

1. Explain the deadlock. Why is a deadlock state more critical than starvation? Describe the resource allocation graph with a deadlock, with a cycle but no deadlock.
2. Explain the methods for deadlock prevention
3. What are threads?
4. What are paging and swapping?
5. With a diagram discuss the steps involved in handling a page fault.
6. What is paging? Explain the paging hardware.
7. What are the methods of handling the page faults?
8. What is segmentation? Explain. What is demand segmentation?
9. What is virtual memory, and give its advantages
10. Describe the LRU page replacement algorithm, assuming there are 3 frames and the page reference string is
11. 7 0 1 2 0 3 0 4 2 3 0 3 2 1 2 0 1 7 0 1
12. Find the number of page faults.
13. Differentiate between the following
 - a) Paging and Segmentation
 - b) Page table and segment table
14. Discuss the following page replacement algorithm with an example
 - i) FIFO
 - ii) LRU.
15. Discuss the Process Synchronization in Operating System.
16. Explain demand paging? Appraise it with the address translation mechanism used. Discuss its
17. specific advantages? How is a page table implemented?
18. Show the page replacement policy with a suitable diagram. Why is it essential for the performance of an operating system?
19. Concept of Process
20. Process Relationship , Process states
21. Process State transitions
22. Process Control Block