

JUN 2006

Subject Code—4256

**P.G.D.C.A. EXAMINATION**

(Second Semester)

MS-08

**OPERATING SYSTEM**

*Time : 3 Hours*

*Maximum Marks : 100*

**Note :** Attempt any *Five* questions. All questions carry equal marks.

1. (a) Define Operating System. Discuss the evolution process of operating systems. 12
- (b) Write short notes on Distributed Operating System and Parallel Operating System. 8
2. (a) What do you understand by File System ? Explain the various allocation methods. 15
- (b) What is a directory ? Discuss the attributes of a directory entry. 5

**P.T.O.**

3. What is the criteria of scheduling algorithms evaluation ? Discuss different CPU scheduling algorithms. 20
4. What is Demand Paging ? Explain the page replacement algorithms. 20
5. Explain the different Disk Scheduling algorithms. How would you select a disk scheduling algorithm ? 20
6. What is a Deadlock ? Explain the procedure of deadlock detection and recovery. 20
7. Define Critical Section Problem. How would you synchronize the interprocess communication ? 20
8. Write short notes on the following :
  - (a) Multiple Processor Scheduling
  - (b) Thrashing
  - (c) Sector queeing in Disk Scheduling
  - (d) Safe State in deadlock avoidance
  - (e) Properties of Linux Operating System.

4×5=20