

Roll No.

Total No. of Questions : 09]

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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 Hours

Maximum 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

Q1)

(10 x 2 = 20)

- a) What is a real time operating system?
- b) List any five functions of operating system.
- c) Give any one difference between a process and a thread.
- d) Explain best fit and worst fit algorithm of allocation.
- e) What is a distributed system?
- f) List four necessary conditions for dead lock.
- g) What is a system call? Explain with example.
- h) What is a kernel?
- i) Explain the difference between a program and a process.
- j) Discuss concurrency.

Section - B

(4 x 5 = 20)

- Q2) State and discuss the differences between Multiprogramming and Multitasking.
- Q3) What are distributed and non distributed operating systems?
- Q4) What is a scheduler? How many types of schedulers coexist in a complex operation system? Explain.
- Q5) Explain the difference between internal fragmentation and external fragmentation. Which one occurs in paging system?
- Q6) Explain Deadlock Prevention Vs Avoidance.

Section - C

(2 x 10 = 20)

- Q7) What is virtual memory? What are its various advantages?
- Q8) What is file system? Explain file protection and allocation methods.
- Q9) What is Process in Linux? Explain 'kill' and 'killall' in detail.

