# MAHATMA GANDHI UNIVERSITY, KOTTAYAM

## MGU-UGP BBA(HONOURS) REGULAR EXAMINATION OCTOBER 2026

## FIFTH SEMESTER

## MG5BBADSE304 – DATA ANALYSIS USING R

**Duration: 2 Hours** **Maximum Marks: 70**

***Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest(I) and Appreciation(Ap)***

Students should attempt at least one question from each course outcome to enhance their overall outcome attainability.

### Part A

### Short Answer Questions (four to five sentences)

A choice between two options for each question, answer five short answer questions, one from each pair

| | | | | |
|---|---|---|---|---|
| 1 | a. | Explain any three features of R programming. | K | CO1 |
| | b. | Distinguish between reserved words and identifiers in R with suitable examples | K | CO1 |
| 2 | a. | Explain the creation and accessing of elements in a matrix in R. What is the output of: numbers <- list (4,5,6,7,8); numbers [2] | U | CO2 |
| | b. | Explain %in% operator in matrix and dim() and length () functions. | U | CO2 |
| 3 | a. | Explain the use of if...else statements in R with a suitable example. | U | CO3 |
| | b. | Differentiate between for loop and while loop in R. | U | CO3 |
| 4 | a. | What is a bar chart? Explain any three types of bar charts used in R. | K | CO4 |
| | b. | What is a histogram? Mention its uses in data analysis. | K | CO4 |
| 5 | a. | Explain arithmetic, relational and logical operators in R with examples. | U | CO1 |
| | b. | What is a vector in R? Explain any three vector operations. | U | CO1 |

## Short Essay (5 Marks)

**A choice between two options for each question, answer three short essay questions, one from each pair**

| | | | | |
|---|---|---|---|---|
| 6 | a. | Explain the different types of data structures in R with special reference to lists and matrices. | A | CO2 |
| | b. | Explain the process of creating, merging and sub-setting a data frame in R. | A | CO2 |

| | | | | |
|---|---|---|---|---|
| 7 | a. | Explain the different types of constants and variables in R with suitable examples. | U | CO1 |
| | b. | Explain the different basic data types in R, namely numeric, integer, complex, logical and character. | U | CO1 |
| 8 | a. | Explain built-in functions in R with suitable examples from mathematical, character and statistical functions. | A | CO2 |
| | b. | Explain for, while and repeat loops in R. Also describe the use of break and next with suitable examples. | A | CO2 |

## Long Essay (20 Marks)

**A choice between two options for each question, answer two essay questions, one from each pair**

| | | | | |
|---|---|---|---|---|
| 9 | a. | Explain the flow-control mechanisms in R in detail. Discuss decision-making statements, nested if, switch, if else, for loop, while loop, repeat loop, break and next statements with suitable examples. Also explain the role of functions in automating computational tasks. | An | CO3 |
| | b. | A company has recorded sales for 12 months. Develop an R program using a for loop to calculate total sales, average sales, highest sales and the number of months in which the sales target was achieved. | An | CO3 |
| 10 | a. | Explain the different methods of data visualization using R. Discuss vertical and horizontal bar charts, categorical, grouped and stacked bar charts, histograms, density lines and pie charts. Explain their applications in presenting business data with suitable examples. | C | CO4 |
| | b. | Explain line graphs and trend analysis in R. Discuss simple and multi-line graphs and explain how charts and graphs can be used to interpret and communicate statistical and business insights. Illustrate with suitable examples. | C | CO4 |

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

BBA (HONOURS) FIFTH SEMESTER EXAMINATION
(2024 ADMISION ONWARDS)
MG5BBACCR301 – Logistics and Supply Chain Management

Duration: 1.5 hrs Maximum Marks: 50

Students should attempt atleast one question from each course outcome to enhance their overall outcome attainability.

