Roll No. ....

Total No. of Questions : 09]   [Total No. of Pages : 02

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.

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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 '&' and 'kill' in detail.

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