

1. The surface of a magnetic disk platter is divided into (C).
A) Sectors B) arms C) tracks D) cylinders
2. On media that uses constant linear velocity, the (D).
A) disk's rotation speed increases as the head moves towards the middle of the disk from either side
B) disk's rotation speed remains constant
C) density of bits decreases from the inner tracks to the outer tracks
D) density of bits per track is uniform
3. The SSTF scheduling algorithm (B).
A) services the request with the maximum seek time
B) services the request with the minimum seek time
C) chooses to service the request furthest from the current head position
D) None of the above
4. What are the two components of positioning time? (A)
A) seek time + rotational latency
B) transfer time + transfer rate
C) effective transfer rate - transfer rate
D) cylinder positioning time + disk arm positioning time

5. Which of the following disk head scheduling algorithms does not take into account the current position of the disk head? (A)
- A) FCFS B) SSTFC) SCAN D) LOOK
6. Consider a disk queue holding requests to the following cylinders in the listed order: 116, 22, 3, 11, 75, 185, 100, 87. What is the order that the requests are serviced, assuming the disk head is at cylinder 88 and moving upward through the cylinders?
- (1) Using the SCAN scheduling algorithm (B)
(2) Using the FCFS scheduling algorithm (A)
(3) Using the SSTF scheduling algorithm (C)
(4) Using the C-SCAN scheduling algorithm (D)
- A) 116 - 22 - 3 - 11 - 75 - 185 - 100 - 87
B) 100 - 116 - 185 - 87 - 75 - 22 - 11 - 3
C) 87 - 75 - 100 - 116 - 185 - 22 - 11 - 3
D) 100 - 116 - 185 - 3 - 11 - 22 - 75 - 87
7. Disk controllers do not usually have a built-in cache. (F)
8. LOOK disk head scheduling offers no practical benefit over SCAN disk head scheduling. (F)
9. In general, LOOK disk head scheduling will involve less movement of the disk heads than SCAN disk head scheduling. (T)