## Part A

### *Short Essay (four to five sentences)*

*Short answer (four to five sentences) of 3 Marks A Choice between two options for each question. Answer five short answer questions, one from each pair*

1a. A company produces good-quality products but often fails to deliver them on time. Which business function needs improvement? Explain. CO 1(U)

OR

1b. Differentiate between "supply" and "supply chain" with an example. CO 1(U)

2a. A company purchases raw materials from different suppliers, but the quality and delivery time vary frequently. Analyse how a proper sourcing policy can help the company overcome these problems.CO2 (An)

OR

2b. Analyse how demand forecasting techniques and Sales and Operations Planning (S&OP) help an organisation reduce demand uncertainty and improve supply chain performance. CO2 (An)

3a. A manufacturing company faces delays because its purchasing, production and distribution departments work independently. Apply the concept of integrated supply chain planning to improve its operations. C03(A)

OR

3b. A global company faces disruptions caused by transportation problems, supplier delays and changing customer demand. Apply suitable supply chain measures to maintain continuous operations.CO3 (A)

4a. Why is supply chain network design important for a business organisation? CO1(U)

OR

4b. How does network design help an organisation reduce supply chain costs? CO1(U)

5a. A retailer and manufacturer independently forecast the same product and obtain very different numbers. Explain how CPFR could help. CO2(U)

OR

5b. Why is vendor performance monitoring necessary after supplier selection? CO2 (U)

**5*3=15**

## Part B

***Long Essay of 10 Marks***

***A Choice between two options for each question. Answer two short essay questions, one from each pair***

6a. A manufacturer receives a large number of returned products from customers. Explain how reverse logistics can help the company manage these products effectively. Discuss its importance and explain how reverse logistics is connected with Supply Chain Management. CO1(U)

OR

6b. Explain the different flows in supply chain management. Discuss the movement of materials, information and finances among suppliers, manufacturers, distributors, retailers and customers. CO1(U)

7a. Develop a coordinated response when demand suddenly rises, a key supplier is delayed and inventory is unevenly distributed. CO2 (An)

OR

7b. A company changes forecasts weekly but does not change procurement or production. Analyse why this is not genuine responsive planning. CO2 (U)

2*10=20

## Part C

*Compulsory Case Study Analysis of 15 Marks*

8. TrendyWear is an online clothing retailer that sells fashionable clothes, footwear, and accessories. Customer preferences change rapidly due to social media trends, seasonal demands, and celebrity fashion. However, the company's purchasing, marketing, inventory, and logistics departments work independently.

The marketing department launches promotional campaigns without informing the purchasing department. As a result, popular products often go out of stock, while slow-moving products accumulate in the warehouse. The logistics department also faces difficulties in delivering products on time during peak demand.

To overcome these problems, TrendyWear's management decides to adopt an integrated supply chain planning approach in which all departments share information and coordinate their decisions. CO3(U)

Answer the following questions

a) Explain the differences between the traditional functional approach and the integrated approach in TrendyWear.

b) How can TrendyWear coordinate the activities of its marketing, purchasing, inventory, and logistics departments to improve supply chain performance?

c) Explain how integrated supply chain planning can help TrendyWear reduce excess inventory, prevent stockouts, and respond quickly to changing fashion trends.

