₹ 1,60,000
Variable Overhead	₹ 3,20,000	Fixed overhead	₹ 5,00,000

The fixed portion of capital employed is ₹ 12 lacs and the varying portion is 50% of sales turnover.

The selling price per unit to earn a return of 12% net on capital employed (net of Tax @ 40%) –

(a) 16.67

(b) 21.25

(c) 21.32

(d) 23.61

ANSWER

Option (d) 23.61

Reason: Return of 12% Net (after tax of 40%) on Capital Employed is equivalent to 20% (Gross) [12% ¸ (1 – 0.4)] on Capital Employed.

Let Selling Price per unit to be 'K'

Since Total Sales = Total Cost + Profit

80,000 K = 14,60,000 + 20% (12,00,000 + 0.5 × 80,000K)

80,000 K = 14,60,000 + 2,40,000 + 8,000K

72,000 K = 17,00,000

'K' = ₹ 23.61

Hence Selling Price per unit will be ₹ 23.61.

127. OOL has developed a new product which is about to be launched into the market. The variable cost of selling the product is ₹ 17 per unit. The marketing department has estimated that at a sale price of ₹ 25, annual demand would be 10,000 units. However, if the sale price is set above ₹ 25, sales demand would fall by 500 units for each ₹ 0.50 increase above ₹ 25. Similarly, if the price is below ₹ 25, demand would increase by 500 units for each ₹ 0.50 stepped reduction in price below ₹ 25.

The price (in ₹) and corresponding quantity (in units), which would maximise OOL's profit in the next year–

(a) Price- 26.00; Quantity- 9,000

(b) Price- 26.50; Quantity- 8,000

(c) Price- 26.50; Quantity- 9,000

(d) Price- 25.50; Quantity- 8,000

ANSWER

Option (a) Price- 26.00; Quantity- 9,000

Reason: Statement of Total Contribution

Sales Price p.u. (₹)	Variable Cost p.u. (₹)	Contribution p.u. (₹)	Sales Volume (units)	Total Contribution (₹)
27.50	17.00	10.50	7,500	78,750
27.00	17.00	10.00	8,000	80,000
26.50	17.00	9.50	8,500	80,750
26.00	17.00	9.00	9,000	81,000
25.50	17.00	8.50	9,500	80,750
25.00	17.00	8.00	10,000	80,000
24.50	17.00	7.50	10,500	78,750
24.00	17.00	7.00	11,000	77,000

From the above statement it is quite apparent that the contribution would be maximum at a sale price of ₹ 26 per unit and sales demand of 9,000 units.

128. Fast Heal Tech Ltd. is a leading IT security solutions and ISO 9001 certified company. The solutions are well integrated systems that simplify IT security management across the length and depth of devices and on multiple platforms. Company has recently developed an Antivirus Software and company expects to have life cycle of less than one year. It was decided that it would be appropriate to adopt a market skimming pricing policy for the launch of the product. This Software is currently in the Introduction stage of its life cycle and is generating significant unit profits.

Out of followings which are the necessary strategies when the Software moves from the Introduction stage to Growth stage of its life cycle –

i. Improving quality and adding new features

ii. Lowering price to attract price-sensitive buyers

iii. Changing marketing strategy to increase demand

iv. Sourcing new market segments/ distribution channels

v. Entering into another niche area could increase profits

Option

(a) iii, iv, and v

(b) i, ii, iii, and iv

(c) ii, iii, iv, and v

(d) i, ii, iii, iv, and v

ANSWER

Option (b) i, ii, iii, and iv

Reason: Following acceptance by early innovators, conventional consumers start following their lead. New competitors are likely to now enter the market attracted by the opportunities for large scale production and profit. Company may wish to discourage competitors from entering the market by lowering the price and thereby lowering the unit profitability. The price needs to be lowered so that the product becomes

attractive to different market segments thus increasing demand to achieve the growth in sales volume.

Strategies at this stage may include the following –

i. Improving quality and adding new features.

ii. Sourcing new market segments/ distribution channels.

iii. Changing marketing strategy to increase demand.

iv. Lowering price to attract price-sensitive buyers.

v. Discourage competitors from entering the market by lowering the price.

Entering into another niche area could increase profits is strategy relevant to Decline stage.

129. An airline company had to ground 25% its fleet operations. This was due to low passenger traffic due to economic recession. The company has started incurring losses because of this. The management has convened to decide whether to temporarily shut down operations for few months until there is a spike in air travel.

Pilots of the company are highly skilled, and a lot of investment has been made in training them. Hence, they will continue to be part of the workforce and their regular salary will be paid each month. Ground staff are lesser skilled. The job market can provide the requisite candidates when the company plans to re-hire once normal operations begin. Hence, the company has decided to retrench 30% of its ground staff. They will be paid retrenchment compensation of 2 month' s salary. Planes that have been grounded need to be maintained continuously in order to be capable of being put into operation when normal operations resume. Due to the nature of the engine, special maintenance cost will need to be incurred in addition to regular maintenance cost in order to keep it in working condition. Planes will continue to be parked at the airport hangar for which the company will pay fees.

Which of the following will be the relevant items to be considered while deciding on the scenario of this temporary shut down?

i. Salary paid to pilots for the period when the planes are grounded

ii. Savings of salary cost of 30% of ground staff who have been let go

iii. Retrenchment compensation of 2 months salary paid to the ground staff who have been let go

iv. Special maintenance cost to ensure that engines of grounded fleet remain in working condition

v. Airport hangar parking fees

Option

(a) ii, iii, iv

(b) i, ii, iii and iv

(c) i, ii, iii and v

(d) ii, iii, iv and v

ANSWER

Option (a) ii, iii, iv

Reason: Relevant items to be considered for decision making are –

Statement ii- Savings of salary cost of 30% of ground staff who have been let go.

Statement iii- Retrenchment compensation of 2 months' salary paid to the ground staff who have been let go.

Statement iv- Special maintenance cost to ensure that engines of grounded fleet remain in working condition.

The above three items are savings or expense that relate to the future and will be earned/ incurred only if the decision is taken to temporarily shut down operations. If the decision is taken to continue operations as normal, these savings and expenses will not happen, hence these are differential in nature, thereby relevant to the decision being taken.

Salary paid to the pilots and airport hanger fees will be incurred irrespective of the decision to temporarily shut down or not. Hence, they are not relevant to the decision being made.

130. A Singaporean company manufactures Products A, B and C, they are joint products. C has no realizable value unless it is processed further after the point of separation. The cost details are as follows –

Cost upto the point of separation per unit

Cost upto the point of separation per unit	$80
Processing after separation –	
Additional Marginal cost per unit	$80
Additional Fixed cost per unit	$20

Product C can be sold for $150 per unit and no more.

Should Product C be processed further?

(a) Yes, because each unit of Product C sold contributes $50 per unit towards recovery of joint cost

(b) Yes, because each unit of Product C sold contributes $70 per unit towards recovery of joint cost

(c) No, because each unit of Product C sold yields loss of $30

(d) No, because each unit of Product C sold yields loss of $10

ANSWER

Option (a) Yes, because each unit of Product C sold contributes $50 per unit towards recovery of joint cost

Reason: Product C should be processed further because each unit of Product C sold contributes $50 per unit towards recovery of joint cost.

Joint cost upto split off point are irrelevant since they have already been incurred and are sunk cost. It is not relevant to whether the product has to be processed further or not. Hence, joint cost of $80 per unit incurred upto the point of separation is irrelevant. Only the additional cost incurred on processing after separation has to be considered.

Selling price of Product C per unit	$150
Less: Additional variable cost after separation per unit	$80
Less: Additional fixed cost after separation per unit	$20
Contribution towards recovery of joint costs per unit	$50

131. Which of the following is not a drawback of cost based pricing approach?

(a) There is no incentive for managers to operate in a cost efficient way

(b) The pricing method does not consider the customer(s) value perception about the product

(c) It ignores the structure of the market in which the firm operates

(d) It requires market research to understand competitor(s) strategy

ANSWER

Option (d) It requires market research to understand competitor(s) strategy

Reason: It is not true that cost based pricing requires market research to understand competitor(s) strategy. Cost based pricing is based purely on the cost the company incurs and the mark up or profit margin it requires. It does not consider competitor(s) strategy, market demand, customers' perception, market conditions etc.

132. PowerOn manufactures batteries that power medical devices like medical imaging systems, defibrillators, ventilators and monitoring devices. PowerOn has customers who are medical equipment manufacturers who use these while making medical devices and machines. Bataid is the latest model of battery that PowerOn has developed. It is safe, stable and longer lasting. These are very important attributes since the performance of medical devices can get affected by them. PowerOn wishes to arrive at a price for Bataid batteries. The market has many similar batteries available. However, Bataid is of a much higher quality as compared with the rest. The nearest comparable battery is Bat 1.

Particulars	Bataid	Bat 1
Operating cost per hour	S$ 2 per hour	S$ 1 per hour
Probability of battery failing	1%	11%
Price of a battery per unit	N.A.	S$ 20,000

Due to the critical nature of the medical devices in which it is used, the cost of a battery failing to the buyer has been arrived as S$ 1,00,000. Both batteries Bataid and Bat 1 can be used for an average of 8,000 hours.

Calculate the value differential of using Bataid.

(a) S$ 20,000

(b) S$ 2,000

(c) S$ 23,000

(d) S$ 22,000

ANSWER

Option (b) S$ 2,000

Reason: The correct answer is S$2,000 per unit of Bat aid. It is calculated as below –

Particulars	Amount S$
Difference in Operating Cost per battery (higher expense incurred by buyer) Bataid = S$2 per hour Bat 1 = S$1 per hour For 8,000 hours = 8,000 × (S$2 - S$1)	8,000
Savings to buyer due to more stable performance of battery Cost of battery failing = S$1,00,000 Difference in probability of battery failure (1% vs 11%) = 10% Lower cost of failure to buyer = 10% × S$1,00,000	10,000
Value Differential of using Bataid (Step 2 – Step 1)	2,000

133. Which of the following is not a criticism of using profits as a single measure of performance evaluation of managers?

(a) Profits can be manipulated if there is collusion among employees

(b) Profits provide a constrained view of performance measurement

(c) Profits alone as a measure of performance evaluation can lead to manager focusing on short term profits rather than long term sustainable strategy

(d) Profits figures can be objectively measured and defended by the managers

ANSWER

Option (d) Profits figures can be objectively measured and defended by the managers

Reason: The correct answer is - profits can be objectively measured with lesser room for subjectivity. These can be used by the managers to defend their decisions.

134. Which of the following is not true about non-Financial factors?

(a) Non-financial factors focus on finer more detailed analysis especially quantitative ones. This offers explanations to certain aspects of financial data too

(b) Non-financial factors consider all aspects of organization strategy and are long term in their outlook

(c) Non-financial factors can always be standardised and are not subject to ambiguity

(d) Non-financial factors encourage managers not to think only about short term financial profitability

ANSWER

Option (c) Non-financial factors can always be standardised and are not subject to ambiguity

Reason: The correct answer is - it is not true that non-financial factors can be standardised and are not subject to ambiguity. Many non-financial are qualitative in nature. There is no easy way of measuring them and can be subject to interpretation given the objective of each company. Hence, it may at times be difficult to establish an accepted standard for non-financial factors.

135. Which of the following is true for CVP analysis done in Just in Time environment (procurement and production) using pull system of supply chain?

i. Direct labour is considered as fixed instead of variable

ii. Direct material varies with production volume

iii. Waste scrap and quantity discounts are removed

iv. Decrease the size of production runs

Option

(a) i and ii

(b) ii and iv

(c) ii, iii and iv

(d) i, ii, iii and iv

ANSWER

Option (d) (i), (ii), (iii) and (iv)

Reason: Direct labour is considered fixed instead of variable. JIT environment the labour force is multi skilled and are capable of handling different demand levels. Under the pull system of supply chain, production begins only when a customer places the order. Hence, direct labour cost is not volume driven. While there is no production in the work cells, the labour is assigned to some other tasks on the shop floor, which is possible because they are multi-skilled.

