

Topic: Preemptive Scheduling

1. What is the primary reason for preempting an ongoing process in preemptive scheduling?

- Higher-priority task
- Background process
- System idle state
- Resource starvation

2. What is the term used to describe the process of saving the current state of a process and restoring the state of the newly scheduled process in preemptive scheduling?

- Context Switching
- Time Slicing
- Priority Inversion
- Resource Reallocation

3. What is the term for the maximum time allocated to a process before being preempted in preemptive scheduling?

- Time Quantum
- Process Priority
- Scheduling Overhead
- Context Switch

4. What is the primary reason for the occurrence of context switching overhead in preemptive scheduling?

- Context Switching
- Resource Allocation Heuristics

- Process Migration
- Saving and restoring process states

5. What is the primary purpose of preemption in process scheduling?

- To optimize resource allocation
- To reduce the overhead of context switching
- To improve system responsiveness to interactive users
- To ensure fairness in process execution

Answer Key

1. Higher-priority task
2. Context Switching
3. Time Quantum
4. Saving and restoring process states
5. To optimize resource allocation