**MAHATMA GANDHI UNIVERSITY KOTTAYAM**

**MGU-UGP BBA (HONOURS) EXAMINATION SEPTEMBER 2026**

**FIFTH SEMESTER**

**MG5BBADSE303- Inventory Management**

**Time :2 Hours** **Max Marks: 70**

| Q No | | Part A- Short answer (3 Marks) (four to five sentences) (a choice between two options for each question-answer five short answer questions, one from each pair (la/1b, 2a/2b, 3a/3b, 4a/4b, 5a/5b), | Learning Domain | CO |
|---|---|---|---|---|
| 1 | a | What is meant by optimum inventory level? Why is it necessary for a business? | K | CO1 |
| | b | What is VED classification? Mention its three categories. | K | CO1 |
| 2 | a | What is ordering cost? Mention any two examples of ordering costs. | U | CO2 |
| | b | A company's sales increase from 1,000 units to 1,200 units and then to 1,400 units over three years. What does this indicate about demand? | U | CO2 |
| 3 | a | Explain the meaning of inventory inspection and mention any two areas checked during inspection. | K | CO3 |
| | b | What is a Goods Receipt Note (GRN)? Mention two details normally recorded in it. | K | CO3 |
| 4 | a | Recognize any two common hazards found in warehouse operations | U | CO4 |
| | b | Explain the importance of eco-friendly packaging in warehouse operations. | U | CO4 |
| 5 | a | What is a barcode system? How does it help in identifying inventory items? | K | CO3 |
| | b | What is an FMCG warehouse? State two important functions performed in an FMCG warehouse. | K | CO3 |
| | | **Part B- Short Essay (5 Marks)(a choice between two options for each question-answer three short essay questions, one from each pair)** | | |
| 6 | a | A company uses 5,000 units of a material annually. The ordering cost is ₹10 per unit and the carrying cost is ₹4 per unit per year. Calculate the EOQ. | A | CO2 |
| | b | Explain how inventory management software, ERP, barcode, RFID and digital dashboards support inventory planning. | U | CO2 |
| 7 | a | Explain the meaning, contents and importance of a Stock Register in inventory control. | A | CO3 |
| | b | Explain the role of barcode scanners in inventory picking, including their working process and advantages. | A | CO3 |
| 8 | a | Describe the functions, applications, and advantages of forklifts in material handling. | U | CO4 |
| | b | Discuss the role of employees and management in maintaining fire safety and emergency preparedness in a warehouse. | U | CO4 |

**Part C-**

**Long Essay (20 Marks)(a choice between two options ) 10 a is Compulsory**

| | | | | |
|---|---|---|---|---|
| 9 | a | "Maintaining the right level of inventory is essential for business success." Discuss this statement by explaining the importance and objectives of inventory management. | A | CO1 |
| | b | Explain ABC, FSN and VED inventory classification techniques. Discuss the basis, categories and importance of each technique with suitable examples. | A | CO1 |
| 10 | | Case ( compulsory ) | | |
| | | FreshBite Food Products manufactures bread, buns and packaged snacks. Maida is one of its major raw materials. The purchase department has noticed that the stock of maida frequently falls below the required level before fresh supplies arrive. On some occasions, the company also purchases large quantities, causing excessive storage, deterioration and higher carrying costs.<br>The following information is available for maida:<br>• Maximum consumption: 150 kg per day<br>• Normal consumption: 120 kg per day<br>• Minimum consumption: 80 kg per day<br>• Reorder period: 2–4 weeks<br>• Reorder quantity: 2,000 kg<br>• Emergency lead time: 3 days<br>The management wants to establish suitable inventory levels so that production can continue smoothly while avoiding unnecessary investment in stock.<br>Questions<br>1. Identify the major inventory management problems faced by FreshBite Food Products.<br>2. Calculate the Reorder Level for maida.<br>3. Calculate the Minimum Stock Level and explain why maintaining a minimum stock level is important for production continuity.<br>4. Calculate the Maximum Stock Level and explain how it can help the company prevent excessive inventory and storage problems.<br>5. Calculate the Average Stock Level and explain its usefulness in inventory planning.<br>6. Calculate the Danger Level for maida.<br>7. Analyse the actions that the purchase and production departments should take when the stock reaches the Danger Level.<br>8. Explain how safety stock can protect FreshBite against unexpected increases in consumption or delays in supplier deliveries.<br>9. Suggest two measures that FreshBite can adopt to reduce wastage and carrying costs while maintaining adequate stock.<br>10. Based on the calculated stock levels, explain how FreshBite can balance the risk of stock-out with the cost of holding inventory. | An | CO2 |