Direct material cost on the other hand is driven by volume of production as production happens only when an order is received.

Due to the nature of the JIT material procurement system, there is minimum if not nil waste or scrap. Since material procurement is not in bulk, quantity discounts are generally not there.

The purpose of a just in time production system is to decrease the size of production runs while increasing the lots processed in a period.

136. Given data about Price (P) and quantity demanded (Q) given the following sales and demand data –

Selling Price per unit (P)	Number of units sold (Q)
₹ 100	500
₹ 90	480

Find the linear relationship between P and Q.

(a) P = 350 – 0.5Q

(b) Q = 350 – 0.5P

(c) P = 350 + 0.5Q

(d) Q = 350 – 0.5P

ANSWER

Option (a) P = 350 – 0.5Q

Reason: P = a – bQ

Where 'P' is the selling price per unit, a is the price at which demand is zero, Q is the quantity demanded.

-b = -0.5 (change in price / change in quantity demanded = (₹ 100-₹ 90) / (500-480) units = -0.5)

Therefore, the equation is P = a – 0.5Q.

Substitute P and Q in the above equation to find 'a'

100 = a – (0.5×500). Therefore, a = 350 units.

Therefore, the linear relationship between Price (P) and quantity demanded (Q) can be written as P = 350 – 0.5Q.

137. In which market should the firm consider not just the demand for the product but also predict the resultant reaction of its rivals or competitors on any decision it takes?

(a) Perfect Competition

(b) Monopolistic Competition

(c) Oligopoly

(d) Monopoly

ANSWER

Option (c) Oligopoly

Reason: Oligopoly is the market in which the firm consider not just the demand for the product but also predict the resultant reaction of its rivals or competitors on any decision it takes.

138. Which of the following is false regarding Price sensitivity for a product?

(a) Uniqueness of the product makes the buyers less sensitive to its price

(b) If the buyers have difficulty comparing alternatives they will be more price sensitive

(c) Higher the perceived quality of the product, less will be the price sensitivity for the product

(d) Higher the expenditure of the product to the total income of the consumer, higher the price sensitivity of the product

ANSWER

Option (b) If the buyers have difficulty comparing alternatives they will be more price sensitive

Reason: It is false that if the buyers have difficulty comparing alternatives they will be more price sensitive. If they are unable to compare products, they will be less sensitive to price changes.

139. How are short term decisions different from long term decisions?

i. Short term decisions do not consider time value of money

ii. Fixed cost is ignored as irrelevant in the short run

iii. Long term decisions do not consider time value of money

iv. Fixed cost is ignored as irrelevant in the long run

Option

(a) i and ii

(b) i and iv

(c) ii and iii

(d) iii and iv

ANSWER

Option (a) i and ii

Reason: The correct answer is i and ii. In the short run, the purchasing power of money does not change much. Hence, the time value of money is not considered. In the short run, fixed cost needs to be incurred anyway and hence is considered irrelevant. These are not true in the long run where the purchasing power of money changes and fixed cost can be considered relevant cost where required.

140. If you want to reduce the set-up cost allocated to each unit of production, what should you do?

(a) Manufacture smaller batch sizes, with each batch requiring different machine specifications for which adjustments are made on the machine

(b) Manufacture larger batch sizes and schedule the batch operations in such a way as to reduce the number of times manufacturing specifications of the machine need to be changed

(c) Manufacture larger batch sizes with each batch requiring different specifications for which adjustments are made on the machine

(d) Manufacture each unit based on the specification required for it individually for which adjustments are made on the machine

ANSWER

Option (b) Manufacture larger batch sizes and schedule the batch operations in such a way as to reduce the number of times manufacturing specifications of the machine need to be changed

Reason: Manufacture larger batch sizes and schedule the batch operations in such a way as to reduce the number of times manufacturing specifications of the machine need to be changed. Lesser the number of changes, lesser the set-up costs. Larger the batch size, lower is the cost allocated per unit of production. Hence both put together, set up cost allocated to each product can be minimized.

When each batch has a different specification for which adjustments are made on the machine, set up cost increases due to more changes to be done on the machine. Also, set up cost will be the highest if instead of batch processing, each individual unit is produced as per the specification required for it individually since the number of changes will be the highest in this case.

141. Which of the following is not a product sustaining activity?

(a) Designing a product or production process

(b) Drawing process charts

(c) Developing special testing routines

(d) Direct material consumption for each product

ANSWER

Option (d) Direct material consumption for each product

Reason: The correct answer is direct material consumption cost for each product is a unit level activity. This cost is dependent on the volume of production. Product sustaining activity are activities performed to support production or sale of a specific type of product. These costs are not dependent on the volume of production. Examples would be designing a product or production process, drawing process charts, developing special testing routines.

142. What is the disadvantage of conventional Cost Volume Profit (CVP) analysis?

(a) Conventional CVP analysis cannot be used in finding out expected production volume level to earn a certain profit level

(b) Conventional CVP analysis cannot be used to determine the ideal selling price to set for the product to earn a target profit

(c) Conventional CVP analysis classifies cost behaviour as fixed and variable with respect to volume alone. Many non-volume driven costs, having cost drivers other than volume, get classified under a single "fixed cost" overhead pool

(d) Conventional CVP analysis cannot be used for all types of business

ANSWER

Option (c) Conventional CVP analysis classifies cost behaviour as fixed and variable with respect to volume alone. Many non-volume driven costs, having cost drivers other than volume, get classified under a single "fixed cost" overhead pool

Reason: The disadvantage of conventional CVP analysis is that it classifies cost behaviour as fixed and variable with respect to volume alone. Many non-volume driven costs, having cost drivers other than volume, get classified under a single "fixed cost" overhead pool. This problem is resolved using Activity Based CVP analysis. CVP analysis can help the company determine the production level or selling price of a product to earn a target profit. It can be applied in any type of business.

143. In which of the following scenarios will an organization not outsource its production?

(a) When the risk of technological obsolescence of the component does not justify the capital investment it requires

(b) When the incremental cost savings and opportunity costs if any are less than the incremental cost due to outsourcing

(c) When it costs more to manufacture the component internally

(d) When the process of making that component is confidential and patented by another organization

ANSWER

Option (b) When the incremental cost savings and opportunity costs if any are less than the incremental cost due to outsourcing

Reason: The correct answer is when the incremental cost savings and opportunity costs if any are less than the incremental cost due to outsourcing. This is when a cost benefit analysis of the outsourcing decision reveals that it might be better to manufacture the component internally as that would be cheaper than outsourcing it.

144. As per market research, when the selling price of a product is ₹ 80,000 per unit there will be no demand. For every ₹ 10,000 reduction in selling price

from ₹ 80,000 per unit, 2 additional units can be sold. The variable cost to manufacture the product is ₹ 50,000 per unit.

The selling price that will maximize the profit for this product will be:

(a) ₹ 60,000 per unit

(b) ₹ 65,000 per unit

(c) ₹ 70,000 per unit

(d) ₹ 75,000 per unit

ANSWER

Option (b) ₹ 65,000 per unit

Reason: The correct answer is ₹ 65,000 per unit.

As per the profit maximization model,

Price = a - bQ and Marginal Revenue = a - 2bQ

where a is the selling price at which demand is nil, b is the slope of the line and Q is the quantity demanded.

Here a = ₹ 80,000 per unit, b = (change in price / change in units) = (10,000/ 2) = 5,000 and Q is the quantity demanded.

Price = 80,000 - 5,000Q

Marginal revenue= 80,000 - 2 (5,000) × Q = 80,000 - 10,000Q

Marginal cost = ₹ 50,000 per unit.

Profit is maximum where Marginal Revenue = Marginal Cost.

80,000 - 10,000Q = 50,000

10,000 Q = 30,000. Therefore Q = 3 units

Therefore, selling price at which profit will be maximum = Price = a - bQ

= ₹ 80,000 - ₹ 5,000(3) = ₹ 65,000 per unit.

145. As per market research, when the selling price of a product is ₹ 80,000 per unit there will be no demand. For every ₹ 10,000 reduction in selling price from ₹ 80,000 per unit, 2 additional units can be sold. The variable cost to manufacture the product is ₹ 50,000 per unit.

What is the optimum quantity that will maximize the profit?

(a) 8 units

(b) 2 units

(c) 3 units

(d) 5 units

ANSWER

Option (c) 3 units.

Reason: As per the profit maximization model,

Price = a - bQ and Marginal Revenue = a - 2bQ

where a is the selling price at which demand is nil, b is the slope of the line and Q is the quantity demanded.

Here a = ₹ 80,000 per unit, b = (change in price / change in units) = (10,000/ 2) = 5,000 and Q is the quantity demanded.

Price = 80,000 - 5,000Q

Marginal revenue= 80,000 - 2 (5,000) × Q = 80,000 - 10,000Q

Marginal cost = ₹ 50,000 per unit.

Profit is maximum where Marginal Revenue = Marginal Cost.

80,000 - 10,000Q = 50,000

10,000 Q = 30,000. Therefore Q = 3 units

146. Which of the following factors will make the customer more sensitive towards the price of a product?

(a) Higher perceived quality of the product

(b) High perishability of the product

(c) Difficulty in comparison of the product with its alternatives

(d) High proportion of expenditure (product cost) to the customer income

ANSWER

Option (d) High proportion of expenditure (product cost) to the customer income

Reason: The correct answer is high proportion of expenditure (product cost) to the customer income. Where the expenditure on account of the purchasing the product is high in proportion to the customer income, the customer will be more sensitive towards the price of a product.

147. Kano Model of product development and customer satisfaction is used for prioritizing the most important features in a product roadmap. Which of the following is not true about the utility of the Kano Model?

(a) Order of priority of product features that cater to customer needs and satisfaction as determined by Kano Model are permanent

(b) The Kano model can prevent wasted time and resources used to develop non-priority features in a product

(c) The Kano model helps to prioritize features that can amplify customer satisfaction

(d) Kano model helps to speed up decision making based on researched data

ANSWER

Option (a) Order of priority of product features that cater to customer needs and satisfaction as determined by Kano Model are permanent

Reason: Customer needs and satisfaction from a product are always changing. Hence, the priority of product features determined using Kano Model will not be permanent. A must have feature today, can be a reverse feature (that causes dissatisfaction) in future. Example can be a dial up connection for internet in the early 2000s has changed from a must have feature to a redundant / reverse feature in today's world of wi-fi connectivity.

148. Oz is about to introduce a cutting-edge new product. Because of the product's capabilities and highly regarded design, there is expected to be

a high level of demand. Oz is eager to recover its significant R&D expenses as soon as feasible.

Which pricing strategy would be applied in order to achieve the goal of returning R&D expenses as soon as feasible?

(a) Price penetration

(b) Price skimming

(c) Cost plus pricing

(d) Discount pricing

ANSWER

Option (b) Price skimming

Reason: Cost plus pricing may seem like a good idea in the beginning of a product's life cycle, but it has the drawback of ignoring market conditions, which could lead to a price that is too high or low to maximize revenue. A price skimming starts with a high price. Despite the low sales volume, this can generate substantial returns very quickly. It makes sense only when the new product is sufficiently distinct to drastically reduce rivalry.

149. O makes lotion for the body to soothe dry skin in the winter. Y received a 10% discount from O on lotion purchases, while Z received a 15% discount. The nature of their dealings was the only distinction between the two, as their order sizes were identical. While Z only offered the lotions for wholesale, Y sold them in the retail market.

Which kind of discount was approved by O?

(a) discounts for quantity

(b) discounts for price differentiation

(c) discounts for trade

(d) discounts for distributors

ANSWER

Option (d) discounts for distributors

Reason: Discount was approved by O is - discounts for distributors.

150. A company manufactures a carbonated drink, which is sold in 1 litre bottles. During the bottling process there is a 10% loss of liquid input due to spillage and evaporation.

