## SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B. Tech – IT

Title of the paper: Operating Systems

Semester: IV Max. Marks: 80 Sub.Code: 6C0063 Time: 3 Hours Date: 02-05-2008 Session: FN

## PART – A Answer All the Questions

 $(10 \times 2 = 20)$ 

What is an operating system? Name any four.

2. What is seek time?

1.

- 3. Define mutual exclusion.
- 4. What is the use of monitors?
- 5. Give any four different file types.
- 6. What is page fault?
- 7. Distinguish multitasking and multiprogramming.
- 8. What do you mean by working set?
- 9. What is the difference between absolute and relative path name in Unix?
- 10. List any two disadvantages of Distributed systems.↓

## PART – B $(5 \times 12 = 60)$ Answer All the Questions

- 11. (a) Discuss the different types of operating system.
  - (b) Explain the function of an operating system from the point of view of a system programmer.

(or)

- 12. Explain the evaluation of scheduling algorithms.
- 13. Explain about preemptive and non preemptive strategies.

(or)

- 14. What is monitor? Explain monitor construct for producer consumer problem.
- 15. With example of your own explain any three page replacement algorithms.

(or)

16. Explain (a) Deadlock recovery methods.

(8)

(b) Semaphores.

(4)

- 17. (a) What are the operations are performed on a directory. (2)
  - (b) Explain acyclic graph directory and general graph directory structure. (10)

(or)

- 18. Explain how virtual address translation is done using combined associative / direct mapping in a paged and segmented system.
- 19. Discuss the salient features of UNIX operating system.

(or)

20. Explain in detail about the Unix file system.