# MAHATMA GANDHI UNIVERSITY KOTTAYAM

## BBA HONOURS MODEL QUESTION PAPER

## MG5CCRBBA 300 STRATEGIC MANAGEMENT

**Duration 1.5 Hours** **Maximum Marks 50**

## Part A

### Short Answer Questions

**Answer either A or B from each question. Each answer should be written in four to five sentences.**

| | | |
|---|---|---|
| 1 a) | Define Strategic Management. | [K], [CO1] |
| | OR | |
| 1 b) | List any three reasons why Strategic Management is important in modern businesses. | [K], [CO1] |
| 2 a) | List three reasons why analysis of internal business environment is important. | [K], [CO2] |
| | OR | |
| 2 b) | State the use of PESTLE Analysis. | [K], [CO2] |
| 3 a) | Explain the need for expansion strategies in a growing business environment. | [U], [CO2] |
| | OR | |
| 3 b) | Why do companies adopt diversification strategies? | [U], [CO2] |
| 4 a) | Explain the meaning and concept of Blue Ocean Strategy | [U], [CO2] |
| | OR | |
| 4 b) | Explain the concept of Industry Attractiveness in the GE-McKinsey Matrix. | [U], [CO2] |
| 5 a) | "Strategy implementation converts strategic plans into action." Explain this statement. | [U], [CO3] |
| | OR | |
| 5 b) | "Actual performance must be compared with established standards during strategic evaluation." Explain this statement. | [U], [CO3] |

**[5 x 3 = 15]**

## Part B

### Long Essay Questions

**Answer Two Long Essay Questions, One From Each Pair**

| | | |
|---|---|---|
| 6 a) | Explain the relationship between Vision, Mission, Goals, and Objectives. | [U], [CO1] |
| | OR | |
| 6 b) | Explain the major steps in the Strategic Management Process from formulation to evaluation. | [U], [CO1] |
| 7 a) | Discuss how Porter's Five Forces affect the attractiveness of an industry with examples. | [U], [CO2] |
| | OR | |
| 7 b) | Explain the BCG Matrix and discuss its four strategic business unit categories with suitable strategies. | [U], [CO2] |
| 8 a) | New business wants to enter a market dominated by established competitors. Apply Marketing Strategy to suggest how the business can identify its target | [A], [CO2] |

customers and build a strong market position.

OR

8 b) A company has three strategic alternatives: becoming the lowest-cost producer, offering unique products, or targeting a narrow customer segment. Apply Porter's competitive strategies to recommend the most suitable strategy for each alternative. [A], [CO2]

**[2 x 10 = 20]**

## Part C
## Compulsory Case Study

9 a) Tata Motors introduced the Tata Nano in 2008 with the aim of providing an affordable car for Indian families. The company initially allocated its manufacturing resources to Singur, West Bengal, but protests connected with land acquisition led it to relocate the project to Sanand, Gujarat. The relocation delayed full-scale production and required substantial investment in a new manufacturing facility. Although the Nano attracted considerable attention at its launch, demand remained below expectations. Reports of vehicle fires, price increases, limited features and its image as a "cheap car" affected customer acceptance. By June 2018, Tata Motors had produced only three Nano cars and sold one, indicating a significant difference between the resources committed to the project and its market performance. [An], CO3]

1. Define a strategic budget and list any three purposes of preparing it.

2. Explain how strategic control could have been used to review the performance of the Tata Nano project after its relocation to Sanand.

3. Assume that Tata Motors had a limited additional budget when Nano sales remained below expectations. Determine how the company should use the available resources and justify your decision.

**[1 x 15 = 15]**

# MAHATMA GANDHI UNIVERSITY KOTTAYAM

## BBA HONOURS MODEL QUESTION PAPER

## MG5DSEBBA305 EXIM Policy and Documentation

**Duration 2 Hours** **Maximum Marks 70**

## Part A

### Short Answer Questions

**Answer either A or B from each question. Each answer should be written in four to five sentences.**

| | | |
|---|---|---|
| 1a) | Briefly explain the role of MSMEs in India's foreign exchange earnings? | [U], [CO1] |
| | OR | |
| 1b) | Distinguish between domestic trade and international trade on any three grounds. | [K], [CO1] |
| 2 a) | What is RCMC? State its importance to an exporter. | [A],[CO2] |
| | OR | |
| 2 b) | Explain the role of export promotion councils in promoting exports. | [A], [CO2] |
| 3 a) | State any three reasons for institutional support for exports. | [U], [CO3] |
| | OR | |
| 3 b) | What are the major components of the export promotion framework in India? | [An], [CO3] |
| 4 a) | State any three sources of export finance. | [K], [CO4] |
| | OR | |
| 4 b) | Mention any three export credit facilities available to exporters. | [K], [CO4] |
| 5 a) | What are the major components of the export promotion framework in India? | [U], [CO3] |
| | OR | |
| 5 b) | State any three functions of Export Promotion Councils. | [U], [CO3] |