What is the standard usage of liquid per bottle?

(a) 1.10 litres

(b) 1.11 litres

(c) 1.00 litres

(d) 0.90 litres

ANSWER

Option (b) 1.11 litres

Reason: Required liquid input = 1 litre × 100/ 90

= 1.11 litres

151. Six years ago material M cost $5 per kg and the price index most appropriate to the cost of material M was 110. The same index now stands at 550.

What is the best estimate of the current cost of material M per kg?

(a) $20.00

(b) $55.00

(c) $50.00

(d) $25.00

ANSWER

Option (d) $25.00

Reason: $5 × 550 ÷ 110 = $25

152. Which of the following would you excluded while analysing customer account profitability?

(a) Sales Revenue

(b) Direct product costs

(c) Delivery cost specific to the customer

(d) Fixed overhead allocation

ANSWER

Option (d) Fixed overhead allocation

Reason: The correct answer is (D) Fixed overhead allocation is excluded from analysing customer account profitability. This has to be incurred irrespective of whether sales are made to the customer or not.

153. Pareto principle based upon the law of –

(a) Diminishing returns

(b) Stable returns

(c) Variable returns

(d) Increasing returns

ANSWER

Option (a) Diminishing returns

Reason: Pareto Analysis ranks the causes (reasons) in descending order of effect. Hence help to identify pay-off. It's obvious that focus is on items at the top (vital few) of the list because these have a higher probability of payoff. Hence the law of diminishing returns (pick the low hanging fruits first) applies here.

154. Pareto principle can't be applied to –

(a) Inventory control

(b) Customer profitability analysis

(c) Quality control

(d) None of the above

ANSWER

Option (d) None of the above

Reason: Pareto analysis can be applied in Inventory Control, Pricing the products, Customer profitability analysis, ABC analysis, and Quality control etc.

155. Pareto analysis shall be performed –

(a) Continuously

(b) Occasionally

(c) Quarterly

(d) Periodically

ANSWER

Option (d) Periodically

Reason: To keep check, that trivial should not become vital (and if turning to vital can be responded early one) and to check that effort done by management eliminate or reduce the impact of vital root-causes.

156. Which one need to be responded first –

(a) Trivial many

(b) Vital few

(c) Trivial few

(d) Vital many

ANSWER

Option (b) Vital few

Reason: Pareto is one of 7QC tools which help the management as control mechanism to prioritize, in term of root causes that need to be responded first. Vital few causing significant impact hence to offer higher payoff.

157. Which costing system is often used to calculate customer profitability?

(a) Manufacturing cycle efficiency

(b) Target costing

(c) Activity-based costing

(d) Delivery cycle efficiency

ANSWER

Option (c) Activity-based costing

Reason: There are several methods, which can be used for this purpose, one commonly used method is activity-based costing.

158. **Assertion** - The informed decision making is essential requirement for efficient strategic Planning and Control.

Reason - Effectiveness of strategy depends upon the efficiency of strategic planning and control.

(a) Both are correct statements but reason is correct explanation to assertion

(b) Both are correct statements and reason is not correct explanation to assertion

(c) Only assertion is correct

(d) Only reason is correct

ANSWER

Option (b) Both are correct statements and reason is not correct explanation to assertion

Reason: Effectiveness of strategy depends upon the efficiency of strategic planning and control. Planning ensure apt strategic choice whereas control ensure flawless execution. Further the informed decision making is essential requirement for efficient strategic Planning and Control. The required set of information to make informed decisions, can be obtained from the same information system which is operated for the purpose of performance measurement and evaluation under performance management system. Both the statements are correct, even connected, but reason is not correct explanation of assertion.

159. Correctly match the items of following sets i.e., classification of activities and action to improve/enhance/unlock value –

i. Necessary (essential) activity that can't be improved upon at this time	A. Eliminate eventually
ii. Necessary (essential) activity that can be changed to improve the process	B. None
iii. Unnecessary (non-essential) activity that can be eliminated eventually (but not now) by changing the process	C. Eliminate immediately
iv. Unnecessary (non-essential) activity that can be eliminated quickly by changing the process	D. Modify the process

Option

(a) i- A, ii-B, iii-C, and iv-D

(b) i- C, ii-A, iii-B, and iv-D

(c) i- B, ii-A, iii-D, and iv-C

(d) i- B, ii-D, iii-A, and iv-C

ANSWER

Option (d) i- B, ii-D, iii-A, and iv-C

Reason: Classification of activities is helpful in devising appropriate strategy. Consider following points to decide course of action after classification. (i) Necessary (essential) activity - can not be improved upon at this time - None (ii) Necessary (essential) activity - can be changed to improve the process - Modify the process to improve value (iii) Unnecessary (non-essential) activity - can be eliminated eventually (but not now) by changing the process - Eventually eliminate the unnecessary activity (iv) Unnecessary (non-essential) activity - can be eliminated quickly by changing the process - Immediately eliminate the unnecessary activity. To improve students understanding - United Parcel Services (UPS)

a logistic company implement the worlds largest wireless network. (Reduce paper work and improve sorting and tracking - helps in resource planning in term of capacity at hub - timely information) Managers at Microsoft chosen to outsource the Xbox manufacturing to Flextronics, because manufacturing hardware is not their core competencies.

160. Business Integration can be attained thought McKinsey's 7S model, which of following statements about business integration and McKinsey's 7S are incorrect –

i. Business integration can overcome the problem of sub-optimisation

ii. It is easy for management to influence the soft S

iii. Structure, system and style are hard S

Option

(a) i only

(b) i and iii only

(c) ii and iii only

(d) iii only

ANSWER

Option (c) ii and iii only

Reason: Business integration can overcome the problem of sub-optimisation, because through it processes are viewed from entities perspective (rather than from viewpoint of individual department or function), that stretch from initial order to final delivery of a product. Further Information Technology breakthrough can be used to integrate these processes and activities. The hard areas comprise 3S namely Strategy, Structure and System. It is easy for management to influence and change these areas, because these hard elements are easily quantified and defined, and deal with facts and rules. Whereas soft areas comprise 4S namely Style, Staff, Skills, and Shared values; since these are influenced by the culture of the organisation, hence more difficult to describe and less tangible, therefore relatively difficult for management to make change.

161. Organisation's Culture and Strategy influence the Performance Measurement. According to you which of following statements are correct –

i. Predictable and reliable culture encourage participation and risk-taking behaviour

ii. When it comes to satisfy customer, the strategy needs to consider non-financial aspects of performance additionally

Option

(a) i only

(b) ii only

(c) both i and ii

(d) None of i and ii

ANSWER

Option (b) ii only

Reason: Predictable and reliable culture encourage formal behaviour and use tried and tested method and techniques of performance measurement, while innovative and creative culture encourage participation and risk-taking behaviour, hence open to adapt new methods and techniques. Organisations that are competing effectively in today's competitive market need to adopt strategies that aim at satisfying customers. These have to focus on quality, time and innovation, in short there is need to consider non-financial aspects of performance additionally to the financial aspects.

162. In functional structure with centralised control, the performance related data _____ at functional level; whereas under decentralised control structure the performance related data _____ at lower down in the hierarchy.

(a) Collected and Analysed; Collected and Analysed

(b) Collected; Collected and Analysed

(c) Collected and Analysed; Collected

(d) Collected; Collected

ANSWER

Option (b) Collected; Collected and Analysed

Reason: Traditionally there are two sort of organisation structures are prevalent i.e., functional and divisional which may be seen as organisation with centralised and decentralised control. Functional Structure and Centralised control - Performance related data to be collected at functional level, but analysed at the upper level and then feedback sent to the functional levels. Decentralised control structure - Performance related data to be collected and analysed lower down in the hierarchy, hence managers have more discretion and autonomy.

163. Complex Business Structure is becoming popular or better to say is need of hour. Which of following shall be feature of complex business structure –

i. Concentrated control

ii. Shared objectives

iii. Pooled resources

iv. Ultimate Beneficial Owner is not easily identifiable

Connected virtually

Option

(a) i, ii, iii, and iv

(b) ii, iii, iv, and v

(c) i, iii, iv, and v

(d) i, ii, iv, and v

ANSWER

Option (b) ii, iii, iv, and v

Reason: Though there is no universally acceptable definition of complex business structure or list thereof. But any business structure said to be complex business structure if one or combination of following features exit - Diluted control or Shared objectives (which sometimes makes determination of ultimate beneficial owner difficult) or Pooled resources

or Connected virtually or Collaboration of different cultures, interests or Diverse business environment.

164. Complex business structure is outcome of changing business environment; it has strong bearing on performance management system and allied aspects. Which of following statements is not true in this regard –

i. The core organisation may invest in the development of an information system that it requires all partners to use.

ii. Virtual organisation may be considered as complex business structure.

iii. In a complex business structure, the core organisation does not need to have a detailed analysis of costs incurred by the business partners.

Option

(a) i only

(b) ii only

(c) both i and iii

(d) None of i, ii and iii

ANSWER

Option (d) None of i, ii and iii

Reason: Accurate, Reliable and Timely information can be answer to majority of issues that performance management may face in case of complex business structure. Hence information systems often play a crucial role in complex business structures. The core organisation may invest in the development of an information system that it requires all partners to use. Having one system used by all partners means that everyone is using the same data. There should be less difficulty collecting information about the performance of partners since the information will all be stored on one system. A virtual organisation is one that has little or no physical premises, but where employees and managers work remotely (typically from their own location) and are connected using IT. These are

sometimes also called as hollow or network organisations; especially where people are connected to each other through some platform such as online trading or retail platforms. Ola, Uber, Flipkart and Amazon are prominent examples. Hence virtual may be considered as complex business structure. In a complex business structure, the core organisation does not need to have a detailed analysis of costs incurred by the business partners. From a financial point of view, the core is only interested the prices that partners will charge, and these will already have been agreed in the service level agreement.

165. Performance measures (CSFs & KPIs thereto) acts as stimuli. Therefore, what get _____, gets_____.

(a) Established, Achieved

(b) Targeted, Attained

(c) Measured, Done

(d) Reported, Improved

ANSWER

Option (c) Measured, Done

Reason: What gets measured, gets done. People will make a greater effort to perform well in aspects of their roles which they know are being measured, compared to those which are not.

166. In context of the management control systems, correctly match the items of following sets i.e., control and scope thereof –

i.	Behavioural control	A.	Appropriate skills
ii.	Personnel control	B.	Desired actions take place
iii.	Cultural control	C.	Information pertaining to performance
iv.	Reporting control	D.	Conducive environment

Option

(a) i- A, ii-B, iii-C, and iv-D

(b) i- C, ii-A, iii-B, and iv-D

(c) i- B, ii-A, iii-D, and iv-C

(d) i- B, ii-D, iii-A, and iv-C

ANSWER

Option (c) i- B, ii-A, iii-D, and iv-C

Reason: Management control systems have an important role to play in developing accountability and in turn accountability leads to better performance. There are three broad categories of control mechanism which any business can use - Behavioural control - to ensure only desired actions take place. Personnel and cultural control - for every job, person with appropriate skills and conducive environment is provided. Reporting control - to control the collection and reporting of information pertaining to performance (basically to ensure outcome of efforts must be reported fairly).

167. In cut-through competition the survival is equally important as attaining competitive advantage hence Predicting and Preventing Corporate Failure become essential. Which of following statements true in this regard –

i. Trigging factor is the root cause of corporate failure

ii. Predicting corporate failure helps in deploying both corrective and preventive measures

Option

(a) i only

(b) ii only

(c) both i and ii

(d) None of i and ii

ANSWER

Option (b) ii only

Reason: The triggering factor which prime facie may seems to be the cause of corporate failure, may or may not be the root cause; even if it is, then also not necessary being the only cause. Multiple reasons may co-exist. To illustrate, failure of Silicon Valley Bank root cause was poor ALM

(Asset liability Management) whereas triggering factor was increase of rate by Fed Reserve, which results in panic among depositors to withdraw their deposits and bear sentiment among investor to sell the securities they held. In context of Strategic Performance Management, it is significant to detect the signs of corporate failure to take corrective measures to control the damage that has already taken place, in addition to applying the preventive measures for future.

