

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

Term-End Examination

June, 2026

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

Time : 2 Hours

Maximum Marks : 50

Note : *Attempt all questions.*

1. (a) State whether the following statements are True or False : 5×1=5
 - (i) According to empirical studies, the distribution of inter-arrival times in a queuing system follows exponential distribution.

- (ii) SPT stands for shortest-processing time.
 - (iii) A system is stable when the arrival rate is greater than the service rate.
 - (iv) In Little's Law, the relationship $L = \lambda W$ represents the number of customers in a system.
 - (v) The Experiment design step is followed by the data collection step in the simulation methodology.
- (b) Fill in the blanks : 5×1=5
- (i) simulation is a stochastic simulation technique.
 - (ii) also has economic implications for both the service organization and its customers.

- (iii) In a queuing system,
refers to customers who leave after
joining the queue.
- (iv) is a modification of the
standard M/M/1 model.
- (v) The waiting time in a queue
decreases as the number of servers
..... .

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

- (a) Virtual Queue
- (b) Computer Simulation
- (c) How queue typically forms ?
- (d) Waiting Time
- (e) Types of Arrival Process
- (f) A/B/C Queuing Model
- (g) Dynamic System

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

- (a) What is a Two-Stage Assembly Line ? Explain with an example how workstation dependency affects worker performance in such a system.
- (b) What is Poisson distribution ? Discuss.
- (c) What is the strategic importance of capacity decisions in service organizations, and how do short-range, medium-range, and long-range capacity planning differ ?
- (d) What are the advantages of multiple-queue systems ?
- (e) When is a random variable considered discrete ? Give an example of a discrete random variable and a distribution name.
- (f) Discuss Discrete-event Simulation.

4. Answer any *one* of the following questions in about **500** words : 1×10=10

- (a) What are some effective strategies for managing customer waiting times to enhance satisfaction and service efficiency ? Explain.
- (b) What is the M/M/C queuing model ? Write the assumptions of the M/M/C queuing model.

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