

Bachelor in Information Technology Mid Term Evaluation

TIME: 1 HOURS 45 MINUTES (1 Hour 15 Minutes writing time 30 minutes Scan and Upload Time)

EXAM DATE: JUNE 30, 2021

SEMESTER: BIT III

SUBJECT: Operating System

INSTRUCTIONS:

1. Section A is compulsory.

2. Please start every question on a new page.

3. Answers will not be marked if it is illegible.

Question Number	A	Total
1,2,3,4,5		/35

Section A

Attempt All the Questions

(Marks $5 \times 7 = 35$)

- 1. Do you think a process can exist without any state? Justify your view with the help of process state transition diagram.
- 2. Suppose three peoples are in line waiting for a department store to open for "the big sale". When the door opens, all three rush the door, but the door is not big enough for all them to pass through at once. Describe a solution for addressing this deadlock that will allow three peoples to pass through the door. Which of the 4 necessary deadlock conditions does your solution break? Explain.
- 3. What is critical section problem? Why executing critical selection must be mutual exclusive? Explain.
- 4. When threads are better than processes? Explain the concept of user level threads in detail.
- 5. What are the advantages of dynamic loading over static loading? Explain with example.

Best of Luck