168. Which of the following is true about CSF?

(a) These factors contribute towards reducing costs

(b) These factors are fundamental to strategic success

(c) These factors need to be only financial factors

(d) These factors concentrate on achieving short term goals

ANSWER

Option (b) These factors are fundamental to strategic success

Reason: The correct answer is (b) these factors are fundamental to strategic success.

169. Which of the following may involve sacrificing long term objectives?

(a) Utilizing internal reserves to find capital expenditures

(b) Increasing quality control measures

(c) Compromising on product design in the rush to launch a new product in the market

(d) Increasing skill development programs for staff

ANSWER

Option (c) Compromising on product design in the rush to launch a new product in the market

Reason: The correct answer is (c) compromising on product design in the rush to launch a new product in the market. Product design is a critical activity that impacts the product during its entire life cycle. Capital expenditures are aimed at generating long term benefits. Similarly

increasing quality control and improving the staff skill through development programs have positive long term impact.

170. Inada Group is in infrastructure business for 30 years. It witness growth in double digit in first 10 year of operation and then around 20-30% in next decade; but dramatically registered more than three digits growth in recent decade. But post a whistle-blown even the stock/ share prices tremble like anything and reduced to 25-45% of market value. The threat of corporate failure has been evolved. You are part of team that is hired by IBS bank the largest financial lender to predict corporate failure using Z score. Their total assets are worth 5,00,000 while they have a working capital of 42,000. Their liabilities stand at 5,00,000 while retained earnings amount to 47,500. Earnings before interest and tax come to 65,000. Sales total 5,70,000 while the market value of equity is 7,00,000. (All the figures in crores) The Z score is –

(a) 2.0880

(b) 2.6428

(c) 2.7468

(d) 3.1226

ANSWER

Option (b) 2.6428

Reason – Calculation of Inada Group's Altman z-score:

Altman z-score can be computed as $\mathbf{1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5}$

Wherein,

X_1 = working capital/total assets

X_2 = retained earnings/total assets

X_3 = earnings before interest and tax/total assets

X_4 = market value of equity/total liabilities

X_5 = sales/total assets

(1.2 × (42,000/ 5,00,000)) + (1.4 × (47,500/ 5,00,000)) + (3.3 × (65,000/ 5,00,000)) + (0.6 × (7,00,000/ 5,00,000)) + (1.0 × (5,70,000/ 5,00,000))

(1.2 × 0.084) + (1.4 × 0.095) + (3.3 × 0.13) + (0.6 × 1.4) + (1.0 × 1.14)

Altman Z-Score = **2.6428**

Analysis of Computed Altman Z-Score – Score in range from 1.81 to 2.99 is considered a **grey area.** Companies which have a score lying in this range are not very safe. Their finances are not stable and the companies may get into the "danger zone" if suitable measures not taken. Hence Inada group with 2.6428 is not in safe zone (above 2.99), though it is also not fall in distress zone (below 1.81) but has to address the issues.

171. Match the tools to the objectives –

Tool	**Objective**
i. Balanced Scorecard	a. Link Strategy, Operations and Performance
ii. Performance Pyramid	b. Linkage between performance measures
iii. Building Block	c. Framework for sustainable development
iv. Triple Bottomline	d. Link between achievement of corporate strategy and management of human resources

Option

(a) i- a, ii- b, iii- c, and iv- d

(b) i- c, ii- a, iii- b, and iv- d

(c) i- b, ii- a, iii- d, and iv- c

(d) i- b, ii- d, iii- a, and iv- c

ANSWER

Option (c) i- b, ii- a, iii- d, and iv- c

Reason: Balanced Scorecard- linkage between performance measures, Performance Pyramid- link strategy, operations and performance, Building Block- link between achievement of corporate strategy and

management of human resources, Triple Bottomline- framework for sustainable development.

172. McKinsey's 7S framework divided 7S into two sets of areas i.e., soft and hard area. The hard S are easy to quantify (measure) hence changes can be made to these by management with greater ease. Which of following is not a hard S?

(a) Strategy

(b) Structure

(c) System

(d) Style

ANSWER

Option (d) Style

Reason: There are three hard S, Namely Strategy, Structure and System.

173. Business integration brings all aspects of business in alignment, so that business objectives can be achieved; by effective implementation of strategies while making efficient use of available set of resources. There are four aspects that are essential to be integrated, namely people, operations, strategy and_____.

(a) Finances

(b) Logistics

(c) Technology

(d) Knowledge

ANSWER

Option (c) Technology

Reason: Four aspects in particular need to be linked as part of business integration effort i.e., people, operations, strategy, and technology. Performance management improves as result of integration of these four aspects.

174. T Motors directed T Steels to deliver a specific metal material for its upcoming e-vehicle considering the design. Engineers from Production and Operation division of T Motors visited to T Steel to explain the needs after deliberation decided some of process need to be performed in such metal while in process at T Steel's plant only (even prior to bring to T Motors' Plant). One of engineer from T Motors placed at T Steel till such metal prepared and deliver to keep check at specifications. Above facts highlights the concept of –

(a) Value Chain

(b) Value System

(c) Value Specification

(d) Value Set

ANSWER

Option (b) Value System

Reason: Extended value chain encompasses the customer's customers and the suppliers' suppliers. Because by creating extended organisation, dynamic and hostile environment can respond in better manner. A firms value chain is connected to what, Porter calls a value system.

175. The new appointed top brass at Jim-Jam Limited give local manager greater autonomy for decision making, with intent to improve performance, in light of fact that company introduced a number of changes in recent past.

Because in past decisions are made at corporate level, local managers only execute them, hence despite power vested with local manager they didn't exercise the authority resultantly changes that were introduced recently failed to create any yield or impact.

Which one of the following elements of McKinsey's 7S's model best explains why the change initiatives have been unsuccessful at Jim-Jam Limited?

(a) Shared values

(b) Strategy

(c) Structure

(d) Systems

ANSWER

Option (c) Structure

Reason: The Jim-Jam in past used to have centralised structure but sudden change in structure from centralised to decentralised make it difficult for staff to mend their ways. Nothing regarding Shared Values, Strategy and System is specified in facts of case.

176. Skyway Airline Limited (SAL), an international carrier took series of loans to finance the M&A deals, but now observing the working capital crisis. CEO of SAL in response to a question at recent press-conference, reported the Z-score of 1.6 and assure the investors as well as stakeholders that thing are under control. In which of following zones, you place the SAL –

(a) Distress

(b) Grey

(c) Safe

(d) Warning

ANSWER

Option (b) Grey

Reason: The classification criteria (into zones of discrimination) applicable to non-manufacturing entities, as per Z-score:

Z-Score	Zone of discrimination	Prediction regarding corporate failure (due to bankruptcy)
Less than 1.1	Distress	Companies with a Z score of below 1.1 are in danger and possibly heading towards bankruptcy.
1.1 to 2.6	Grey	Companies with scores 1.1 to 2.6 need further investigation.
More than 2.6	Safe	Companies with a score more than 2.6 are financially sound.

Mind-it, Skyway Airline Limited (SAL) is an international carrier, a non-manufacturing entity.

177. Consider the following categories of performance measures –

i.	Profitability measures.
ii.	Customer-satisfaction measures.
iii.	Efficiency, quality, and time measures.
iv.	Innovation measures.

A cruise line operates on a national scale in a very competitive marketplace. In view of this information, which measures should the company use in the evaluation of its managers?

(a) i

(b) i and ii

(c) ii and iii

(d) i, ii, iii and iv

ANSWER

Option (d) i, ii, iii and iv

Reason: These categories of performance measures are all the things that a company needs in order to have a competitive advantage. Competitive advantage is an advantage that a company has over its competitors which it gains by offering consumers greater value than they can get from its competitors. In a very competitive marketplace such as this cruise line is in, competitive advantage is essential. In order to have a competitive advantage, the company needs to excel in all of these performance measures. If managers are not evaluated on their performance in these areas, they will not work toward excelling in them, and the company will not have a competitive advantage. Therefore, the company should use all of these measures in its evaluation of its managers.

178. Following are the scores of six firms as per Argenti's A score model. You are required to identify healthy firms –

Firm	Defects	Mistake	Symptoms of trouble
i	10	0	4
ii	2	15	0
iii	10	15	0
iv	15	0	0
v	0	30	0

(a) Only firm i, ii, iii, and iv

(b) Only firm i and iv

(c) Only firm ii and iii

(d) Only firm ii, iii, iv, and v

ANSWER

Option (c) Only firm ii and iii

Reason: The maximum score allotted is 100 (being 43 from Defects, 45 from Mistake and 12 from Symptoms of trouble). For a firm to be cleared as healthy, its overall score must be less than the maximum acceptable score of 25 (with 10 and 15 being the maximum acceptable scores in defects and mistakes respectively). If a firm scores anything in Symptoms of trouble this is immediately seen as an indicator that the firm is at risk. A firm that scores more than 25 overall, even if it scores below the individual thresholds in either of Defects (10) or Mistake (15), would still be considered at risk. In case of 1st (i) firm Symptoms of trouble score is 4, while in case 4th (iv) firm Defects score is more than 10 whereas in case of 5th (v) firm Mistake scores are 30, which more than acceptable limit of 15, hence Firm 1 (i), 4 (iv) and 5 (v) are at risk. On contrary firm 2 (ii) and 3 (iii) are healthy.

179. Which of following statements are incorrect in regard to Argenti's A score model –

i. Mistakes and defects not inter-related

ii. Threshold is Kept at score of 45

iii. There are three underlying groups (dimensions) i.e., Mistakes, Defects and Symptoms of failure

Option

(a) Only i

(b) Only ii

(c) Both i and ii only

(d) Both i and iii only

ANSWER

Option (c) Both i and ii only

Reason: Mistake and defects are interrelated. To illustrate, if the management and accounting system is weak (defect) then mistakes are bound to happen. The threshold score to identify the corporate at risk of failure is 25.

180. Based upon the Z score the companies are classified into different zone of discriminations, which of following is not a Zone of discrimination?

(a) Distress

(b) Warning

(c) Grey

(d) Safe

ANSWER

Option (b) Warning

Reason: There are three zones of discrimination - Distress - Companies are in danger and possibly heading towards bankruptcy in upcoming two years, Grey - Further investigation is required, especially in CSFs and KPIs, Safe - Companies are financially sound.

181. Which among the following is not a category of control mechanism that can be used as part of management control system?

(a) Behavioural Control

(b) Reporting Control

(c) Cultural Control

(d) Physical Control

ANSWER

Option (d) Physical Control

Reason: Management control systems have an important role to play in developing accountability and in turn accountability leads to better performance. There are three broad categories of control mechanism which any business can use are Behavioural control, Personnel and cultural control, and Reporting control.

182. How can EVA of a company be improved?

(a) Operating profits can be improved without investing more capital

(b) Choose projects where additional infusion of capital gives a return that is less than the cost of obtaining this additional capital

(c) Discontinue projects where the return on investments yields more than the cost of capital

(d) Change the cost of capital to reflect EVA that is favourable

ANSWER

Option (a) Operating profits can be improved without investing more capital

Reason: The correct answer is (A) EVA can be improved when operating profits can be improved without investing more capital (that is more efficiency is build into the business operations). In statement (B), the return on capital infused should be more than the cost of additional capital. In statement (C), projects where return is less than cost of capital need to be discontinued. Statement (d) implies that the cost of capital should be manipulated to reflect a favourable EVA, which is not ethical.

183. A courier company wants to analyse its operations using the Building Block model. It receives packages from customers and sends it main collection centres of big logistics companies that deliver the parcel to the final destination outside the city. Similarly, the company collects parcels from these collection centres and delivers them to final recipient within the city.

