

Important Short Questions

UNIT I

1. Define Operating System.
2. List the components of an Operating System.
3. What are system calls?
4. Name the types of system calls.
5. Differentiate user view and system view of OS.
6. What is a multiprocessor system?
7. What is a real-time operating system?
8. Define process.
9. What is Inter-Process Communication (IPC)?
10. Write any five basic Linux commands.

UNIT II

1. What is process synchronization?
2. What is the critical section problem?
3. Define semaphore.
4. What is a monitor?
5. What is the Bakery algorithm?
6. What are classical synchronization problems?
7. Define CPU scheduling.
8. What is turnaround time?
9. What is multilevel queue scheduling?
10. Name any five Linux process management commands.

UNIT III

1. What is a deadlock?
2. List the four necessary conditions for deadlock.
3. What is a resource allocation graph?
4. What is Banker's algorithm?

5. Define paging.
6. What is segmentation?
7. What is virtual memory?
8. What is page replacement?
9. What is thrashing?
10. Name Linux memory management commands.

UNIT IV

1. What is a file system?
2. What is a directory structure?
3. What is file allocation?
4. What is free-space management?
5. What is RAID?
6. What is disk scheduling?
7. Name any two disk scheduling algorithms.
8. What is block multiplexing?
9. What is secondary storage?
10. Name Linux file management commands.

Important Long Questions

UNIT 1

1. Explain components/functions of OS.
2. Explain OS services and system calls.
3. Explain types of operating systems.
4. Explain process management and IPC.
5. Explain Linux architecture and basic commands.

UNIT 2

1. Explain critical section problem and solutions.
2. Explain semaphores with producer-consumer.
3. Explain CPU scheduling algorithms.
4. Explain multilevel queue and feedback scheduling.
5. Explain monitors and classical synchronization problems.

UNIT 3

1. Explain deadlock and handling methods.
2. Explain Banker's algorithm.
3. Explain contiguous allocation, paging and segmentation.
4. Explain virtual memory and page replacement.
5. Explain thrashing and frame allocation.

UNIT 4

1. Explain file system structure and implementation.
2. Explain file allocation methods.
3. Explain free space management.
4. Explain disk scheduling algorithms.
5. Explain RAID and disk management.