## SRIPAT SINGH COLLEGE

# DEPARTMENT OF COMPUTER SCIENCE Internal Examination 4<sup>th</sup> Semester (PCC) – 2024 OPERATING SYSTEM

Full marks: 20

Time: 1 Hr.

#### Group - A

#### 1. Answer any ten questions:

2X10 = 20

- a. Explain process synchronization.
- b. Differentiate between Internal and External Fragmentation.
- c. Write two advantages of virtual memory concept.
- d. Define the term Disk Bandwidth.
- e. Differentiate between seek time and rotational latency.
- f. Explain the term file system in brief.
- g. Write a short note on "Process Control Block".
- h. Explain various types of program threats.
- i. What is segmentation?
- i. What is kernel?
- k. What is time- sharing system?
- I. What is a thread?
- m. What is the basic function of paging?
- n. What are the necessary conditions for deadlocks?
- o. What are the functions of memory management?

### SRIPAT SINGH COLLEGE

## Internal Examination 4<sup>th</sup> Semester (GE) – 2024 DATABASE MANAGEMENT SYSTEM

Full marks: 20

Time: 1 Hr.

#### Group - A

1. Answer any ten questions:

2X10 = 10

- a) What is Data Model.
- b) What are the components of ER Model.
- c) What is class.
- d) What is Abstract class.
- e) What is Entity.
- f) Difference between Super key and Primary key.
- g) What is Client/Server architecture.
- h) Write down syntax of Create table command.
- i) Write down commands of DDL and DML. (Minimum 3 Commands each).
- j) What do you mean by Function Dependencies? Write down the various Functional Dependencies.
- k) Write down the difference between Relational Algebra and SQL queries.
- I) What is BCNF.
- m) Write down the major difference between BCNF and 3 NF.
- n) What is Normalization?
- o) Write down Three level architecture of DBMS.