

SET-1

1. Write short notes about : a) Fragmentation b) Paging c) Segmentation d) Virtual memory e) Swiping
2. Discuss about allocation of frames and free space management.
3. Explain sequential and indexed file access methods.
4. Explain the three allocation methods in file system implementation. Illustrate with proper diagram.
5. Write short notes on Mass storage management with storage device hierarchy and disk structure.

SET-2

1. Discuss about various memory allocation mechanisms
2. What is demand paging? Explain.
3. State and explain the four approaches to free-space management.
4. Write short notes on file sharing and file protection.
5. Explain Disk Scheduling Algorithms with example. a) FCFS b) SSTF c) SCAN d) CSCAN e) LOOK f) CLOOK

SET-3

1. Distinguish between paging and segmentation.
2. Explain the usage of TLB in Paging. Can sharing of pages possible in Paging? Explain with a example.
3. Consider the following disk queue with requests for I/O to blocks on cylinders 98,183,37,122,14,124,65,67 in that order, using FCFS algorithm of the disk head is initially at cylinder 53, find the total head movement in cylinders. Also provide the necessary diagram to show the head movement for the above queue.
4. Discuss about swap space management.
5. Explain stable- storage implementation and tertiary storage structure.

SET-4

1. Discuss about compaction and thrashing.
2. Consider the following reference string 7,0,1,2,0,3,0,4,2,3,0,3,2,1,2,0,1,7,0,1. Assume there are three frames. Apply FIFO and LRU page replacement algorithms to the reference string above and find out how many page faults are produced.
3. Compare and contrast different directory structures: a) single level b) two level c) tree structured d) ACL graph e) general graph.
4. Write short notes about disk attachment types with neat diagrams. A) HAC b) NAC c) SAN
5. Explain about protection mechanisms in multiuser environment.