**[5 x 3 = 15]**

## Part B

### Short Essay Questions

**Answer either A or B from each question. All questions are compulsory.**

| | | |
|---|---|---|
| 6 a) | Explain the major components of the export promotion framework in India. | [U], [CO3] |
| | OR | |
| 6 b) | Describe the major infrastructure facilities required for export development. | [U], [CO3] |
| 7 a) | Distinguish between Open Account and Cash-in-Advance? | [A], [CO4] |
| | OR | |
| 7 b) | Explain the factors influencing import pricing. | [An], [CO4] |
| 8 a) | Explain pre-shipment finance and its importance to exporters. | [A], [CO4] |
| | OR | |
| 8 b) | Explain the major export credit facilities available to exporters. | [U], [CO4] |

**[3 x 5 = 15]**

## Part C

### Long Essay Questions

**Answer either A or B**

| | | |
|---|---|---|
| 9 a) | Explain the role of imports in industrial and technological development. Discuss how imports of capital goods, raw materials and technology can support economic growth. | [E], CO1] |
| | OR | |
| 9 b) | Discuss the composition and direction of foreign trade? | [U], CO1] |

10 a) Discuss the role of Customs and Export Promotion Authorities in facilitating export transactions. Explain how they support exporters in completing regulatory requirements. [An], CO2]

OR

10 b) Discuss the purpose and importance of Consular Invoice, Customs Invoice, GR Form, SDF Form and PP Form in export transactions. [An], CO2]

**[2 x 20 = 20]**

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

**MGU UGP BBA (HONOURS) FIFTH SEMESTER EXAMINATION**

**(2024 ADMISSION ONWARDS)**

**MG5DSEBBA302-CHANGE MANAGEMENT AND ORGANISATIONAL DEVELOPMENT**

**Time: 2 Hours** **Maximum: 70 Marks**

## Part A

## Short Answer

*(Answer any 1 from each pair of questions in part A in 4/5 sentences. Each question carries 3 marks)*

1 a) Explain the role of change agent in organisational development. [U] [CO1]

OR

1 b) Explain how technological advancement creates a need for organisational change. [U] [CO1]

2 a) Define the terms given below:

a) organisational development

b) organisational diagnosis [R] [CO2]

OR

2 b) State the purpose of the Seven-Stage Model in organizational change. [R] [CO2]

3 a) Discuss the objectives of strategic change interventions. [U] [CO3]

OR

3 b) Describe the importance of ethical practices in organisational development [U] [CO3]

4 a) Examine the characteristics that distinguish OD from routine organisational activities. [An] [CO4]

OR

4 b) A company has successfully introduced a new work practice, but employees gradually return to their previous practices. Analyse how the organisation can institutionalise the change? [An] [CO4]

5 a) Explain the difference between proactive and reactive changes with suitable examples. [U] [CO1]

OR

5b) Explain any three external factors that may necessitate organisational change [U] [CO1]

$5 \times 3 = 15$

## Part B
## Short Essay

*(Answer any 1 from each pair of questions in part B. Each question carries 5 marks)*

6 a) Explain Burke-Litwin change model with an example [U] [CO2]

OR

6 b) Explain how empathetic leadership creates an appreciative climate during disruptive changes. [U] [CO2]

7 a) Analyse how the Unfreezing, Moving and Refreezing stages can be applied when introducing new technology in an organisation. [An] [CO1]

OR

7 b) Analyse the cause of resistance to organisational change and examine the strategies used by change agents to minimise such resistance [An] [CO1]

8 a) A change in technology affects employees, work processes, structure and customers. Analyse this situation using the Systems Theory approach.. [An] [CO2]

OR

8 b) Analyse how the Porras and Robertson Model can be used to improve employee satisfaction through changes in the organisational work environment. [An] [CO2]

$3 \times 5 = 15$

## Part C

## Long Essay Questions

*(Answer any 1 question from the given pair in part C. Each question carries 20 marks)*

9 a) Apply the principles of Total Quality Management (TQM) in an organisation seeking transformational change through continuous improvement and customer satisfaction. Analyse how TQM can support the transformation process [An] [CO3]

OR

9 b) Examine the importance of feedback systems in facilitating continuous change. Analyse how timely, constructive and regular feedback can influence employee performance and organisational learning. [An] [CO3]

$1 \times 20 = 20$

## Part D

## Compulsory Case Study (20 Marks)

10) A manufacturing company introduces a leadership development programme to improve managerial effectiveness. The OD team implements the programme according to a planned schedule and provides training and support to managers. After implementation, the organisation evaluates the programme using employee feedback, performance improvement, and achievement of organisational goals. Successful practices are continued and incorporated into the organisation's policies and regular management practices.