Which of the following are suitable for measuring resource utilization in the courier service company?

(a) Ability to handle ad hoc surge in parcels

(b) Cost of delivery per consignment

(c) Number of customer complaints

(d) Client feedback review

ANSWER

Option (b) Cost of delivery per consignment

Reason: The cost of delivery per consignment shows how the utilization of vans to deliver the packages either to the collection centre or to deliver to the final recipient within the city. Resource utilization measures the efficiency of use of business assets. If the vans are utilized to full capacity, the cost of delivery per consignment would be lower. Ability to handle ad hoc surge in parcels shows the flexibility in operations. Number of customer complaints and client feedback review would reflect the quality of service.

184. Which of the following is not indicative of measure for "innovation and learning" in the Balanced Scorecard?

(a) Ideas generated from employee participation

(b) Sale of new products in proportion to total sales

(c) Number of patents

(d) Sales refunds for products returned

ANSWER

Option (d) Sales refunds for products returned

Reason: The answer is (d) Sales refunds for products returned, which is part of customer perspective. The other measures are indicative of innovation and learning. Sales from new products in proportion to total sales indicates commercial viability of the innovative products, idea generation from employee staff is indicative of learning, number of patents is indication of innovation.

185. Which of the following is false regarding the Rewards used in the Building Block model?

(a) Reward schemes should be linked to performance, achievement of standards

(b) Employees should have clarity of the targets to achieve and corresponding reward system

(c) Employees should be made responsible for all the outcomes of revenue and cost, whether controllable or not

(d) Covers a range of financial and non-financial rewards and benefits

ANSWER

Option (c) Employees should be made responsible for all the outcomes of revenue and cost, whether controllable or not

Reason: The correct answer is (c) it is false that employees should be made responsible for all the outcomes of revenue and cost, whether controllable or not. Evaluating of performance should be based only those aspects that are within the control of the employee.

186. Which of the following is not a measure of Competitiveness?

(a) Promptness in responding to customer requests

(b) Growth in sales

(c) Capturing market share

(d) Customer retention rate

ANSWER

Option (a) Promptness in responding to customer requests

Reason: The correct answer is (a) promptness in responding to customer requests, which is a measure of the Flexibility dimension. Flexibility is the responsiveness to the change in the factor influencing business performance. Competitiveness is part of the results metric which reflects how the company stands in comparison with its competitors. Growth in sales, market share and customer retention rate all reflect the company's performance with respect to its competitors.

187. Match the three building blocks with their objectives in the model proposed by Fitzgerald and Moon –

Tool	Objective
i. Standards	a. Goals of the business comprise of the Determinants (performance areas that influence results) and Results that reflect the success or failure of the determinants
ii. Dimensions	b. Define the characteristics of the performance measures used (KPIs) in terms of being equally challenging to everyone, acceptable to everyone and should be an achievable target
iii. Rewards	c. Schemes that should motivate employees to achieve the standards

Option

(a) i- (a), ii-(b), and iii-(c)

(b) i- (c), ii-(a), and iii-(b)

(c) i- (b), ii-(a), and iii-(c)

(d) i- (b), ii-(c), and iii-(a)

ANSWER

Option (c) i- (b), ii-(a), and iii-(c)

Reason: Standards- Defines the characteristics of the performance measures, Dimensions- Goals of the business, Rewards- Schemes that should motivate employees to achieve the standards.

188. How is Performance Pyramid superior to Balanced Scorecard?

(a) Performance Pyramid combines financial and non-financial measures

(b) Performance Pyramid considers internal as well as external issues

(c) Performance Pyramid focuses on customers and shareholders only

(d) Performance Pyramid due to its hierarchical approach forces senior managers to set objectives along with performance indicators for each level of the organization

ANSWER

Option (d) Performance Pyramid due to its hierarchical approach forces senior managers to set objectives along with performance indicators for each level of the organization

Reason: Performance Pyramid is better than other tools because its hierarchical framework links operational aspects with strategy (corporate vision) and performance. The measures of performance integrate vertically and horizontally thereby linking performance to overall corporate vision. Balanced scorecard on the other hand only links the performance measures of the four perspectives with each other. Senior management misguidedly delegate the responsibility of scorecard implementation and execution to the lower levels of management. This is avoided in Performance Pyramid due to its hierarchical framework that fixes responsibility at all levels of management.

189. Which of the following statements are true about Performance Pyramid?

i. Integrates the business strategic objective with operational performance objectives using a hierarchical approach

ii. Focuses on objectives for internal efficiency with external effectiveness

iii. Performance measures in relation to a wide range of stakeholder groups such as customers, employees and suppliers

Option

(a) i and iii

(b) i and ii

(c) ii and iii

(d) i, ii, and iii

ANSWER

Option (b) i and ii

Reason: Statement (iii) is incorrect because only 2 stakeholders shareholders and customers are focussed upon.

190. ROI is _____ measures and leads to _____.

(a) relative, optimisation

(b) relative, sub-optimisation

(c) absolute, optimisation

(d) absolute, sub-optimisation

ANSWER

Option (b) relative, sub-optimisation

Reason: ROI is a relative measure; it discourages investment because this can decrease ROI in the short term, hence leads to sub-optimisation.

191. RI is _____ measures, hence best applicable to compare performance of division of _____size.

(a) absolute, same

(b) relative, different

(c) relative, same

(d) absolute, different

ANSWER

Option (a) absolute, same

Reason: RI is excess of operating income over the required income to meet cost of capital hence absolute measure, therefore comparison can be made between divisions of same size only.

192. The number of inpatient hospital deaths decreased 8%, from 776 in 2021 to 715 in 2022.

(a) Economic (Profit)

(b) Environmental (Planet)

(c) Social (People)

(d) Need not to be reported

ANSWER

Option (c) Social (People)

Reason: Social bottom line, since hospital mortality rate measures the clinical quality.

193. Key Performance Indicator is the _____ of Critical Success Factor.

(a) Target Measure

(b) Extension

(c) Source

(d) Substitute

ANSWER

Option (a) Target Measure

Reason: Key performance indicators (KPIs) are the way to measure whether the CSFs are working. Using CSFs and KPIs helps a business stay focused on the key actions that will keep it on track to achieving its goals.

194. Critical Success Factors are true _____ of Competitive Advantage.

(a) Target Measure

(b) Extension

(c) Source

(d) Substitute

ANSWER

Option (c) Source

Reason: If any organisation is able to use its core competencies to exploit the CSFs, it will surely have an edge over rivals, which will position the organisation in a better strategic position; leads to competitive advantages. Hence Critical Success Factors are a true source of Competitive Advantage.

195. A company wishes to collect 95% of its accounts receivables within 60 days of sale. This is an example of:

(a) A Mission

(b) A Critical Success Factor

(c) A Key Performance Indicator

(d) A Vision

ANSWER

Option (c) A Key Performance Indicator

Reason: Collection of 95% of accounts receivable within 60 days of sale is a measurable target set by the organization. Hence it is a KPI. Other options would be more general in their definition rather than being a specific measurable target to achieve. A Mission seeks to explain why does the company exist. A Vision describes what the company would like to achieve and generally states an ambitious future. A Critical Success Factor would be those areas or processes that are vital for the attainment of strategic objective. Key Performance Indicators are measurable targets set within such areas critical to success and signals the performance of the company in such areas.

196. In a highly competitive airline industry, the top management of Gofly airline wants to get a comprehensive view of its business regularly. Hence, they have adopted the Balanced Scorecard in order to get access to

information in a crisp and concise manner. Given the challenges of rising costs, decreased profit margins and other business uncertainties, the airline wishes to adopt "operational efficiency and performance" as its strategic theme for the next coming years. The Balanced Scorecard has been prepared with this background.

Match each objective to the appropriate perspective of the Balanced Scorecard –

Balanced Scorecard Perspective	Objective
i. Customer Perspective	a. Investing in modern flight simulators to provide scenario driven model of training to pilots as part of their annual training program
ii. Internal Business Process Perspective	b. Maximize aircraft utilization by reorganizing routes to reduce vacant (unsold) seats in flights
iii. Learning and Growth Perspective	c. Ensure on-time arrival and on-time departure to within 15 minutes of scheduled time
iv. Financial Perspective	d. Fast aircraft turnaround time (time between aircraft landing and next take off)

Option

(a) i- c, ii- d, iii- a and iv- b

(b) i- b, ii- d, iii- c and iv- a

(c) i- d, ii- c, iii- a and iv- b

(d) i- b, ii- c, iii- a and iv- d

ANSWER

Option (a) i- c, ii- d, iii- a and iv- b

Reason: Ensure on-time arrival and on-time departure to within 15 minutes of scheduled time will determine how the customer perceives

Gofly airline. Punctuality in operations is important for operational efficiency.

Fast aircraft turnaround time (time between aircraft landing and next take off) is a critical internal operation that will enable to help improve operational efficiency. Hence, this is an Internal Business Process Perspective that will help GoFly achieve its strategic objective and ensure customer satisfaction.

Investing in modern flight simulators to provide scenario driven model of training to pilots as part of their annual training program will improve GoFly's valued asset, the team of pilots who operate its fleet. Skilled and experienced pilots is a must for operational efficiency and performance. This pertains to Learning and Growth Perspective.

Maximize aircraft utilization by reorganizing routes to reduce vacant (unsold) seats in flights is needed in order to earn maximum revenue from each flight. This is a Financial Perspective that the shareholders or owners of GoFly would be interested in.

197. Taxaid is tax planning and advisory company that helps clients with filing their tax returns. They also take care of any arbitration and litigation that would arise on account of these filings. When Taxaid receives a client request for filing tax returns, the request is allocated to tax return preparers. Once the tax return is prepared, the supervisor for the team vets the preparation process and the related tax calculations. Taxaid has multiple teams for different types and complexity of clients namely individuals, corporates, partnerships etc. In order to get complete information for filing the return, Taxaid has a questionnaire that is required to be filled out by the client at the beginning of the assignment. This document aims at capturing all relevant aspects relating to taxation, both financial and non-financial information required for disclosure purpose.

Taxaid is developing a Balanced Scorecard to get an overview of their performance under various parameters.

Identify which of the following would be classified as Internal Business Processes –

i. Average time spent by the supervisor correcting the errors in the tax return prepared by the tax return preparer.

ii. Gaps and loopholes in the questionnaire given to the client that is needed to capture all relevant aspects relating to taxation, both financial and non-financial information required for disclosure purpose.

iii. The average number of hours of training imparted to the employees during the year.

iv. The average system downtime during which time, work needs to be suspended.

Option

(a) i and ii

(b) ii and iv

(c) i, ii and iv

(d) i, ii and iii

ANSWER

Option (c) i, ii and iv

Reason: Internal Business Processes Perspective stems from business processes that impact the satisfaction of shareholders and customers. The processes affect cycle time, quality, employee skill, productivity etc. which impact client satisfaction. They also have a financial implication that impacts shareholders' perception.

Statement 1 - Average time spent by the supervisor correcting the errors in the tax return prepared by the tax return preparer reflects employee skill (both of the tax preparer and supervisor) and productivity. Error correction is a non-value adding process and has to be minimized.

Statement 2 - Gaps and loopholes in the questionnaire reflect the quality of information collected from clients. This impacts the quality (accuracy and correctness) of return filing.

Statement 4 - The average system downtime during which time, work needs to be suspended impacts productivity.

All of the above impact the cycle time and productivity of the tax filing process.

Statement 3 - The average number of hours of training imparted to the employees during the year should be captured in the Learning and Growth Perspective.

198. A law firm is looking to implement certain performance measurement metrics to evaluate the performance of its junior law partners.

