

Roll No.

Total No. of Pages 02

Total No. of Questions : 09

B.Tech. (Sem. – 4th)
OPERATING SYSTEM
SUBJECT CODE : CS - 202
Paper ID : [A0458]

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

Time : 03 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)

Q1. Explain the following

- a) Hash Table
- b) Semaphores
- c) Judgment 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)

- Q2. Explain demand paging with proper diagram and example.
- Q3. What you understand by process scheduling ? Write a note.
- Q4. What is the overall structure of an OS? Draw a neat architecture and explain.
- Q5. Write a note on device management. How various devices work in synchronization to each other?
- Q6. What are various kinds of interrupts? How we handle them?

SECTION - C

(2*10 = 20 Marks)

- Q7. 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.
- Q8. Write a detailed note on multiprocessor and distributed systems. What are their advantages and how these are implemented?
- Q9. How the files are stored on the secondary memory storage ? Discuss in context of DOS and UNIX partitioning and file management schemes.