

ST.JOSEPH'S COLLEGE OF ENGINEERING

ST.JOSEPH'S INSTITUTE OF TECHNOLOGY

CS6401-OPERATING SYSTEM

Assignment – 4

Part – A

1. List the various file attributes
2. What are the various file operations? (NOV/DEC 2012)
3. What is Network File System?
4. What is seek time and rotational latency?
5. What is meant by free space management?
6. How to maintain free space list?
7. Define FCB.
8. What are the responsibilities of file manager? (May/June 2013)

Part – B

1. Suppose that a disk drive has 5,000 cylinders, numbered from 0 to 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 algorithms?
i) FCFS ii) SSTF iii) SCAN iv) LOOK v) C-SCAN vi) C-LOOK (Nov/Dec 2012)
2. a) Write about the kernel I/O subsystem and its services (APRIL 2011, Nov/Dec 2012)
b) Explain about file protection and sharing
3. Explain the different file allocation methods for disk space. Mention their advantages and disadvantages.
4. a) Explain the various directory structures
b) What are the various methods for free space management?