

C09-CM-402/C09-IT-402

3459

BOARD DIPLOMA EXAMINATION, (C-09) OCT/NOV-2017 DCM-FOURTH SEMESTER EXAMINATION

OPERATING SYSTEMS

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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 a system call.
- **2.** List the types of operating systems.
- 3. Draw queueing diagram of a process scheduling.
- **4.** When is a process terminated?
- 5. Name multithreading models.
- **6.** What is the circular wait in a deadlock?
- **7.** When does external fragmentation happen?

- **8.** Name the page replacement algorithms.
- 9. Write about the C-scan disk scheduling.
- **10.** What are the file operations?

PART—B

10×5=50

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. Write about operating system services.
- **12.** What is a process? Write about sequential and concurrent processes.
- 13. Explain the criteria of CPU scheduling algorithms.
- 14. Explain various techniques for deadlock prevention.
- **15.** Explain paging technique.
- **16.** Explain page replacement algorithms.
- **17.** Explain free space management.
- 18. Explain the differences among file access methods.

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