

\*



C16-CM-303

6229

BOARD DIPLOMA EXAMINATION, (C-16)

JUNE/JULY—2022

DCME - THIRD SEMESTER EXAMINATION

OPERATING SYSTEM

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. Define system call with an example.
2. List any three operating systems.
3. List various states of a process.
4. What is a scheduler? List different types of schedulers.
5. Write about Inter Process Communication.
6. Write about overlays.
7. Define thrashing.
8. List various disk space allocation methods.
9. Define seek time and latency time.
10. What is the need of file protection?

\*

\*

**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 various operating system components.
12. Explain process creation and process termination.
13. Explain deadlock recovery techniques.
14. Explain the following :
  - (a) First Come First Serve (FCFS) scheduling algorithm
  - (b) Multilevel queue scheduling algorithm
15. Explain about demand paging.
16. List and explain page replacement algorithms.
17. Explain the following disk scheduling algorithms :
  - (a) FCFS
  - (b) SCAN
  - (c) C-SCAN
  - (d) LOOK
18. Explain directory structure organization.

★ ★ ★