Match the qualitative aspect related to the employees to the measure (KPI) –

i. Skill	a. Average time taken to handle a case from beginning to closure
ii. Efficiency	b. Client customer surveys after the service is provided
iii. Morale	c. Number of years of practice
iv. Client satisfaction	d. Employee attrition rate

Option

(a) i- a, ii- b, iii- c, and iv- d

(b) i- c, ii- a, iii- b, and iv- d

(c) i- c, ii- a, iii- d, and iv- b

(d) i- b, ii- d, iii- a, and iv- c

ANSWER

Option (c) i- c, ii- a, iii- d, and iv- b

Reason: Skill – Number of years of practice.

Efficiency - Average time taken to handle a case from beginning to closure.

Morale - Employee attrition rate.

Client satisfaction - Client customer surveys after the service is provided.

199. A company has ₹ 50,00,000 that it can invest either in Project A or Project B. Given below are details given regarding the projects:

	Division A	Division B
Available investment project	50,00,000	50,00,000
Controllable contribution	10,00,000	8,00,000
ROI on proposed project	20%	16%
Present ROI of divisions	25%	15%
Overall cost of capital	18%	18%

Which of the following situations will not lead to goal congruence for the company?

i. Manager of Division A rejects the project proposal because current divisional ROI of 25% is higher than the 20% ROI from the project.

ii. Manager of Division A accepts the project proposal because the 20% ROI from the project is more than the overall cost of capital for the company.

iii. Manager of Division B rejects the project proposal because current divisional ROI of 15% is lower than the overall cost of capital for the company.

iv. Manager of Division B accepts the project proposal because the current divisional ROI of 15% is lower than the 16% ROI from the project.

Option

(a) i and iv

(b) ii and iii

(c) i and iii

(d) ii and iv

ANSWER

Option (a) i and iv

Reason: The correct answer is (i) and (iv) will not lead to goal congruence for the company. A manager should accept the project proposal, in the interest of goal congruence only if it is higher than the overall cost of capital. The overall cost of capital is 18% while the ROI of the project for

Division B is 16%. Acceptance of this project by Division B will impact the profitability of the company. Similarly, as long as the ROI from the project is higher than the overall cost of capital, the Division should accept the project. However, in (i) where Division A rejects the project just because the 20% ROI from the project is lower than the present divisional ROI of 25%, the profitability of the company is impacted. This is because even though the divisional ROI is higher, Division A should have accepted the project as it was higher than the overall cost of capital therefore accepting the project would have positively impacted the overall profit of the company.

200. Which of the following statements is false?

(a) Residual Income is subject to the scale of operations while Return on Investment is not subject to scale of operations

(b) Decision based on Residual Income is taken by comparing contribution with cost while decisions based on Return on Investment is taken based upon a comparison between two rates (current rate and expected rate from the project)

(c) Residual Income is an absolute measure while Return on Investment is a relative measure

(d) Residual Income is adjusted for price level changes while Return on Investment is measured at current price levels

ANSWER

Option (d) Residual Income is adjusted for price level changes while Return on Investment is measured at current price levels

Reason: The correct answer is- the statement that Residual Income is adjusted for price level changes while Return on Investment is measured at current price levels is false. Both Residual Income and Return on Investment are calculated at current price levels and are not adjusted for inflation. Under both methods, this can cause principal distortions because returns are measured at current levels while investments are depreciation are at historical prices.

201. Which of the following is a benefit of using Triple Bottom Line (TBL) reporting?

(a) Reporting can result in cost saving by identifying areas where wastage can be reduced

(b) Reporting is based on objective cash flows, rather than subjective accounting profits

(c) Reporting aims at maximizing shareholder wealth

(d) Identification and measurement of targets and actuals is well defined and easily tracked

ANSWER

Option (a) Reporting can result in cost saving by identifying areas where wastage can be reduced

Reason: The correct answer is triple bottom line reporting aims at encouraging staff to reduce wastage such that it has a positive impact on People, Planet and Profits.

202. In which of the four perspectives of a balanced scorecard would ROI be likely to appear?

(a) Financial

(b) Customer

(c) Internal processes

(d) Learning and growth

ANSWER

Option (a) Financial

Reason: ROI relates to Financial Perspective.

203. In which of the four perspectives of a balanced scorecard is the objective 'reduce staff turnover' mostly likely to be?

(a) Financial

(b) Customer

(c) Internal processes

(d) Learning and growth

ANSWER

Option (d) Learning and growth

Reason: Reduce staff turnover is likely to be most relevant to the Internal Processes perspective.

204. Which of the following is NOT a key dimension of the balanced scorecard model?

(a) Financial

(b) Customer

(c) Internal processes

(d) Rewards

ANSWER

Option (d) Rewards

Reason: Rewards is not a key dimension of the balanced scorecard model.

205. Which of the following is a key step in how you develop a balanced scorecard?

(a) Identify industry growth

(b) Establish the four categories of perspectives

(c) Identify the strategic capabilities and resources

(d) Link the vision and objectives to individual performance

ANSWER

Option (d) Link the vision and objectives to individual performance

Reason: Link the vision and objectives to individual performance is a key step in developing a balanced scorecard.

206. Which of the following measures has ABC Healthcare implemented to ensure 'economy'?

(a) Established a team of highly qualified medical professionals

(b) Negotiated discounted rates with suppliers for medical equipment and supplies

(c) Conducted community outreach programs

(d) Implemented a code of conduct for employees

ANSWER

Option (b) Negotiated discounted rates with suppliers for medical equipment and supplies

Reason: Negotiated discounted rates with suppliers for medical equipment and supplies related to economy. Economy refers to obtaining the appropriate quantity and quality of resources at the lowest cost possible.

207. Which of the following is not a characteristic of Not for Profit Organization?

(a) Their principal operation is for charitable, welfare, social, environmental and mutual co-operation

(b) Sources of funds are from contributions from members or external contributions

(c) Wealth creation for shareholders is not the objective of the Not for Profit Organization

(d) Surplus do not form part of corpus

ANSWER

Option (d) Surplus do not form part of corpus

Reason: Not for profit organizations do not operate for profit i.e., wealth creation is not their moto. They are not expected or allowed to distribute surplus to stakeholders. Surplus if any becomes part of corpus.

208. Not for Profit organizations do not operate for profit, their principal operation is for charitable, welfare, social, environmental and mutual co-operation. What about the performance measurement of these organization is false?

(a) Performance measures are need to monitor to provide reasonable assurance to the contributor that the funds have been used for the purpose for which it was given. Hence, these organizations have a fiduciary responsibility towards the contributor of funds

(b) Performance measures can be both financial and non-financial in nature

(c) It is easy to measure the cost and benefit of activities of not for profit organizations

(d) At times external factors beyond the control of the organization can affect its performance

ANSWER

Option (c) It is easy to measure the cost and benefit of activities of not for profit organizations

Reason: It is false that the cost and benefit of activities of not for profit organizations are easy to measure. For example, the benefit of planting trees to reduce pollution takes years to be realized and it may not be easily quantifiable. Hence, the benefit generated of an NGO involved in tree plantation cannot be derived easily. Similarly, some of the costs will not be monetary in nature or directly linked to the activities of the organization. It might involve clearance of land to set up a museum or school, for which certain activities like construction of building, laying roads can cause pollution, which cannot be quantified.

209. Match the following –

i.	Effectiveness	a.	An input measure, the resource approach
ii.	Efficiency	b.	Link between input and output, the process approach
iii.	Economy	c.	An output approach, the goal approach

Option

(a) i- b, ii- a, iii- c

(b) i- c, ii- b, iii- a

(c) i- a, ii- b, iii- c

(d) i- a, ii- c, iii- b

ANSWER

Option (b) i- c, ii- b, iii- a

Reason: Effectiveness - An output approach, the goal approach; Efficiency - Link between input and output, the process approach; Economy - An input measure, the resource approach.

210. NZ vocational school offers education programs for students to be trained in areas like electronics, food processing, tourism, and hospitality etc. It has received grant in aid from the local government. The objective is to have an intake of at least 40 students in each of these trades. In order to attract students, the school participated in an education fair. The teachers at the vocational school explained to prospective students about the courses offered and the way the organization works.

You have been asked to assess the Value for Money of the school's participation in the education fair.

Match the measure to the objective:

i. Number of prospective students who visited the stall	a. Economy
ii. Ability of the teachers to communicate with the students about the courses and resolve their doubts	b. Efficiency
iii. Cost of the stall, brochures and other material	c. Effectiveness

Option

(a) i- b, ii- a, iii- c

(b) i- a, ii- b, iii- c

(c) i- c, ii- b, iii- a

(d) i- a, ii- c, iii- b

ANSWER

Option (c) i- c, ii- b, iii- a

Reason: Number of prospective students who visited the stall – Effectiveness. More the number of students who visited the stall, more effective was the school's promotion in the education fair.

Ability of the teachers to communicate with the students about the courses and resolve their doubts – Efficiency. Teachers are the resources that the school has to promote the courses it is offering. Their ability to communicate

with the students about the courses and to resolve their doubts indicates how efficiently the resource was utilized.

Cost of the stall, brochures, and other material – Economy. It is the main cost incurred in this promotional activity.

211. X Society offers accounting support to charitable organisations. Each employee works six chargeable hours a day on average, with the remaining portion of the workday being devoted to non-chargeable administrative tasks.

A primary goal of X Society is to achieve a superior standard of service and client satisfaction.

X Society has set a goal of "cutting expenditure by 5%" for the upcoming year.

Which option best assigns the aforementioned goal to the value for money performance category?

(a) Efficacy

(b) Efficiency

(c) Economy

(d) Effectiveness

ANSWER

Option (c) Economy

Reason: Economy best assigns the goal of "cutting expenditure by 5%" to the value for money performance category.

212. Which one of the following statements about internal performance reporting is true?

(a) Always contain a mixture of financial and non-financial measurements

(b) Can take any form that management chooses

(c) Are required by an accounting standard to be based on the 'Balanced Scorecard' system

(d) Contain the same information as financial accounting statements, but they are produced monthly rather than annually

ANSWER

Option (b) Can take any form that management chooses

Reason: Internal performance reports can take any form that management chooses considering the need of organisation, as these are voluntary reports not statutory required.

213. Since performance report also includes reporting on non-financial measures, you are required to identify which of the following statements correct about the non-financial performance measures?

i. Non-financial measures do not involve the calculation or recording of any numbers

ii. The most appropriate non-financial measures vary, depending upon the nature of the organisation

iii. Non-financial measures should correspond as far as possible with the aims of the organisation as a whole

iv. The use of non-financial performance measures helps to address the deficiencies of measurements such as Return on Investment (ROI)

Option

(a) i, ii, and iii

(b) ii, iii and iv

(c) i, iii and iv

(d) i, ii, and iv

ANSWER

Option (b) ii, iii and iv

Reason: Only statement (i) is incorrect rest all are correct. Non-financial qualitative information is likely to be as important as quantitative data, but it is more difficult to quantify and present in reports. Technically, qualitative information is referred to as a construct, which is an attribute that cannot be directly measured. To illustrate, Constructs include things like enthusiasm and empathy. Typically, an effort must be made to convert qualitative information into quantifiable information for communication,

assessment, and comparison purposes. The conversion of construct into variable involves the calculation or recording of any numbers.

214. What are the objectives of transfer pricing –

i. Achieve goal congruence, maximise earnings in line with the objectives of the company

ii. Facilitate divisional performance

iii. Manipulate profits to minimise tax

iv. Determines the allocation of divisional resources in terms of scale of operations and investments

Option

(a) i and iv only

(b) ii and iii only

(c) iii and iv only

(d) i, ii, and iv

ANSWER

Option (d) i, ii, and iv

Reason: The correct answer is (d). Sub optimal utilization of resources can be avoided by using transfer pricing. This determines the level of output for the particular product or service. Decisions about inter divisional sales will then determine the scale of operations and investment. Transfer pricing is aimed at profit maximization for the company as a whole in line with its objectives. It is helps in evaluating the performance of individual divisions.

