

**BACHELOR OF BUSINESS
ADMINISTRATION (SERVICES
MANAGEMENT) (BBASM)**

Term-End Examination

June, 2025

**BSM-016 : MANAGING SERVICE
OPERATIONS-II**

Time : 2 Hours

Maximum Marks : 50

Note : *All questions are compulsory.*

1. (a) State whether the following statements are True or False : 1×5=5
- (i) The calling population need not be homogeneous.
 - (ii) M/M/I is a parallel-server queuing model.

- (iii) In a multiple server system, not many people wait in queue.
 - (iv) Queue discipline is not a rule for selecting the next customer in line to be served.
 - (v) Bottleneck is a location or resource that constrains the output.
- (b) Fill in the blanks : $1 \times 5 = 5$
- (i) _____ is a line of waiting customers who require service from one or more servers.
 - (ii) _____ happens when an arriving customer do not join the queue to avail the service as there is long queue.
 - (iii) _____ is giving priority to those who would benefit most from immediate service.
 - (iv) Inadequate waiting area can cause customers to _____.
 - (v) For a random variable the _____ always sums to 1.

2. Briefly explain any *five* of the following in about **100** words each : $2 \times 5 = 10$

- (a) The Psychology of Waiting
- (b) Single Queue
- (c) Finite-Queue M/MIC model
- (d) Probability of Excessive Waiting
- (e) Examples of simulation applications in services
- (f) Inverse transformation method
- (g) Normal Distribution

3. Answer any *four* of the following in about **250** words each : $5 \times 4 = 20$

- (a) What is a Calling Population ? Discuss the classification of Calling Population.
- (b) What are the parameters used to define queue configuration ? Explain Multiple-Queue Alternative.
- (c) Explain the various elements of service capacity with the help of an example.
- (d) What is M/G/I model in queuing ? Explain with the help of an example.

- (e) Why is it important to plan capacity of a service unit ?
 - (f) Discuss customer service in a call center using service model simulation.
4. Answer any *one* of the following questions in about **500** words : 10×1=10
- (a) Discuss the methods used to change the environment of the waiting area.
 - (b) What is a Service Process ? Explain the factors which affect the service process. How can the service processes be classified ? Discuss.

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