

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech (CSE/IT) (Sem.-4)

OPERATING SYSTEMS

Subject Code : CS-202

Paper ID : [A0458]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY.
2. Attempt any FOUR questions from SECTION-B.
3. Attempt any TWO questions from SECTION-C.

SECTION-A

(10 × 2 = 20 Marks)

- I. Explain the following
 - (a) Hash Table
 - (b) Semaphores
 - (c) Judgement field in the page table
 - (d) Fragmentation of memory
 - (e) Round Robin scheduling
 - (f) SOLARIS OS
 - (g) SCO-UNIX
 - (h) Security features in Linux
 - (i) Open Source Software
 - (j) Boot Process of a PC

SECTION-B

(4 × 5 = 20 Marks)

2. Explain demand paging with proper diagram and example.
3. What you understand by process scheduling ? Write a note.
4. What is the overall structure of an OS? Draw a neat architecture and explain.

5. Write a note on device management. How various devices work in synchronization to each other?
6. What are various kinds of interrupts? How we handle them?

SECTION-C

(2 × 10 = 20 Marks)

7. Write a note on the following :
 - a) Interprocess communication
 - b) Preemptive and Non Preemptive scheduling
 - c) Physical and logical address space
 - d) Internal and external fragmentation
8. Write a detailed note on multiprocessor and distributed systems. What are their advantages and how these are implemented?
9. How the files are stored on the secondary memory storage ? Discuss in context of DOS and UNIX partitioning and file management schemes.