Department of Computer Applications

OPERATING SYSTEMS (CA615)

Mr.I.Benjamin Franklin, Mr.CJustin Marshal

UNIT-I

1. Write a note on Operating systems and its uses.
2. Explain the history of Operating systems.
3. Briefly explain about Multiprogramming.
4. Write a note on BOOTING process.
5. Discuss about the services of OS?
6. Explain about Contiguous and Non-Contiguous allocation methods.
7. Write a note on Directory structure.

UNIT-II

8. What is Context switching? Explain with diagram.
9. Draw a sketch on Process state Transition diagram.
10. Write a note on Process Control Block (PCB).
11. Discuss about various operations on process.
12. Write a note on scheduling philosophy.
13. What are the three levels of Scheduling?
14. Write a note on producer-consumer problem.
15. Briefly explain about semaphore algorithm.
16. Write a note on Coffman's four conditions.
17. Discuss about various strategies of Deadlock.

UNIT-III

18. Write a note on Memory management.
19. Explain about single contiguous memory management.
20. Discuss about fixed partition memory management.
21. Explain about Variable partition memory management.
22. Write a note on Paging.
23. Briefly explain about Segmentation.
24. What are the common terminologies used in virtual memory managements systems.
25. Explain about any four page replacement policies.

UNIT-IV

26. What are the components of GUI?
27. Write a note on Authentication.
28. Differentiate between Virus and Worms

29. Discuss about different types of Threats.
30. Write a note on Encryption.
31. What are the design principles to be followed in designing secured system?
32. What are the advantages of using Digital signature?
33. Explain about various Protection mechanisms.

UNIT-V

34. Give an overview of UNIX.
35. Write a note on file system of UNIX.
36. What are the different types of files recognized by UNIX?
37. Write a note on Internals of file system.
38. Briefly explain about I node table.
39. What are system calls? Explain.
40. Explain about the basic commands used in UNIX.