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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Civil) (Sem.-4)

OPERATING SYSTEM

Subject Code : CS-202

M.Code : 56513

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**Q1. Write briefly :**

- a) Write at least two disadvantages of layered architecture of Operating System.
- b) List various CPU scheduling criteria.
- c) Define the term semaphores.
- d) Differentiate between paging and segmentation scheme of memory management.
- e) Differentiate between Logical and physical address space.
- f) Define the term seek time.
- g) Explain in brief about the term Caching.
- h) Explain the term security in brief.
- i) Write two advantages of distributed operating system.
- j) Write two advantages of LINUX operating system.

SECTION-B

- Q2 What is a process? Explain the different states of a process with a diagram. Also explain in detail the Contents of PCB of a process.
- Q3 What are critical sections? Why mutual exclusion required? Explain any one method of achieving mutual exclusion in detail.
- Q4 Describe the access matrix model used for protection purpose.
- Q5 Write a detailed note on multiprocessor operating systems.
- Q6 Write a detailed note on Interrupts in reference to I/O systems.

SECTION-C

- Q7 a) Explain the following CPU scheduling algorithm :
- i) Priority scheduling
 - ii) shortest job first scheduling
- b) Explain the following terms :
- i) Buffering
 - ii) Spooling
- Q8 Write a detailed note on Paging scheme of memory management.
- Q9 Write a detailed note on UNIX operating system with SOLARIS.

NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC case against the Student.