

Roll No.

Total No. of Questions : 07]

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B.Sc. IT (Sem. – 3rd)
OPERATING SYSTEM
SUBJECT CODE : BS - 203
Paper ID : [B0410]

[Note : Please fill subject code and paper ID on OMR]

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.

Section - A**Q1)****(10 × 2 = 20)**

- a) What is the difference between system program and application program?
- b) Define logical address space of a process.
- c) What is Convoy effect?
- d) What is the disadvantage of paging system?
- e) Define critical section problem.
- f) What is the cause of thrashing?
- g) What is the difference between SCAN and C-SCAN scheduling?
- h) What is deadlock Prevention?
- i) How two level directory structures differ from single level directory?
- j) What is data encryption?

Section - B**(4 × 10 = 40)**

- Q2)** What is Multiprogramming operating system? Explain functions of the multiprogramming systems.
- Q3)** What is process scheduling? Explain different scheduling techniques.
- Q4)** How does paging differ from fixed partition scheme? Explain address translation and relocation in paging.
- Q5)** What is file? Explain different access methods in file management?
- Q6)** What is a threat? Differentiate between system threats and program threats. Also discuss method to deal with them.
- Q7)** What is a deadlock? What are various conditions for its occurrence? How to prevent Deadlock? Illustrate with the examples.

