TBC-203

B. C. A. (SECOND SEMESTER) MID SEMESTER EXAMINATION, March, 2024

INTRODUCTION TO OPERATING SYSTEM

Time: 11/2 Hours

Maximum Marks: 50

- Note: (i) Answer all the questions by choosing any *one* of the sub-questions.
 - (ii) Each sub-question carries 10 marks.
- 1. (a) Explain the main purpose of an operating system and discuss the different type of services provided by operating system.

(CO1, CO2)

OR

(b) Explain IPC and its module in Operating System. (CO1, CO2)

2. (a) Discuss the layered architecture of operating system with a neat diagram.

(CO1, CO2)

OR-

- (b) Explain term process with the block diagram. Differentiate between program and process. (CO1, CO2)
- 3. (a) Explain different type of process scheduler with a suitable diagram. (CO2, CO2)

OR

- (b) Why do we need thread? Define multithreading problem. (CO2, CO2)
- 4. (a) Explain function and main components of computer system organization with suitable diagram. (CO1, CO2)

OR

- (b) Define following term: (CO1, CO2)
 - (i) Multicore programming
 - (ii) Implicit threading

5. (a) Explain type and working of system call in operating system. Also list name of various system calls used in operating system. (CO1, CO2)

OR

(b) Explain computer system architecture and its type in term of operating system.

(CO1, CO2)