

ANNA UNIVERSITY COIMBATORE
B.E. / B.TECH. DEGREE EXAMINATIONS : OCTOBER 2009
REGULATIONS – 2007
FOURTH SEMESTER
070230013 - OPERATING SYSTEMS
(COMMON TO CSE / IT)

TIME : 3 Hours

Max.Marks : 100

PART – A

(20 x 2 = 40 MARKS)

ANSWER ALL QUESTIONS

1. What are the jobs of an operating system?
2. What are the different types of systems?
3. What is the need for DMA?
4. What are the activities of operating system in concern with disk management
5. What are the common types threading implementation?
6. Give the two types of Scheduling?
7. Define Semaphore.
8. Define monitors. Where it was implemented?
9. Define Deadlock.
10. How we can prevent deadlock?
11. What is DLL? Where it is adapted?
12. Define the concept of paging.
13. What is meant by virtual memory and which part of memory device is act as virtual memory
14. Define the simply the concept of optimal page replacement algorithm
15. What are all the typical file attributes?
16. What is meant by thrashing?
17. What is meant by index block?

18. Give an advantage and disadvantage for linked allocation method?
19. List some of the file operations.
20. What is the need of Buffer.

PART – B

(5 x 12 = 60 MARKS)

ANSWER ANY FIVE QUESTIONS

21. Explain the various system components in detail.
22. Explain the inter process communication in detail.
23. Explain FCFS, Round Robin and Priority scheduling using an example and state which type scheduling is best in terms of processing time.
24. Explain any two classic problems of synchronization.
25. Explain the various techniques for deadlock avoidance.
26. a Explain the terms paging and explain the paging hardware diagram. 6
b Explain the structure of any one paging table in detail. 6
27. a Explain the concepts of page replacement in detail with a neat sketch. 6
b Explain FIFO page replacement and optimal page replacement in detail with an example. 6
28. Explain the various file allocation methods in detail.

*****THE END*****