

6229

BOARD DIPLOMA EXAMINATION, (C-16)

MAY/JUNE—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. List the components of operating system.
2. Write a short note on system calls.
3. Define scheduler. List the different types of schedulers.
4. Write about the concept of safe state in deadlocks.
- * 5. List the uses of threads.
6. What is external fragmentation?
7. Define swapping.
8. List various free space management techniques.
9. Define seek time and latency time.
10. List various types of operations that may be performed on files.

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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 following : 10
(a) multi-programming
(b) time sharing systems
- 12.** Explain different process states with a neat diagram. 10
- 13.** Explain FCFS, Round Robin scheduling algorithms with an example. 10
- 14.** Explain deadlock avoidance and detection techniques. 10
- 15.** Explain segmentation scheme for memory management. 10
- 16.** (a) Explain FIFO page replacement algorithm with an example. 5
(b) Explain working set model. 5
- 17.** Explain different disk scheduling algorithms with an example. 10
- 18.** Explain various file access methods. 10

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