C16–CM–**303**

6229

BOARD DIPLOMA EXAMINATION, (C–16)
MARCH/APRIL—2018
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. List different types of system calls.

2. Write a short note on distributed operating systems.

3. Define semaphore. List different types of semaphores.

4. What is process control block (PCB)? Draw its structure.

5. Distinguish between preemptive scheduling and non-preemptive scheduling.

6. Define dynamic linking.

7. What is single-partition allocation?

8. What is swapping?

9. List various file allocation methods.

10. Write about direct access method.

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PART—B 10×5=50

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

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

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

11. Explain spooling and buffering with neat sketch. 10

12. Explain *(a)* process creation and *(b)* process termination. 5+5

13. Explain about round-robin and shortest job first (SJF) scheduling algorithms with example. 10

14. Explain the conditions that must satisfy the occurrence of deadlock. 10

15. Explain the demand paging technique. 10

16. Explain any two page replacement algorithms with an example. 10

17. List and explain the disk scheduling algorithms. 10

18. Explain about directory structure. 10

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