UNIT V

One marks

1. Define a file in operating system.
2. Name some of the attributes of a file.
3. What are the typical operations on file.
4. Name some information associated with an open file.
5. Define a shared lock.
6. Define an exclusive lock.
7. Name some common file types.
8. What are the file access methods.
9. Give a diagrammatic example of index and relative files.
10. Show the typical file-system organization.
11. Name any three schemes for defining the logical structure of a directory.
12. What are the types of path names?
13. Give an example of acyclic-graph directory structure.
14. Define a mount point in file structure.
15. State the classifications of users in connection with each file.
16. Give the organization of a typical file-control block.
17. Define file descriptor in UNIX systems.
18. What does the root partition contains.
19. What are the major methods of allocating disk space.
20. Name any two disk scheduling algorithm.

Two marks (10)

1. Give any five file types, their usual extensions and functions.
2. Give the comparison of FCFS and SSTF scheduling.
3. What do you mean by RAID levels.
4. What are the problems with RAID.
5. What is a contiguous allocation method.
6. What do you mean by logical file system.
7. What is a boot control block.
8. Write a short note on FAT.
9. What is the concept behind free-space list.
10. Explain about internal file structure.

Five marks (5)

1. Explain the concept of selection of a disk-scheduling algorithm.
2. Explain about various access methods in details.
3. Write a short note on file system mounting.
4. Explain the concept of protection in operating system.
5. Write about the file system structure.

Ten marks (10)

1. Explain in detail about RAID structure.
2. Suppose that a disk drive has 5000 cylinders, numbered 0 through 4999. The drive is currently serving a request at cylinder 143, and the previous request was at cylinder 125. The queue of pending requests, in FIFO order, is: 86,1470,913,1774,948,1509,1022,1750,130 Starting from the current head position, what is the total distance (in cylinders) that the disk arm moves to satisfy all the pending requests for each of the following disk-scheduling algorithm? A) FCFS B)SSTF C)SCAN D)LOOK E)C-SCAN F)C-LOOK
3. Explain about various directory structures.
4. Explain about various issues in relation to file sharing.
5. Explain in detail about file-system implementation.
6. Write a short note on a) Directory implementation b)Free-space management
7. Explain all the file allocation methods in detail.
8. Write a short note on a) Overview of mass-storage structure b)Disk structure
9. Explain all the disk scheduling algorithms.
10. On a disk with 1000 cylinders, numbers 0 to 999, compute the number of tracks the disk arm must move to satisfy all the requests in the disk queue. Assume the last request serviced was at track 345 and head is moving to track 0. The queue in FIFO order contains requests for the following tracks: 123, 874,692, 475, 105, 376. Perform the computation for the following disk scheduling algorithms.

i. FIFO ii. SSTF iii. SCAN iv. LOOK