

Roll No.

Total No. of Questions : 7

Total No. of Pages : 02

BCA (Sem.-4th)
OPERATING SYSTEMS
Subject Code : BC-404
Paper ID : [B0218]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

- 1. SECTION-A is COMPULSORY.**
- 2. Attempt any FOUR questions from SECTION-B.**

SECTION-A **(10 × 2 = 20 Marks)**

1. Write a short note on :

- What are different types of real time systems?
- List various scheduling criterion.
- What is interprocess communication?
- How process is different from program?
- What are various file access methods?
- What is physical address space?
- What are different types of semaphore?
- How authorization is different from authentication?
- List the features of distributed system.
- List various system threats.

SECTION-B **(4 × 10 = 40 Marks)**

- What is operating system? Discuss its need. Explain various operating system services.
- What are various Scheduling algorithms? Explain each scheduling algorithm with their relative merit and demerits.

4. What is paging? How it is different from segmentation? Explain hardware support for paging.
5. Explain the following :
 - (a) Virtual memory
 - (b) Critical Section
6. List necessary condition for deadlock. Explain different methods to handle deadlock.
7. Write notes on the following :
 - (a) File allocation methods
 - (b) File Protection