

MAY 2012

**P/ID 17467/
RCT/PCAO**

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Write short notes on Time Sharing System.

Or

- (b) Discuss how Communication is done among the processor during the System Calls.

2. (a) Explain the States and Control Blocks of Process in detail.

Or

- (b) Explain the following in detail :

(i) Deadlocks and Starvation.

(ii) Binary Semaphores.

3. (a) Illustrate the Page Replacement techniques in detail.

Or

- (b) Discuss the structure of Disk.

4. (a) Write short notes on File operations.

Or

(b) Discuss the security problems in Operating System.

5. (a) Give an overview of Unix history.

Or

(b) Discuss about management of PC hardware in MS-DOS.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. (a) Explain in detail about I/O structure.

(b) Briefly explain about system design and implementation.

7. (a) Discuss about Process concept in detail.

(b) Explain in detail about Deadlock Prevention.

8. Write in detail about Hardware Protection.

9. Explain the characteristics of Deadlock.

10. Explain the following in detail :
 - (a) Demand Paging.
 - (b) Thrashing.
 11. Describe in detail about Disk Scheduling.
 12. Give a detailed note on Encryption.
 13. Explain the file system in UNIX operating system.
-