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Total No. of Pages: 02

Total No. of Questions: 07

B.Sc.(IT) (Sem.-3) **OPERATING SYSTEM** Subject Code: BS-203 Paper ID : [B0410]

Time: 3 Hrs. Max. Marks: 60

INSTRUCTION TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks
- 2. SECTION-B contains SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.

SECTION-A

Q1) Write briefly:

- a) Describe Interrupt driven I/O cycle.
- b) Name the different process states.
- c) Where does Semaphores find their applications in operating systems?
- d) Explain the term Demand Paging.
- e) How swapping of two processes can take place?
- f) Write a note on the Boot Process.
- g) Enlist different types of directory structures.
- h) Define Buddy system.
- i) What is the purpose of Caching?
- j) Explain the term RAID.

SECTION-B

- Q2) Explain in detail paging and segmentation schemes of memory management with suitable examples.
- Q3) What is an operating system? What are the functions of operating system and explain its types?
- Q4) a) 'A major security problem for operating systems is user authentication'. Justify this statement with detailed explanation and example.
 - b) Write a note on Program Threats.
- Q5) What is a File? Explain different access methods in file management.
- Q6) What is a Deadlock? How a deadlock can be avoided? Explain.
- Q7) Explain the concept of Direct Memory Access in detail.