

Operating Systems
(IT-357, Dec 06)

Note: Attempt five questions, selecting at least one question from each unit.

UNIT-1

1. a) State the purpose of Process Control Block.
b) What are the characteristics of Real Time Operating System?
c) What are the methods of inner Process Communication?
2. a) What are System Programs?
b) Define the role of Semaphore in Mutual Exclusion.
c) Explain Context Switching.

UNIT-2

3. a) Describe the characteristics of Round Robin Scheduling.
b) What is Deadlock? Explain the methods for deadlock recovery.
4. a) Describe how Demand Paging Works.
b) Explain the following:-
 - i) Internal and External Fragmentation.

UNIT-3

- ii) Inverted Page Table
5. a) Explain Logical and Physical File system.
b) Explain directories structures and implementation of directories.
6. Write notes on the following:-
 - a) Buffering
 - b) Device Allocation Considerations

UNIT-4

7. Compare Network and Distributed Operating Systems.
8. Explain the file system of UNIX Operating System.