215. Which of the following are true about cost based transfer pricing?

i. It is based on the internal cost records of the company and is readily available

ii. The basis for cost based transfer pricing can be more easily understood as compared to market based transfer pricing

iii. Cost based transfer pricing is subjective

iv. Managers of supplying division may find little incentive to lower the costs, this goes against goal congruence

Option

(a) i and ii only

(b) i, ii and iv

(c) i, ii and iii

(d) All of i, ii, iii, and iv

ANSWER

Option (d) All of i, ii, iii, and iv

Reason: Internal cost records provide the information for calculating cost based transfer pricing. Since information is available completely within, the basis for the transfer price will be more easily understood as compared to market based transfer price. The interpretation of costs can be of many types like full costing, marginal costing, standard costing etc. Hence cost based transfer pricing is subjective. Since managers of supplying divisions are allowed to recoup the divisional cost by charging other divisions it services, there is little incentive for the manager to build efficiency in the cost structure. This goes against goal congruence.

216. Division A transfers good to Division B. Division A incurs marginal cost of $10 per unit and Division B incurs a marginal cost of $5 per unit. Division B sells the finished product externally at $20 per unit.

If there is no external market for the intermediate product, what should be the minimum transfer price (in $) that Division A should charge to promote goal congruence?

(a) 10 per unit

(b) 15 per unit

(c) 20 per unit

(d) Between 15 per unit and 20 per unit

ANSWER

Option (a) 10 per unit

Reason: Division A should be able to recover its marginal cost which is $10 per unit. Since there is no external market, there is no opportunity cost. The other figures are arbitrary.

217. Division A transfers good to Division B. Division A incurs marginal cost of ₹ 10 per unit and Division B incurs a marginal cost of $5 per unit. Division B sells the finished product externally at $20 per unit.

If there is an external market for the intermediate product, what is the maximum price the Division B will be willing to pay to Division A for the intermediary product?

(a) Marginal cost of Division A per unit

(b) Net marginal revenue per unit

(c) External buy-in price per unit

(d) Lower of net marginal revenue per unit and the external buy in price per unit

ANSWER

Option (d) Lower of net marginal revenue per unit and the external buy in price per unit

Reason: Where there is an external market, Division B will be willing to pay (Division A) a maximum price calculated as – lower of net marginal revenue per unit and the external buy in price per unit.

218. Division A transfers good to Division B. Division A incurs marginal cost of $10 per unit and Division B incurs a marginal cost of $5 per unit. Division B sells the finished product externally at $20 per unit.

What is the net marginal revenue per unit (in $) for the intermediate product?

(a) 10 per unit

(b) 15 per unit

(c) 20 per unit

(d) Between 15 per unit and 20 per unit

ANSWER

Option (b) 15 per unit

Reason: The net marginal revenue per unit is calculated as selling price per unit less the marginal cost of Division B = $20 per unit - $5 per unit = $ 15 per unit.

219. Division A transfers good to Division B. Division A incurs marginal cost of $10 per unit and Division B incurs a marginal cost of $5 per unit. Division B sells the finished product externally at $20 per unit.

If Division B can procure the intermediate product at $14 per unit, what should be the maximum price (in $) that A can charge to remain competitive?

(a) 15 per unit

(b) 14 per unit

(c) 10 per unit

(d) 20 per unit

ANSWER

Option (b) 14 per unit

Reason: Division B will be willing to pay (Division A) a maximum price calculated as lower of net marginal revenue per unit and the external buy in price per unit. The net marginal revenue is $15 per unit while the external buy in price is $14 per unit. Hence, Division B will not be ready to pay more than the external price. So, Division A can charge maximum $14 per unit to remain competitive with the market.

220. Division A transfers good to Division B. Division A incurs marginal cost of $10 per unit and Division B incurs a marginal cost of $5 per unit. Division B sells the finished product externally at $20 per unit.

If Division B can procure the intermediate product at $18 per unit, what should be the maximum price (in $) that A can charge to remain competitive?

(a) 15 per unit

(b) 10 per unit

(c) 20 per unit

(d) 18 per unit

ANSWER

Option (a) 15 per unit

Reason: Division B will be willing to pay (Division A) a maximum price calculated as lower of net marginal revenue per unit and the external buy in price per unit.

The net marginal revenue is $15 per unit while the external buy in price is $18 per unit. Division B will hence be willing be ready only up to $15 per unit. If Division B pays beyond $15 per unit, it will result in a loss for the division.

221. Division A transfers good to Division B. Division A incurs marginal cost of $10 per unit and Division B incurs a marginal cost of $5 per unit. Division B sells the finished product externally at $20 per unit.

If Division A can sell the intermediate product externally at $12 per unit, what should be range for transfer pricing (in $)? Assume Division A is operating at full capacity and the Division B can procure the part for $14 per unit.

(a) $12 per unit to $14 per unit

(b) $15 per unit to $20 per unit

(c) $10 per unit to $15 per unit

(d) $10 per unit to $12 per unit

ANSWER

Option (a) $12 per unit to $14 per unit

Reason: The correct answer is $12 per unit to $14 per unit. When there is an external market, Division A will charge the opportunity cost due to lost sales since it is operating at full capacity.

The minimum price charge by Division A will be marginal cost per unit + opportunity cost per unit. Opportunity cost per unit = external selling price less marginal cost for the intermediate product = $12 per unit less $10 per unit = $ 2 per unit. Hence, the minimum price that Division A will charge = $12 per unit. Division B will be ready to pay a maximum of $14 per unit which is the lower of net marginal revenue and external market price. Therefore, the transfer price range will be from $12 per unit to $14 per unit.

222. A company has a division A producing three products called X, Y, Z. Each product can be sold in the open market in the following manner.

Maximum external sales are X 800 units, Y 500 units, Z 300 units.

Particulars	X	Y	Z
Selling price per unit ($)	96	92	80
Variable Cost of production in Division A ($)	33	24	28
Labour Hours required per unit in Division A	6	8	4

Product Y can be transferred to Division B, but the maximum quantity that might be required for transfer is 300 units of Y.

Division B could buy similar product in the open market at a price of $45 per unit.

When Division A has capacity of 13,000 hours, which of the following statements is true regarding the transfer price charged to Division B for sale of 300 units of Product Y?

(a) Division A has 3,000 hours surplus capacity, the transfer price range will be from $24 per unit to $45 per unit

(b) Division A has 3,000 hours deficit in capacity, the transfer price range will be from $24 per unit to $45 per unit

(c) The transfer price charged by Division A to Division B can be more than $45 per unit

(d) The transfer price charged by Division A to Division B can be less than $24 per unit

ANSWER

Option (a) Division A has 3,000 hours surplus capacity, the transfer price range will be from $24 per unit to $45 per unit

Reason: Division A has 3,000 hours surplus capacity, the transfer price range will be from $24 per unit to $45 per unit.

Actual capacity of Division A is 13,000 hours while external sales require 10,000 hours. Hence, capacity surplus is 3,000 hours.

Due to surplus capacity, Division A can meet Division B's request without curtailing external sales. There is no opportunity cost on account of lost contribution.

Minimum transfer price = Marginal Cost of Production per unit of Y = $24 per unit.

Maximum transfer price = Lower of Net Marginal Revenue and the External Buy-in Price. The Maximum Transfer Price would be the External Procurement Price for Division B = $45 per unit.

Note: Additional cost information related to Division B would be needed to calculate net marginal revenue.

223. Centurion Co. is leading manufacturer of pulp, board, paper, tissues etc. It operates a Pulp Division that manufactures Wood Pulp for use in production of various paper items. The following information are available:

Selling Price	₹ 300
Less: Variable Expenses	₹ 225
Contribution	₹ 75
Less: Fixed Expenses (Allocated based on a capacity of 1,00,000 kgs per year)	₹ 40
Net Income	₹ 35

Centurion Co. has just acquired a small company that manufacturers paper cartons. This company will be treated as a division of Centurion with full profit responsibility. The newly formed Carton Division is currently purchasing 10,000 kgs of pulp per year from supplier at a cost of ₹ 300 per kg less a 10% quantity discount.

Centurion's President is anxious that the Carton Division begins purchasing its pulp from the Pulp Division if an acceptable transfer price can be worked out.

Pulp Division is operating at full capacity. It is in a position to sell all its produce to outside customers at ₹ 300 per kg. What will be the minimum acceptable transfer price (in ₹) for Pulp Division?

(a) 225 per kg

(b) 300 per kg

(c) 265 per kg

(d) 270 per kg

ANSWER

Option (b) 300 per kg

Reason: The correct answer is ₹ 300 per kg. Since Pulp division operating at full capacity and is in a position to see its produce to outside customers it will have to factor for the contribution from lost sales. Pulp Division earns ₹ 75 per kg as contribution from each unit.

Transfer price = Variable cost + contribution lost per unit = ₹ 225 + ₹ 75 = ₹ 300 per kg

224. Centurion Co. is leading manufacturer of pulp, board, paper, tissues etc. It operates a Pulp Division that manufactures Wood Pulp for use in production of various paper items. The following information are available:

Selling Price	₹ 300
Less: Variable Expenses	₹ 225
Contribution	₹ 75

Less: Fixed Expenses (Allocated based on a capacity of 1,00,000 kgs per year)	₹ 40
Net Income	₹ 35

Centurion Co. has just acquired a small company that manufacturers paper cartons. This company will be treated as a division of Centurion with full profit responsibility. The newly formed Carton Division is currently purchasing 10,000 kgs of pulp per year from supplier at a cost of ₹ 300 per kg less a 10% quantity discount.

Centurion's President is anxious that the Carton Division begins purchasing its pulp from the Pulp Division if an acceptable transfer price can be worked out.

Pulp Division is operating at full capacity. It is in a position to sell all its produce to outside customers at ₹ 300 per kg. What will be the maximum acceptable transfer price (in ₹) for Carton Division?

(a) 225 per kg

(b) 300 per kg

(c) 265 per kg

(d) 270 per kg

ANSWER

Option (d) 270 per kg

Reason: The correct answer is ₹ 270 per kg. Carton Division can purchase its requirement from a supplier at a cost of ₹ 300 per kg less a 10% quantity discount = ₹ 270 per kg. Carton Division will not be ready to pay any more to the Pulp Division.

225. Centurion Co. is leading manufacturer of pulp, board, paper, tissues etc. It operates a Pulp Division that manufactures Wood Pulp for use in production of various paper items. The following information are available:

Selling Price	₹ 300
Less: Variable Expenses	₹ 225

Contribution	₹ 75
Less: Fixed Expenses (Allocated based on a capacity of 1,00,000 kgs per year)	₹ 40
Net Income	₹ 35

Centurion Co. has just acquired a small company that manufacturers paper cartons. This company will be treated as a division of Centurion with full profit responsibility. The newly formed Carton Division is currently purchasing 10,000 kgs of pulp per year from supplier at a cost of ₹ 300 per kg less a 10% quantity discount.

Centurion's President is anxious that the Carton Division begins purchasing its pulp from the Pulp Division if an acceptable transfer price can be worked out.

Assuming that Pulp Division is currently selling only 60,000 kg to outside customers at ₹ 300 per kg, what will be the minimum acceptable transfer price (in ₹) for Pulp Division?

(a) 225 per kg

(b) 300 per kg

(c) 265 per kg

(d) 270 per kg

ANSWER

Option (a) 225 per kg

Reason: The correct answer is ₹ 225 per kg. Pulp Division is selling only 60,000 kgs to external customers. Hence, there is excess capacity with the division that can fully cater to the requirement of 10,000 kgs of Carton Division. Hence, the minimum transfer price that should be acceptable to Pulp Division is the variable cost per unit ₹ 225 per kg. There is no contribution due to lost sales.

