

**BACHELOR OF BUSINESS
ADMINISTRATION (SERVICES
MANAGEMENT) [BBA(SM)]**

Term-End Examination

December, 2022

BSM-016 : MANAGING SERVICE OPERATIONS–II

Time : 2 Hours

Maximum Marks : 50

Note : *All questions are compulsory.*

1. Answer all the questions. Each question carries 1 mark. 1×10=10

Fill in the blanks :

- (a) A _____ can be defined as an individual workstation where customers receive services.
- (b) For each queuing model, the assumptions underlying its _____ are noted.

- (c) _____ service resources at one location should be undertaken with some caution if customers must travel to that facility.
- (d) Queue management can lead to better customer experience and may also lead to an increase in _____.
- (e) Service delivery systems are both _____ and stochastic in their nature.

State whether the following statements are *True* or *False* :

- (f) Queue discipline represents the way the queue is organized.
- (g) Service capacity can be stored for future use.
- (h) A random number is one that is totally correlated to other numbers in a sequence.
- (i) For a random variable the Cumulative distribution of discrete and continuous distribution always sums to 1.

- (j) For any simulation model to work effectively the development of clear and concise problem definition is not important.
2. Answer any **five** questions in about **100** words each. Each question carries 2 marks. $2 \times 5 = 10$
- (a) Define Finite-Queue M/M/C Model.
 - (b) Explain Computer simulation.
 - (c) What is Model Verification ?
 - (d) What do you understand by the term pseudo-random number ?
 - (e) List any **two** continuous random variable distributions.
 - (f) Define server.
 - (g) What is Stereotypical queue ?
 - (h) What is Exponential distribution ?
3. Answer any **four** questions in about **250** words each. Each question carries 5 marks. $4 \times 5 = 20$
- (a) Define Calling Population. Explain the classification of Calling Population.

- (b) Explain Queue configuration and the types of queue configurations.
 - (c) What are the basic assumptions of M/M/1 queuing model ?
 - (d) Discuss Monte Carlo Simulation with example.
 - (e) Give at least *three* examples of simulation applications in services.
 - (f) Write a short note on the average customer waiting time.
4. Answer any *one* question in about **500** words.

1×10=10

- (a) Explain the Strategies for Managing Customer Waiting.
- (b) What is discrete event simulation ? Describe the flowchart of a discrete-event simulation for an airline ticket counter.