

- Explain the main features of an Operating System along with the services it provides ?
- Define a process, its states with the help of a diagram ?
- Explain PCB and Process context.
- Contrast and explain Multiprogramming and Multitasking ?
- For the following jobs calculate average waiting time for (i) Round Robin ( $q=2$ ) (ii) Shortest job first algorithms
- What is Process Synchronization?
- How is the process synchronization achieved ?
- Describe a Semaphore ?
- Explain mutual exclusion and synchronization with example.
- Describe a Semaphore.
- Define Deadlock and its characteristics.
- Discuss a file descriptor ?
- Discuss the different directory structures of different operating systems.
- Explain in brief the UNIX File Structure ?
- Write a short note on IOS-UI elements.
- Compare and contrast IOS and Android Operating Systems.