Roll No.							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**

## 1. Write briefly:

- (a) List any five functions of Operating System.
- (b) Define the term Bootstrapping.
- (c) Give any one difference between a process and a thread.
- (d) Explain best fit and worst fit algorithm of allocation.
- (e) Why the page size is always in powers of 2?
- (f) Define preemptive and non-preemptive scheduling.
- (g) What is Prepaging?
- (h) Why is protection of file required?
- (i) Define the term RAID.
- (j) Explain categories of threat.

## **SECTION - B**

- 2) What do you mean by Scheduling? Explain various CPU scheduling algorithms with examples.
- What is deadlock? Explain necessary conditions for deadlock. What are the various 3) methods for prevention and avoidance of deadlock?
- 4) What is Paging? How it is different from Segmentation? Explain.
- Write short note on the following: 5)
  - (a) Semaphores
  - (b) Fragmentation
- 6) What do you mean by device management? Explain I/O Hardware Organization.
- 7) What are Program Threats? How will the system be protected against these threats?