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-a.　　　Market segmentation is useful for_____. (CO1, K1)　　　1

(a) Prospects identification

(b) To know customer's taste & preference pattern

(c) To Target current client

(d) All of these

1-b.　　　_____describe the employees skill in serving the client. (CO1, K2)　　　1

(a) Internal marketing

(b) External marketing

(c) Communicating

(d) service operations

1-c.　　　Service design elements consists of_____. (CO2, K1)　　　1

(a) Facility design

(b) Facility location

(c) Capacity planning

(d) All of the above

1-d.　　　For a New Service Development we need to be concerned about____. (CO2, K4)　　　1

(a) Location

(b) Facilities Layout

(c) Effective Customer inflow and Work flow

(d) All of the above

1-e. Managing the peak demand becomes difficult due to ___ nature. (CO3, K3) 1

(a) Intangibility

(b) Perishability

(c) Inseparable

(d) Heterogenous

1-f. _____pricing strategies encourage the customer to expand his/her dealings with the service provider. (CO3, K5) 1

(a) Relationship pricing

(b) Price bundling.

(c) Benefit-driven pricing.

(d) Efficiency pricing.

1-g. _____ is NOT a factor influencing the delivery gap. (CO4, K2) 1

(a) willingness to perform

(b) overpromising

(c) role ambiguity

(d) inadequate support

1-h. The firms overemphasis on cost reduction and short-term profits will increase the size of the: (CO4, K4) 1

(a) Knowledge gap

(b) Communication Gap

(c) Standard Gap

(d) Delivery Gap

1-i. Type of optimization problem is VRP. (CO5, K3) 1

(a) Linear Programming

(b) Integer Programming

(c) Nonlinear Programming

(d) Dynamic Programming

1-j. Variant of VRP involves delivering goods to a set of customers while minimizing the total distance traveled. (CO5, K3) 1

(a) Capacitated VRP

(b) Periodic VRP

(c) Open VRP

(d) Distance-constrained VRP

2. Attempt all parts:-

2.a. Discuss the term People Processing. (CO1, K1) 2

2.b. Mention four responsiveness crucial in service quality. (CO2, K2) 2

2.c. Describe physical evidence. (CO3, K2) 2

| 2.d. | Describe implicit service guarantee. (CO4, K2) | 2 |
| 2.e. | Enumerate the type of e-services. (CO5, K1) | 2 |

SECTION-B   30

3. Answer any <u>five</u> of the following:-

3-a.	Describe the principles of service operations. (CO1, K1)	6
3-b.	Discuss the challenges that arise in cross-cultural service encounters. (CO1, K5)	6
3-c.	Write down the importance of new service development. (CO2, K3)	6
3-d.	Describe the role of intermediaries in new service development process. (CO2, K4)	6
3-e.	Describe the dimensions of servicescape. (CO3, K2)	6
3.f.	"Customer retention is beneficial for organization", comment. (CO4, K5)	6
3.g.	Explain Dynamic Vehicle Routing. (CO5, K3)	6

SECTION-C   50

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

| 4-a. | Examine the role of the service industry in shaping the GDP of India and its impact on economic growth. (CO1, K6) | 10 |
| 4-b. | According to you, which one is more important either product marketing or service operations? Justify your answer. (CO1, K5) | 10 |

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

| 5-a. | List any example of company providing service differentiation. (CO2, K1) | 10 |
| 5-b. | List down five examples of high and low contact of services. (CO2, K1) | 10 |

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

| 6-a. | Describe reasons of switching service providers, Suggest measures a marketer can undertake to prevent the customers from switching. (CO3, K4) | 10 |
| 6-b. | Explain the term word of mouth communication and discuss its significance for a health service provider. (CO3, K2) | 10 |

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

| 7-a. | Describe a real-world scenario where a company successfully used quantitative forecasting methods such as moving averages or exponential smoothing to improve their demand forecasting accuracy. (CO4, K3) | 10 |
| 7-b. | In the context of demand forecasting, discuss the advantages and disadvantages of using historical data versus market research data. Provide examples to support your arguments. (CO4, K4) | 10 |

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

| 8-a. | Discuss real-world applications benefit from VRP solutions. (CO5, K5) | 10 |
| 8-b. | In a city with multiple medical facilities, you are responsible for optimizing the routes of ambulances to respond to emergency medical calls. The goal is to minimize response time while considering the capacity of each ambulance and the urgency of each call. Create a model to solve this problem as a VRP, taking into | 10 |

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account real-time dynamics and the critical nature of emergency response. (CO5, K6)

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