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**6428**

Register Number  
Name of the Candidate:

**M.Sc. DEGREE EXAMINATION, May 2015**

**(INFORMATION TECHNOLOGY)**

**(SECOND SEMESTER)**

**231: DISTRIBUTED OPERATING SYSTEM**

Time: Three hours

Maximum: 100 marks

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**SECTION-A**

**(8×5=40)**

**Answer any EIGHT questions**

1. What are the components of DCE?
2. Explain the layers in OSI reference model.
3. Explain how computer clocks are implemented.
4. Explain the working principle of Bully algorithm used for process synchronization.
5. What are the common goals of computer security?
6. What are the approaches to authentication? Explain.
7. Define Inode. What are its fields?
8. What is a Super Block? Explain.
9. What do you mean by shared memory communication? Explain.
10. Describe the socket mechanism used for communication.

**SECTION-B**

**(3×20=60)**

**Answer any THREE questions**

11. Explain the various distributed computing system models.
12. Explain the various approaches used in mutual exclusion mechanism in process synchronization.
13. Discuss in detail on Digital signature.
14. Explain the various system calls used for the file system in UNIX.
15. Discuss the role of semaphores in solving problems in multiprocessor systems.

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