PARTA

1. Define Operating System.
2. What are the functions of OS?
3. Explain the role of OS as resource manager.
4. List the services provided by OS.
5. Breif the evolution of operating system.
6. What do you mean by kernel?
7. Explain serial processing.
8. What are the problems faced by serial processing systems?
9. Explain batch processing.
10. What is resource utilization?
11. What is a monitor?
12. What is resident Monitor?Give its memory layout.
13. Explain multiprogrammed batch system.
14. Differentiate uniprogramming and multiprogramming.
15. What are the advantages of multiprogramming?
16. What do mean by time sharing systems?
17. Compare batched multiprogramming systems and time sharing systems.
18. Define Multiprocessing and multitasking.
19. Briefly explain kernel/supervisor mode and usermode.
20. What is a process?
21. What are the components of process.
22. What is process management?
23. Define Memory management.
24. Define Information protection and security.
25. List the elements of operating system.
26. Detail multiprocessor and multicore architecture.
27. List the events that lead to process creation.
28. Write about the different process states.
29. List atleast 4 reasons for process termination.

30. What is the need for the Blocked state?

31. Show the Process representation in Linux.

32. Explain Process scheduling with a neat diagram

33. What is ready queue and device queue?

34. Differentaite short term and long term scheduler.

35. What is the use of middele term scheduler.

36. What is context switch?

37. What are the models of IPC?

38. What is IPC?

39. What is a PCB?

40. Explain the role of PCB?

41. List the steps involved in process creation.

42. Define System calls with examples.

43. Define Thread.

44. What resources aretypically shared by all of the threads of a process?

45. List the benefits that are associated with threads?

46. What is bounded and unbounded buffer?

47. Whatis critical section?

48. What is mutual exclusion?

49. What is synchronization?

50. What is a semaphore?

51. What are Pipes and its type?

52. Define Shared memory.

53. Define Message passing

54. What is race condition.

PARTB

55.Discuss about the evolution of operatingsystems.

56. With neat diagram explain the five states involved in process model.

57. Explain the various reasons involved in process creation and termination.

58. Explain IPC in detail.

59. State producer/consumer problem.

60. Explain scheduler and its types.