Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐

PRESIDENCY UNIVERSITY

BENGALURU

End - Term Examinations – December 2025

Date: 23-12-2025   **Time:** 09:30am – 12:30pm

School: SOM -PG	**Program:** MBA
Course Code: MBA4028	**Course Name:** Service Operations Management
Semester: III	**Max Marks**: 100	**Weightage**: 50%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	15	15	30	40	

Instructions:

   (i) Read all questions carefully and answer accordingly.

   (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 3 marks.   **10Q x 3M=30M**

1.	Focused study reveals, simultaneous production and consumption of services are significant challenge for the service companies. Discuss two major Service Operations Management challenges related to this finding.	3 Marks	L 2	CO 1
2.	Customer experience is an intrinsic part of the operation process thus service is a two-way flow. Exemplify, managing service operations effectively through co-production and co-creation.	3 Marks	L 2	CO 1
3.	Service operations deteriorate over time unless it is given care and attention. Use Process Analysis concept to address above challenges.	3 Marks	L 2	CO 1
4.	Quality is an increasingly important element that differentiate between competing services. Discuss how focusing on the five dimensions of service quality can help businesses differentiate their services from competitors.	3 Marks	L 2	CO 1
5.	A strong service quality culture is an organizational value system that prioritizes customer satisfaction and continuous improvement which is fundamental to the service operations. Conclude the above statement with key Components of Service Quality Culture.	3 Marks	L 2	CO 1

6.	Service guarantees are powerful tools in service operations management. Outline key Benefits of a Service Guarantee Program.	3 Marks	L 3	CO 2
7.	Successful balancing of Revenue optimization and Customer experience requires integrating yield and waiting time management. Apply the above statement in defining Yield and Waiting time management.	3 Marks	L 3	CO 2
8.	Provide Strategy always ensures sufficient capacity in service operations management. Explain the above statement with examples.	3 Marks	L 3	CO 2
9.	Queuing theory (waiting line analysis), is the mathematical study of waiting lines and their associated processes. Interpret elements of a Queuing System.	3 Marks	L 3	CO 2
10.	Service industry demand forecasting involves anticipating future customer needs to strategically manage resources, staffing levels, pricing, and operations. Illustrate importance of Demand Forecasting in a Service Industry.	3 Marks	L 3	CO 2

Part B

Answer the Questions.   **Total Marks 40M**

11.	a.	Service blueprinting is a design tool based on process flow diagram. Use Service Blueprint for a coffee shop.	10 Marks	L 3	CO 3
		Or			
12.	a.	Implement the strategic positioning of a service company with tactical execution.	10 Marks	L 3	CO 3

13.	a.	Poka Yoke, or mistake-proofing, in service operations involves designing processes to help in maintaining consistency and reliability in service delivery. Implement a Poka Yoke plan for a Health care unit in a small village.	10 Marks	L 3	CO 3
		Or			
14.	a.	Apply the fishbone diagram for root cause analysis of demand forecasting issues.	10 Marks	L 3	CO 3

15.	a.	Illustrate the Swimlane process map for Payroll planning.	10 Marks	L 3	CO 3
		Or			
16.	a.	Illustrate the procedural framework for effective service recovery plan within a service organization.	10 Marks	L 3	CO 3

17.	a.	Use the Newsvendor Model to optimize single-period capacity decisions within service operations.	**10 Marks**	**L 4**	**CO 4**
		Or			
18.	a.	The daily demand for an item is stochastic and follows the normal distribution with mean (µ) of 100 and a standard deviation (σ) of 20. The supplier of the item takes two weeks to deliver the item from the date the order is placed. The cost of ordering is Rs. 1000 per order and carrying cost is Rs. 250 per unit per year. Assume 250 working days in a year. The organisation places order in fixed quantities of 500. Calculate the appropriate reorder point for 90 percent service level, and total cost of the plan. Assume Probability of stock out α = 10 % and Z $_α$ = 1.28	**10 Marks**	**L 4**	**CO 4**

Part C

Answer all the Questions. Each question carries 15marks   **2Q x 15M=30M**

19.	a.	In a rural health center, the patients arrive with an average inter-arrival time of 10 minutes. The time required for the doctor's examination time is with an average of 6 minutes. **Questions:** Analyze the given data to find a. What is the chance that a new patient will see the doctor without having to wait and b. If the municipal health committee wants to appoint one more doctor when the average waiting time for a patient is more than 45 minutes, then What should be the increased rate of arrival of patients to justify the appointment of second doctor.	**15 Marks**	**L 4**	**CO 4**

20.	a.	Air India's chemical management strategy, from an environmental perspective, primarily involves the responsible handling of hazardous materials, reduction of pollution through specific operational improvements, and a focus on using cleaner, less harmful alternatives in line with its overall sustainability policy. The airline's publicly available information focuses more broadly on carbon emissions and waste reduction; specific initiatives demonstrate a commitment to minimizing chemical impact. **Question** Relate Air India's comprehensive chemical management policy into its overall environmental sustainability goals and "boost green drive" initiatives to gain a competitive advantage and improve its brand image.	**15 Marks**	**L 4**	**CO 4**