226. Centurion Co. is leading manufacturer of pulp, board, paper, tissues etc. It operates a Pulp Division that manufactures Wood Pulp for use in production of various paper items. The following information are available:

Selling Price	₹ 300
Less: Variable Expenses	₹ 225
Contribution	₹ 75
Less: Fixed Expenses (Allocated based on a capacity of 1,00,000 kgs per year)	₹ 40
Net Income	₹ 35

Centurion Co. has just acquired a small company that manufacturers paper cartons. This company will be treated as a division of Centurion with full profit responsibility. The newly formed Carton Division is currently purchasing 10,000 kgs of pulp per year from supplier at a cost of ₹ 300 per kg less a 10% quantity discount.

Centurion's President is anxious that the Carton Division begins purchasing its pulp from the Pulp Division if an acceptable transfer price can be worked out.

Assuming that Pulp Division is currently selling only 60,000 kg to outside customers at ₹ 300 per kg, what will be the minimum transfer price (in ₹) be acceptable to Carton Division?

(a) less than 270 per kg

(b) more than 270 per kg

(c) less than 300 per kg

(d) more than 300 per kg

ANSWER

Option (a) less than 270 per kg

Reason: The correct answer is less than ₹ 270 per kg. Minimum transfer price of Pulp Division ₹ 225 per kg and the external buy in price of Carton Division is ₹ 270 per kg.

227. Centurion Co. is leading manufacturer of pulp, board, paper, tissues etc. It operates a Pulp Division that manufactures Wood Pulp for use in production of various paper items. The following information are available:

Selling Price	₹ 300
Less: Variable Expenses	₹ 225
Contribution	₹ 75
Less: Fixed Expenses (Allocated based on a capacity of 1,00,000 kgs per year)	₹ 40
Net Income	₹ 35

Centurion Co. has just acquired a small company that manufacturers paper cartons. This company will be treated as a division of Centurion with full profit responsibility. The newly formed Carton Division is currently purchasing 10,000 kgs of pulp per year from supplier at a cost of ₹ 300 per kg less a 10% quantity discount.

Centurion's President is anxious that the Carton Division begins purchasing its pulp from the Pulp Division if an acceptable transfer price can be worked out.

Assuming that Pulp Division is currently selling only 60,000 kg to outside customers at ₹ 300 per kg. If the external supplier reduces the price to ₹ 260 per kg, will there be an agreement between Pulp and Carton Division?

Figures in ₹

(a) Yes, transfer price range will be from 260 per kg to 300 per kg

(b) No, Pulp Division cannot recover its full cost of 265 per kg and hence will not be ready to sell

(c) Yes, transfer price range will be from 225 per kg to 260 per kg

(d) No, Pulp Division has a constraint in terms of capacity and cannot accommodate the internal transfer

ANSWER

Option (c) Yes, transfer price range will be from 225 per kg to 260 per kg

Reason: Yes, transfer price range will be from ₹ 225 per kg to ₹ 260 per kg. Although, Pulp Division will not be able to recover its full cost (fixed plus variable cost) of ₹ 265 per kg. However, it will be able to recover its variable cost, at ₹ 225 per kg, fixed cost is anyway a sunk cost. Carton

Division will be ready to pay up to ₹ 260 per kg. Hence the transfer price range will be from ₹ 225 per kg to ₹ 260 per kg.

228. Division A manufactures 10,000 units of a Chemical X each month that can be sold externally at ₹ 5,000 per unit. Production of Division A is at full capacity. The demand for Chemical X exceeds the production capacity of the company. The variable cost of manufacturing Chemical X is ₹ 3,000 per unit while allocated fixed cost of production is ₹ 500 per unit. The company has opened Division B where Chemical X can be used as a raw material to produce some other finished product.

Until Division B establishes itself, the management wants to transfer 3,000 units of Chemical X internally within the company rather than sell it to the external market. If the internal transfer happens, the company can benefit from savings in packaging cost amounting to ₹ 200 per unit.

What should be the transfer price that Division A can quote?

(a) ₹ 5,000 per unit

(b) ₹ 3,000 per unit

(c) ₹ 2,800 per unit

(d) ₹ 4,800 per unit

ANSWER

Option (d) ₹ 4,800 per unit

Reason: The correct answer is ₹ 4,800 per unit of Chemical X.

Division A can sell Chemical X in the external market for ₹ 5,000 per unit. It is operating at full capacity and there is external demand for the chemical. Therefore, the transfer price that can promote goal congruence is

Minimum Transfer Price (determined by the supplying division) = Additional Outlay Cost per unit + Opportunity Cost per unit.

Additional Outlay Cost = Marginal Cost + Any Additional Incidental Costs incurred by the supplying division e.g., storage, transportation etc. In this case there is no additional incidental cost due to internal transfer, rather there is a savings due to lower packaging cost. This should be considered.

Opportunity Cost is the benefit that is foregone from selling internally rather than externally. Opportunity cost is the contribution lost from external sales which is selling price of ₹ 5,000 – ₹ 3,000 variable cost = ₹ 2,000 per unit.

Transfer price = marginal cost of ₹ 3,000 per unit - savings of ₹ 200 per unit due to lower packaging cost + ₹ 2,000 which is the lost contribution per unit (opportunity cost) = ₹ 4,800 per unit.

229. Division A manufactures 10,000 units of a Chemical X each month that can be sold externally at ₹ 2,500 per unit. Production of Division A is at full capacity. The demand for Chemical X exceeds the production capacity of the company. The variable cost of manufacturing Chemical X is ₹ 1,500 per unit while allocated fixed cost of production is ₹ 250 per unit. The company has opened Division B where Chemical X can be used as a raw material to produce some other finished product.

Until Division B establishes itself, the management wants to transfer 3,000 units of Chemical X internally within the company rather than sell it to the external market. If the internal transfer happens, the company can benefit from savings in packaging cost amounting to ₹ 100 per unit.

What should be the transfer price that Division A can quote?

(a) ₹ 2,500 per unit

(b) ₹ 1,500 per unit

(c) ₹ 1,400 per unit

(d) ₹ 2,400 per unit

ANSWER

Option (d) ₹ 2,400 per unit

Reason: The correct answer is ₹ 2,400 per unit of Chemical X.

Division A can sell Chemical X in the external market for ₹ 2,500 per unit. It is operating at full capacity and there is external demand for the chemical. Therefore, the transfer price that can promote goal congruence is-

Minimum Transfer Price (determined by the supplying division) = Additional Outlay Cost per unit + Opportunity Cost per unit.

Additional Outlay Cost = Marginal Cost + Any Additional Incidental Costs incurred by the supplying division e.g., storage, transportation etc. In this case there is no additional incidental cost due to internal transfer, rather there is a savings due to lower packaging cost. This should be considered.

Opportunity Cost is the benefit that is foregone from selling internally rather than externally. Opportunity cost is the contribution lost from external sales which is selling price of ₹ 2,500 – ₹ 1,500 variable cost = ₹ 1,000 per unit.

Transfer price = marginal cost of ₹ 1,500 per unit - savings of ₹ 100 per unit due to lower packaging cost + ₹ 1,000 which is the lost contribution per unit (opportunity cost) = ₹ 2,400 per unit.

230. If in MyGlam company the new manager wants to understand that if the variance arises solely because the actual quantity sold differs from the budgeted quantity sold is –

(a) Static budget variance

(b) Master budget increment

(c) Sales mix variance

(d) Sales volume variance

ANSWER

Option (d) Sales volume variance

Reason: Sales Volume Variance arises due to difference of actual quantity sold and budgeted quantity sold.

231. The Managing Director of ACE Toy company reviewed the standard cost variance analysis, and he wants to understand the reason of unfavourable labour efficiency variance of ₹ 6,700. The most likely cause of the variance is –

(a) The new contract with labour increased wages

(b) For last few weeks the machinery maintenance has been inadequate

(c) The production department has employed highly skilled workers

(d) None of the above

ANSWER

Option (b) For last few weeks the machinery maintenance has been inadequate

Reason: If machine will not work properly for production in such case labour efficiency variance will be unfavourable.

232. If the production levels increase in a manufacturing organization ABS Ltd within a relevant range, which of the following costs would decrease if production levels were increased within the relevant range?

(a) Total fixed costs

(b) Variable costs per unit

(c) Total variable costs

(d) Fixed costs per unit

ANSWER

Option (d) Fixed costs per unit

Reason: The fixed cost per unit decreases, if production increases within a relevant range.

233. When we perform a task, as experience is gain with the task, which one of the following techniques would most likely be used –

(a) Regression analysis

(b) Learning curve analysis

(c) Sensitivity analysis

(d) Normal probability analysis

ANSWER

Option (b) Learning curve analysis

Reason: A learning curve is a concept that shows how a process is improved over time due to learning and increased proficiency.

234. The manager of production department is arguing that the following point is not responsible for Material Usage Variance –

(a) Change in method of production/ design

(b) Increased efficiency in production can help in bringing down wastage rate

(c) Changes made in the material mix

(d) Purchase price of inferior quality material

ANSWER

Option (d) Purchase price of inferior quality material

Reason: Quantity of Inferior quality material is responsible for material usage variance.

235. Deciding the selling price of the new product in market is the most difficult decision. While doing the variance analysis, the manager of the sales and marketing department of the company is interested to know which of the following is not responsible for Sales Price Variance –

(a) Higher discounts given to customers in order to encourage bulk purchases

(b) Failure to satisfy demand due to production difficulties

(c) Better sales price realization

(d) Market conditions or economic conditions forcing changes in prices across the industry

ANSWER

Option (b) Failure to satisfy demand due to production difficulties

Reason: Failure to satisfy demand due to production difficulties will result in Sales volume variance and not sales price variance.

236. NEC is a multiple product manufacturer. NEC produces the unit, and all overheads are associated with the delivery of units to its customers:

Particulars	Budget	Actual
Overheads (₹)	4,000	3,900

Output (units)	2,000	2,100
Customer Deliveries (no.'s)	20	19

Efficiency Variance and Expenditure Variance by adopting ABC approach in ₹ are –

(a) Efficiency Variance 400 (F); Expenditure Variance 100 (A)

(b) Efficiency Variance 100 (A); Expenditure Variance 400 (F)

(c) Efficiency Variance 100 (F); Expenditure Variance 400 (A)

(d) Efficiency Variance 400 (A); Expenditure Variance 100 (F)

ANSWER

Option (a) Efficiency Variance 400 (F); Expenditure Variance 100 (A)

Reason: Efficiency Variance = Cost Impact of *undertaking activities* more/ less than *standard*

= (21 deliveries* – 19 deliveries) ×₹ 200

= ₹ 400 (F)

Expenditure Variance = Cost impact of paying more/ less than standard for actual activities undertaken

= 19 deliveries × ₹ 200 – ₹ 3,900

= ₹ 100 (A)

(*) 20 Deliveries / 2,000 units × 2,100 units

237. CNZ has identified the following variances for Oct'23:

Sales Margin Volume Variance ₹ 5,000 (A)

Sales Price Variance ₹ 2,500 (F)

Material Cost Variance ₹ 1,000 (A)

Total Cost Variance ₹ 6,000 (A)

Standard Margin on Actual Sales for the Oct'23 was ₹ 60,000.

What was the fixed budget profit for the period?

(a) ₹ 62,500

(b) ₹ 60,000

(c) ₹ 65,000

(d) ₹ 70,000

ANSWER

Option (c) ₹ 65,000

Reason: Sales Margin Volume Variance:

(Actual Quantity − Budgeted Quantity) × Standard Margin per unit = 5,000 (A)

Standard Margin on Actual Sales:

(Actual Quantity × Standard Margin per unit) = ₹ 60,000

Fixed Budget Profit: (₹ 60,000 + ₹ 5,000) = ₹ 65,000

238. DIVY's operating costs are 70% variable. Which of the following variances' figures would change if DIVY changed from standard marginal costing to standard absorption costing?

i. Direct material efficiency variance

ii. Variable overhead price variance

iii. Variable overhead efficiency variance

iv. Sales volume variance

v. Fixed overhead expenditure variance

Option

(a) i and ii

(b) ii and iii

(c) iv and v

(d) iv only

ANSWER

Option (d) iv only

Reason: Sales Volume Variance (by concept)