Printed Page:-3 **Subject Code:- BMBAMF0416**

Roll. No:

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute Affiliated to AKTU, Lucknow)

MBA MF

SEM: IV - THEORY EXAMINATION (2025 - 2026)

Subject: Marketing Analytics

Time: 3 Hours **Max. Marks: 100**

General Instructions:

IMP: *Verify that you have received the question paper with the correct course, code, branch etc.*

1. *This Question paper comprises of* ***three Sections -A, B, & C.*** *It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.*

2. *Maximum marks for each question are indicated on right -hand side of each question.*

3. *Illustrate your answers with neat sketches wherever necessary.*

4. *Assume suitable data if necessary.*

5. *Preferably, write the answers in sequential order.*

6. *No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.*

SECTION-A 20

1. Attempt all parts:-

(1.1) State how often market sizing should be updated. (CO1 - K1) 1

(a) Annually or as market changes

(b) Every decade

(c) Once

(d) Never

(1.2) Identify a key output of marketing analytics for market sizing. (CO1 - K1) 1

(a) Addressable market estimate

(b) Product design

(c) Employee training

(d) Legal compliance

(1.3) Describe how to avoid a price war. (CO2 - K1) 1

(a) Differentiate product

(b) Match lowest price always

(c) Reduce quality

(d) Exit market

(1.4) Define optional product pricing. (CO2 - K1) 1

(a) Base product low and add-ons high

(b) All products same price

(c) Only base product sold

(d) All products free

(1.5) Describe how GDP affects sales forecasting. (CO3 - K1) 1

(a) Higher GDP often increases sales
(b) Higher GDP decreases sales
(c) No effect
(d) GDP unrelated

(1.6) Define forecast bias. (CO3 - K1) 1
(a) Systematic over- or under-prediction
(b) Random error
(c) Seasonal error
(d) Trend error

(1.7) Define cross-selling. (CO4 - K1) 1
(a) Selling additional products to existing customers
(b) Selling to new customers
(c) Discounting products
(d) Returning products

(1.8) Explain why retention is more profitable than acquisition. (CO4 - K1) 1
(a) Existing customers have higher CLV and lower cost
(b) Existing customers pay less
(c) Existing customers complain more
(d) Existing customers buy less

(1.9) Define up-selling in retail. (CO5 - K1) 1
(a) Selling a higher-value product
(b) Selling a cheaper product
(c) Selling a return
(d) Selling a gift

(1.10) Define monetary score in RFM. (CO5 - K1) 1
(a) Score based on total money spent
(b) Score based on purchase count
(c) Score based on recency
(d) Score based on location

2. Attempt all parts:-

(2.1) Explain how macroeconomic factors affect market sizing. (CO1 - K2) 2
(2.2) State why predatory pricing is illegal. (CO2 - K2) 2
(2.3) Describe how to handle missing data in forecasting. (CO3 - K2) 2
(2.4) Describe how to segment customers by CLV. (CO4 - K2) 2
(2.5) Explain how to choose minimum support threshold. (CO5 - K3) 2

SECTION-B 30

Answer any one of the following:-

(3.1) Explain the importance of geographic segmentation in market sizing. (CO1 - K2) 6
(3.2) Explain how to present market sizing results to stakeholders. (CO1 - K2) 6

Answer any one of the following:-

(3.3)	Explain why airlines use price discrimination. (CO2 - K2)	6
(3.4)	Explain the ethics of personalized pricing. (CO2 - K2)	6

Answer any one of the following:-

(3.5)	Explain objectives of sales forecasting with suitable examples. (CO3 - K2)	6
(3.6)	Describe how to use exponential smoothing for short-term forecasts. (CO3 - K3)	6

Answer any one of the following:-

(3.7)	Explain how to use RFM scores to predict churn. (CO4 - K2)	6
(3.8)	Describe the limitations of simple CLV formula. (CO4 - K2)	6

Answer any one of the following:-

(3.9)	Define bundle pricing. Explain how to use Market Basket Analysis for bundle pricing. (CO5 - K2)	6
(3.10)	Explain how to use Market Basket Analysis for store layout. (CO5 - K2)	6

<u>SECTION-C</u> 50

4. Answer any <u>one</u> of the following:-

(4.1)	Conduct a PESTLE analysis for market sizing of a renewable energy startup. (CO1 - K4)	10
(4.2)	Simulate a market sizing exercise for a food delivery service in a new tier-2 city. (CO1 - K3)	10

5. Answer any <u>one</u> of the following:-

(5.1)	Define price war. Discuss disadvantages of price war. (CO2 - K2)	10
(5.2)	Apply psychological pricing to a retail store's product list. (CO2 - K3)	10

6. Answer any <u>one</u> of the following:-

(6.1)	Discuss qualitative methods of demand forecasting.. (CO3 - K2)	10
(6.2)	Analyze how to forecast for a product with strong seasonality and irregular promotions. (CO3 - K4)	10

7. Answer any <u>one</u> of the following:-

(7.1)	Define customer retention. Design a retention strategy for low-CLV customers. (CO4 - K6)	10
(7.2)	Apply STP framework to a retail brand using CLV approach. (CO4 - K3)	10

8. Answer any <u>one</u> of the following:-

(8.1)	Define cross-selling. Explain advantages of cross-selling for a bank. (CO5 - K2)	10
(8.2)	Propose a real-time recommendation system using association rules. (CO5 - K6)	10