STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600 086 (For candidates admitted during the academic year 2009-10)

SUBJECT CODE : CS/PC/OS24

M. Sc. DEGREE EXAMINATION, APRIL 2010 **INFORMATION TECHNOLOGY SECOND SEMESTER**

COURSE	:	CORE	
PAPER	:	OPERATING SYSTEMS	
TIME	:	3 HOURS	MAX. MARKS: 100

Section – A

10 * 2 = 20Answer all the questions

- 1. Define Batch Systems
- 2. Define Time Sharing Systems
- 3. Define Process.
- 4. Define Co-operating process.
- 5. Define Mutual Exclusion.
- 6. Define Semaphores
- 7. Compare Compile Time and Load Time.
- 8. Define Virtual Memory.
- 9. What is meant by Bitmap?
- 10. Define Swap-Space Management.

Section – B Answer any SIX of the following 6 * 5 = 30

- 11. Explain Multi processor systems.
- 12. Discuss various services of operating systems.
- 13. Discuss various process states.
- 14. Explain about threads.
- 15. Discuss synchronization hardware.
- 16. Discuss about swapping of two process using disk as a backing store.
- 17. Discuss various file operations.
- 18. Explain about file allocation methods.

Section – C Answer any FIVE of the following

5 * 10 = 50

- 19. Explain about System Calls.
- 20. Discuss any two CPU scheduling algorithms with suitable examples.
- 21. Discuss inter process communication.
- 22. Discuss any two classic problems of synchronization.
- 23. Explain about Deadlock prevention and avoidance.
- 24. Discuss demand paging
- 25. Discuss about Disk scheduling.
