

## Operating System Question Paper

- Q1. Explain the concept of process scheduling and its types. (5 Marks)
- Q2. What are the differences between multitasking, multithreading, and multiprocessing? (5 Marks)
- Q3. Describe the various states of a process. (5 Marks)
- Q4. Explain deadlock and the methods to handle it. (5 Marks)
- Q5. What is virtual memory and how is it implemented? (5 Marks)
- Q6. Discuss the concept of paging and segmentation. (5 Marks)
- Q7. Describe the file system structure in operating systems. (5 Marks)
- Q8. Explain inter-process communication (IPC) mechanisms. (5 Marks)
- Q9. What are system calls and how do they work? (5 Marks)
- Q10. Compare preemptive and non-preemptive scheduling. (5 Marks)
- Q11. Explain the role of the kernel in an operating system. (5 Marks)
- Q12. What is the difference between internal and external fragmentation? (5 Marks)
- Q13. Explain demand paging and its advantages. (5 Marks)
- Q14. Describe the critical section problem and solutions. (5 Marks)
- Q15. What are semaphores and how are they used? (5 Marks)
- Q16. Explain thrashing and methods to prevent it. (5 Marks)