

Operating Systems

Q1: Which of the following is a deadlock prevention technique?

- A) Mutual Exclusion
- B) Circular Wait
- C) Resource Allocation Graph
- D) Preemption

Answer: D) Preemption

Q2: Explain the concept of virtual memory.

Answer: Virtual memory allows the execution of processes that may not be completely in memory,

Q3: Which scheduling algorithm is non-preemptive?

- A) Round Robin
- B) Shortest Job Next (SJN)
- C) Multilevel Queue
- D) Priority Scheduling

Answer: B) Shortest Job Next (SJN)

Q4: What is the purpose of a semaphore in an operating system?

Answer: A semaphore is used for process synchronization to avoid race conditions in concurrent p