

Roll No.

Exam Code : J-19

Subject Code—0405

M.C.A. (First Year) EXAMINATION

(Batch 2009 Onwards)

(5 Years Integrated Course)

OPERATING SYSTEM-I

MCA-105

Time : 3 Hours

Maximum Marks : 70

Section A

Note : Attempt any *Seven* questions. **7×5=35**

1. Define Operating System and its functions.
2. Explain about process state transition diagram.
3. What is Thrashing ?
4. What is meant by virtual memory ?
5. Explain about swapping.

(2-77-20-0119) J-0405

P.T.O.

6. Discuss the necessary condition of deadlock.
7. Explain the term first fit, best fit and worst fit.
8. Explain real time system.
9. Define critical section.
10. What is distributed system ?

Section B

Note : Attempt all the questions.

11. Discuss various scheduling algorithms.

Or

Discuss deadlock system and its characterization. **12**

12. What is CPU Scheduler ? Describe the differences among short term, medium term and long term scheduler.

Or

Differentiate among batch, multiprogrammed batch and time sharing system. **12**

13. Explain the difference between internal and external fragmentation with example.

Or

Write short notes on the following :

- (i) System structure
- (ii) Virtual machines.

11