SET-1

1. Define OS? What are the various objectives and functions of the Operating Systems?
2. Illustrate about different types of system calls in OS.
3. Explain in detail about IPC mechanism.
4. What are the classical problems of synchronization?
5. Define deadlock? Illustrate a deadlock state with a real time example

SET-2

1. State and explain the various types of system programs in detail.
2. List the essential properties of the following types of operating systems.

   A) Batch b) interactive c) time sharing d) real time
3. List and explain the different types of schedulers and scheduling queues.
4. Define critical section problem. What are the requirements to satisfy the solution?
5. Explain the necessary conditions for deadlocks.

SET-3

1. Classify the different operating system structures?
2. Describe various services of the operating system.
3. Illustrate pcb in detail.
4. Describe various solutions for critical section problem.
5. Explain how a deadlock is evaluated by resource allocation graph (RAG).

SET-4

1. List the essential properties of the following types of operating systems.

   A) Network b) distributed c) clustered d) handheld
2. Label the computer system architecture? Represent the different views of a system.
3. Distinguish between process and thread? What are the different states of process?
4. How semaphores and monitors are effective mechanisms for process synchronization?
5. Explain different methods for handling deadlocks.