

**OPERATING
SYSTEM
NOTES**

**Important Questions
& Short Notes**

1. Introduction to Operating System

OS is system software that manages hardware and software resources.
Functions: Process management, memory management, file system, security.

2. Process Management

Process: Program in execution
Thread: Lightweight process
Scheduling: FCFS, SJF, Round Robin

3. Memory Management

Paging: Fixed size pages
Segmentation: Variable size segments
Virtual Memory allows large programs to run

4. Deadlock

Deadlock is a situation where processes wait forever.
Conditions: Mutual exclusion, hold and wait, no preemption, circular wait

5. Important Questions

1. What is OS?
2. Explain scheduling
3. What is deadlock?
4. Explain paging
5. Difference between process and thread

6. Interview Questions

1. What is virtual memory?
2. What is context switching?
3. Difference between paging and segmentation?
4. What is thrashing?