## **OS** questions

- 1. types of scheduling.
- 2. Write a short note on Single contiguous memory management.
- 3. Explain functions of Memory Management Unit.
- 4. Write a short note on Variable/Dynamic partition memory management.
- 5. Batch Operating System
- 6. Booting
- 7. classical ipc problems
- 8. Clustered Systems
- 9. Components of os
- 10. Context Switching and its advantages
- 11. Contigious and Non-contigious allocation method
- 12. Contiguous Memory and chained (linked lists)
- 13. Critical Section
- 14. Deadlocks, preventions, how to avoid, recovery
- 15. Describe Classical IPC problems.
- 16. Describe how to implement a lock using semaphores.
- 17. Device Driver, Device Handler:
- 18. Different Services of the Operating Systems
- 19. Direct Memory Access (DMA)
- 20. Explain Computer Architecture with suitable Diagram.
- 21. Explain concept of semaphore with suitable example.
- 22. Explain File system
- 23. Explain graphical representation of deadlock
- 24. Explain importance of virtual memory management system.
- 25. Explain in brief process lifecycle.
- 26. Explain Interrupt service routine with diagram.
- 27. Explain multithreading models?
- 28. Explain mutual exclusion in IPC.
- 29. Explain operating system structure.
- 30. Explain segmentation with suitable diagrams.
- 31. Explain the term memory swapping.

- 32. Explain various process states.
- 33. Goal of authentication
- 34. I/O Procedure:
- 35. Inter Process Communication (IPC)
- 36. Interrupt Service Routines (ISR)
- 37. Layered Os
- 38. List different page replacement algorithms with exxamples
- 39. memory allocation
- 40. Monolithic (Simple) Operating System
- 41. Mutual Exclusion in IPC Paging
- 42. Peterson algorithm
- 43. Process and Process States, Define process, Diagrams
- 44. Process Control Block (PCB)
- 45. Procucer Consumer problem
- 46. Protection mechanism in file system
- 47. Race condition with examples
- 48. recovery-from-deadlock-in-operating-system/
- 49. Scheduling policies
- 50. SEGMENTATION
- 51. semaphore
- 52. solution for Producer Consumer problem with Examples
- 53. Swapping
- 54. System Calls
- 55. system when page fault occurs.
- 56. Time sharing systems vs Process Control and Real Time Operating Syste
- 57. Under what circumstances do page fault occur? Describe the action taken by operating
- 58. Virtual Memory
- 59. What is authentication?
- 60. What is batch system in OS?
- 61. What is critical section problem? Why executive critical section must be exclusive Explain
- 62. What is dead lock? What are the dead lock detection methods?
- 63. What is Demand Paging?
- 64. What is difference between logical end physical addresses?
- 65. What is Memory management?
- 66. What is Multiprogramming system?

- 67. What is OS?
- 68. What is Process Control Block?
- 69. What is Process?
- 70. What is race condition? Give an example.
- 71. What is Semaphore?
- 72. What is the difference between paging and segmentation?
- 73. Which are the techniques for Deadlock recovery?
- 74. Which are the techniques used for avoiding deadlock?
- 75. Write a note on booting.
- 76. Write a note on Fixed Partitioned Memory Management.
- 77. Write a note on Peterson's Algorithm.
- 78. Write a short note on Evolution of Operating System.
- 79. Write a short note on history of operating system.
- 80. Write note on Multitasking.
- 81. Write note on process scheduling techniques.
- 82. Write short note on: i) Swapping ii) Protection and Sharing
  - 83. Define operating system and list the basic services provided by operating system
  - 84. What is paging? Discuss basic paging technique in details.
  - 85. Define DMA (Direct Memory Access) controller. Explain its working
  - 86. Explain context-switching with its advantages.