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

## Term-End Examination

## June, 2023

### 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 queuing system consists of two key elements, _____ and server.

   (b) _____ can be defined as the maximum ability of a system to deliver service over a period of time.

(c) A _____ is a computer program designed to imitate the real-world system or processes using a model.

(d) The physical size of a product is an important criterion for the _____ analysis and design.

(e) Random variables can be of two types– either discrete or _____.

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

(f) The costumer can be considered a potential resource that participates in a service process.

(g) M/M/1 queuing model refer to a double-server queuing model.

(h) Computer-based simulations actually use pseudo-random numbers.

(i) For a discrete and continuous random variable the cumulative distribution always sums to 1.

(j) A dynamic system is one that is influenced by actions over time.

2. Answer any *five* questions in **about** 100 words each. Each question carries 2 marks.    2×5=10

Explain briefly :

(a) Service Process

(b) Monte-Carlo Simulation

(c) Random Numbers

(d) Discrete Random Variable

(e) Uniform distribution

(f) Consequences of excessive waiting time

(g) 'Foot in the Door' strategy

(h) ABC classification in queuing.

3. Answer any *four* questions in about **250** words each. Each question carries 5 marks.    5×4=20

(a) Define queue and explain the types of queues.

(b) Explain the term 'Single Queue'. Discuss the advantages of single queuing system.

(c) Discuss the classification flowchart of queuing models.

(d) Explain Finite-Queue M/M/1 Model.

**P. T. O.**

(e)   Write a short note on Normal Distribution.

(f)   Explain the first-come, first-served (FCFS) queuing policy giving examples.

4.   Answer any *one* question in about **500** words :

10

(a)   Define Capacity. Explain the various elements of service capacity.

(b)   Explain the process of developing a systems simulation.