Analyse the process of implementing and evaluating the OD programme, the evaluation criteria used, and the steps taken to institutionalise the change. [An] [CO4]

$1 \times 20 = 20$

# MAHATMA GANDHI UNIVERSITY, KOTTAYAM

## BBA (HONOURS) FIFTH SEMESTER EXAMINATION
## (2024 ADMISSION ONWARDS)

## MG5BBASEC301 - AI FOR BUSINESS

Duration: 1 Hour Maximum Marks: 35

### Part A
### Multiple Choice Questions
**Answer all questions. Each question carries 1 mark.**

1. Artificial Intelligence is best described as the ability of machines to: [U], [CO1]
   A) Store unlimited data B) Work without electricity C) Replace every employee D) Perform tasks that normally require human intelligence
2. Which is a characteristic of an AI system? [U], [CO1]
   A) It can learn from data B) It always gives perfect results C) It has human emotions D) It functions without instructions or data
3. The term 'AI winter' refers to a period of: [K], [CO1]
   A) Rapid growth in AI investment B) Reduced interest and funding in AI C) Replacement of AI by the internet D) Development of only robotic machines
4. How does AI mainly differ from simple automation? [U], [CO1]
   A) AI can learn and adapt from data B) AI uses no computer system C) Automation always requires human intelligence D) Automation can make every strategic decision
5. Why is data called the fuel for AI? [U], [CO1]
   A) Data physically powers computers B) AI systems use data to learn patterns and make predictions C) Data removes the need for algorithms D) All data is automatically accurate
6. AI-as-a-Service (AIaaS) allows a business to: [U], [CO1]
   A) Use AI capabilities through cloud-based services B) Purchase only computer hardware C) Avoid using business data D) Develop AI only without internet access
7. Which type of machine learning uses labelled data? [K], [CO1]
   A) Unsupervised learning B) Reinforcement learning C) Supervised learning D) Random learning
8. A company analysing whether online comments are positive or negative is using: [U], [CO1]
   A) Speech recognition B) Sentiment analysis C) Image generation D) Warehouse automation
9. Which AI application is most suitable for estimating next month's product sales? (Apply, [CO1]
   A) Demand forecasting B) Language translation C) Resume screening D) Speech recognition
10. A Large Language Model is mainly trained to: [K], [CO1]
    A) Understand and generate human-like text B) Repair physical machines C) Manage warehouse shelves D) Provide guaranteed factual answers
11. An AI-powered business dashboard mainly helps managers to: [U], [CO1]
    A) View updated insights and patterns in data B) Eliminate all business risks C) Replace the organization's database D) Prevent competitors from entering the market
12. In an expert system, the knowledge base contains: [K], [CO1]
    A) Stored facts and rules used for decision support B) Only employee attendance records C) Physical components of a robot D) Advertisements created by customers
13. Personalized advertising uses AI mainly to: [U], [CO2]
    A) Show the same advertisement to everyone B) Tailor advertisements to individual interests and behaviour C) Stop collecting customer feedback D) Remove all human involvement from marketing
14. Which financial application uses AI to identify unusual transactions? [U], [CO2]
    A) Credit scoring B) Algorithmic trading C) Fraud detection D) Financial reporting
15. Predictive maintenance helps an organization to: [U], [CO2]
    A) Repair equipment only after complete failure B) Predict possible equipment failure before it occurs C) Increase manual inspection paperwork D) Stop monitoring machine performance
16. AI-based resume screening is used to: [U], [CO2]
    A) Shortlist applicants based on relevant criteria B) Conduct every final interview C) Guarantee that bias never occurs D) Determine employee salaries automatically

