



C16-IT-403

**6497**

**BOARD DIPLOMA EXAMINATION, (C-16)  
OCT/NOV—2018  
DIT—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 operating system. Give examples.
2. What is spooling? Explain.
3. Define process. List the steps involved in a sequential process.
4. Draw and explain the process state diagram.
5. State necessary conditions for arising deadlocks.
6. Write short note on swapping.
7. Describe dynamic loading.
8. List the various allocation methods used in secondary storage management.
9. Explain LOOK disk scheduling algorithm.
10. Define file. Give examples.

**PART-B**

10×5=50

- \* **Instructions :** (1) Answer *any five* questions.  
(2) Each questions carries **ten** marks.  
(3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.

11. Explain multi-programming and time sharing.
12. Draw and explain process control block.
13. Describe the process of recovering from deadlock.
14. Explain multi-level feedback queue scheduling with neat sketch.
15. Describe multiple partition allocation with example.
16. Explain working set model and page fault frequency.
17. Explain FCFS and SSTF disk scheduling algorithms.
18. Explain single level and two level directory structure organization.

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