C16-CM–303

6229

BOARD DIPLOMA EXAMINATION, (C-16)

OCTOBER/NOVEMBER—2023

DCME - THIRD SEMESTER EXAMINATION

OPERATING SYSTEMS

Time : 3 Hours] [*Total Marks* : 80

PART—A 3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Write any three differences between distributed systems and real time systems.

2. List different types of system calls.

3. Draw the process state diagram.

4. What is semaphore?

5. Define deadlock.

6. What is address binding?

7. List any three differences between paging and segmentation.

8. List various disk scheduling algorithms.

9. Write about disk structure.

10. Define file management.

PART—B

10×5=50

Instructions : (1) Answer *any* **five** questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. Explain the components of an operating system.

12. Explain Round Robin scheduling algorithm with an example.

13. Explain Deadlock avoidance and detection algorithms.

14. Explain interprocess communication.

15. Explain single partition and multiple partition allocation.

16. Explain LRU and optimal page replacement algorithms.

17. Explain various Disc allocation methods.

18. Explain directory structure organization.

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