17. Netflix mainly uses AI to: [K], [CO2]

A) Manufacture television sets B) Recommend content based on viewing behaviour C) Provide banking services D) Operate delivery warehouses

18. An AI readiness assessment examines whether an organization has: [U], [CO2]

A) Suitable data, technology, skills and leadership support B) Only a large advertising budget C) No need for employee training D) A fully automated workplace

19. Explainable AI is important because it helps users to: [U], [CO2]

A) Understand how an AI system reached a decision B) Hide the logic behind an AI decision C) Remove accountability from managers D) Ensure that AI never makes an error

20. Green AI focuses on: [U], [CO2]

A) Using only green-coloured interfaces B) Reducing the environmental impact of AI systems C) Replacing environmental data D) Using AI only in agriculture

[20 x 1 = 20]

## Part B

## Compulsory Case Study

**Read the case carefully and answer all the questions that follow.**

### SahayaMart's AI Transformation

SahayaMart, a growing Indian retail chain, plans to introduce an AI system across its physical stores and online platform. The proposed system will study purchase records to forecast stock requirements, assist customers through a chatbot and help store managers make faster operational decisions. The management expects the project to reduce stock-outs, improve customer service and support business growth.

A pilot study, however, reveals several concerns. Customer records contain missing entries, duplicate profiles and outdated contact details. Some stores have reliable internet connectivity and modern systems, while others use older computers. Employees fear that the technology may replace their jobs, and many managers have limited knowledge of AI. The company has not yet clearly assigned responsibility for checking AI-generated decisions.

The pilot chatbot also performs differently across customer groups because its training data does not adequately represent all regional languages. Customers are not clearly informed about how their purchase histories and conversations will be used. SahayaMart therefore decides that employees must review important AI decisions, customers must receive clear information about data use, and staff must be trained to work effectively with the new system.

**Answer the following questions based on the case study:**

1. Identify the major challenges that SahayaMart may face while implementing AI. Support your answer with evidence from the case.
2. Examine the bias and data-privacy concerns in the proposed AI system. Suggest suitable responsible AI measures.
3. Explain how human-AI collaboration can help SahayaMart introduce the system without weakening employee roles or managerial accountability. [A], [CO2]

[1 x 15 = 15]

# MAHATMA GANDHI UNIVERSITY KOTTAYAM

## BBA HONOURS MODEL QUESTION PAPER

## MG5DSEBBA301 CONSUMER BEHAVIOUR

**Duration 2 Hours** **Maximum Marks 70**

## Part A

### Short Answer Questions

**Answer either A or B from each question. Each answer should be written in four to five sentences.**

| | | |
|---|---|---|
| 1 a) | Define consumer behaviour and state any two characteristics that explain its nature. | [K], [CO1] |
| | OR | |
| 1 b) | Explain any two ways in which consumer behaviour help marketers. State one limitation of consumer-behaviour analysis. | [U], [CO1] |
| 2 a) | In a family, the mother orders a laptop online, the father pays for it and their daughter uses it for her studies. Distinguish among the buyer, customer and user in this situation. | [A], [CO2] |
| | OR | |
| 2 b) | A child requests a breakfast cereal, an older sibling compares brands, the parents select and pay for it, and all family members consume it. Identify any four buying roles evident in the situation. | [A], [CO2] |
| 3 a) | Anu needs a smartphone for work, prefers a familiar brand, listens to colleagues and parents, and buys during a festival discount. Identify any five internal and external factors influencing her decision. | [A], [CO3] |
| | OR | |
| 3 b) | A student buys shoes approved by close friends, follows the style of a famous athlete and avoids a brand associated with a group she dislikes. Identify the three types of reference groups evident in the situation. | [A], [CO3] |
| 4 a) | Differentiate between functional value and hedonic value. Give one consumer example of each. | [U], [CO1] |
| | OR | |
| 4 b) | Explain the relationship between customer satisfaction and customer loyalty. Why may a satisfied customer still change brands? | [U], [CO1] |
| 5 a) | A beverage brand repeatedly uses the same musical signature, rewards repeat purchases and shows consumers learning through demonstrations. Identify the three learning processes used by the brand. | [A], [CO4] |
| | OR | |
| 5 b) | One consumer buys salt routinely, another compares a few mixer grinders, and a third conducts an extensive search before purchasing a house. Identify the level of involvement shown by each consumer. | [A], [CO4] |

