

## Section - A

(10 × 2 = 20)

1)

- a) Differentiate between parallel systems and distributed systems.
- b) Differentiate between process scheduling and job scheduling.
- c) What is the need of revocation of access rights?
- d) How is the security ensured in an operating system?
- e) Define thrashing.
- f) List some properties of logical address space.
- g) What is semaphore? Explain.
- h) What do you understand by FAT? Explain.
- i) What is the domain of protection? Explain.
- j) What is virtual memory? Explain.

- Q2)** What resources are used when a thread is created? How do they differ from those when a process is created?
- Q3)** Analyze the impact of time quantum in round robin scheduling algorithm.
- Q4)** How can timer be used as a CPU protection mechanism? Explain.
- Q5)** Explain why it's less costly to enforce controlled access in segmented memory management than in pure paging.
- Q6)** Differentiate between multitasking and multiprogramming systems.

**Section - C**

**(2 × 10 = 20)**

- Q7)** What are the various techniques available for secondary storage management? Describe any two techniques.
- Q8)** Explain the security and protection mechanism of LINUX operating system.
- Q9)** Explain the Banker's algorithm for detection and avoidance of deadlock with the help of suitable example.