C09–CM–402/C09–IT–**402**

3459

BOARD DIPLOMA EXAMINATION, (C–09)
OCT/NOV—2016
DCM—FOURTH 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. Define an operating system.

2. What is spooling?

3. What are the benefits of interprocess communication?

4. What is a cooperative concurrent process?

5. List the deadlock recovery techniques.

6. Name the conditions to be satisfied to occur a deadlock.

7. What is demand paging?

8. What is the page-fault frequency strategy?

9. Write about disk structure.

10. List the operations to be performed on directories.

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 the types of system calls.   10

12. Explain the process state diagram.   10

13. Explain the scheduling criteria of CPU.   10

14. Write about deadlock avoidance.   10

15. Explain *(a)* swapping and *(b)* single-partition allocation.   5+5=10

16. Explain *(a)* working set model and *(b)* page-fault frequency.
5+5=10

17. Explain disk allocation methods.   10

18. Explain file operations.   10

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