**[5 x 3 = 15]**

## Part B

### Short Essay Questions

**Answer either A or B from each question.**

6 a) A clothing retailer is shifting from a store-centered model to an integrated website, mobile application and social-media presence. Explain how digital transformation may change consumer search, comparison, purchase and post-purchase behaviour. [U], [CO1]

OR

6 b) An online marketplace publishes false reviews, hides mandatory charges until checkout and refuses to assist customers who receive defective products. Identify the unethical practices and explain the consumer rights affected under the Consumer Protection Act 2019. [U], [CO1]

7 a) Explain any five important changes in the profile of Indian consumers in the post-liberalisation and digital era. Illustrate your answer with suitable examples. [U], [CO2]

OR

7 b) A start-up plans to introduce a millet-based snack but is uncertain about preferred flavours, price and package size. Recommend suitable consumer-research methods and explain how the findings can support its marketing decisions. [A], [CO2]

8 a) A student recognises the need for a laptop, searches online, compares alternatives, purchases one and later posts a review. Apply the stages of the consumer decision-making process to this situation. [A], [CO2]

OR

8 b) A hospital plans to purchase a new diagnostic system. Doctors evaluate clinical usefulness, technicians assess operating requirements, finance officers examine cost and senior management gives approval. Explain the buying centre and identify the organisational buying roles evident in the case. [A], [CO2]

**[3 x 5 = 15]**

## Part C

### Long Essay Questions

**Answer either A or B**

9 a) Analyse the consumer decision-making process in detail. Explain how internal and external factors influence each stage from problem recognition, information search and evaluation of alternatives to purchase decision and post-purchase behaviour. [An], [CO3]

OR

9 b) A new lifestyle brand plans to use social media influencers as a major part of its marketing strategy to reach young consumers and build its presence in a competitive market. Apply the concept of influencer marketing to explain why this approach has become increasingly popular. Discuss the major reasons for the growth of influencer marketing in India. How can the brand use it effectively to influence consumer behaviour and achieve its marketing objectives? Explain with example. [A], [CO3]

**[1 x 20 = 20]**

## Part D

### Compulsory Case Study

10 Apex Motors, a high-end automobile manufacturer, recently introduced the "Terra GT," an electric SUV. Apex historically catered to rugged, outdoor-oriented drivers. However, for the Terra GT, marketing framed the vehicle as "Sophisticated Luxury for the Elite Professional." Apex priced it at $85,000, placed advertisements in high-end business journals, and selected minimalist, gallery-style showrooms with highly formal sales staff.

Simultaneously, Lumina Tech released a smart home assistant called "EchoSphere." During its pre-launch, Lumina ran high-energy TV spots featuring energetic music and humorous scenarios to drive engagement. However, in the first month post-launch, customers suffered frequent server outages and app crashes. While early buyers found the advertisements fun, overall reviews plummeted due to reliability failures.

A perceptual mapping analysis comparing Terra GT, EchoSphere, and key competitors revealed the following positioning insights:

- *Terra GT:* Consumers perceived it as overpriced and excessively formal, leaving a gap in its traditional "rugged, highly durable utility" space. Existing Apex owners expressed confusion over who the brand was trying to be.
- *EchoSphere:* Consumers rated the product high on "Excitement" due to its advertising, but exceptionally low on "Competence" due to functional failures.

Questions

a. Explain the elements of the consumer perception process in the context of Apex's Terra GT. How did Apex's marketing mix cues (use 4 Ps of marketing) lead to perceptual distortion among traditional Apex customers?

b. Based on the case, analyse how Apex can use perceptual mapping for Market Segmentation and Brand Repositioning to address customer confusion.

c. Using Aaker's Brand Personality framework, contrast Lumina Tech's marketing image with its real product performance. What identity conflict did this create for consumers? What are the long-term consequences on consumer attitudes and learning when communication and service experiences contradict each other?

[An],[CO4]
**[1 x 20 = 20]**