These selected questions and answers are prepared from Operating Systems Exam point of view and will also help in quick revision to get good marks in Operating Systems Examination. These questions has been prepared for the computer science graduates (B.C.A, M.C.A, B.Tech, B.E. and so...), to help them understand and revise the basic to advanced concepts related to Operating System.

Following is the selected list of questions and their answers and will help in quick revision to get good marks in Operating Systems Examination.

**Operating Systems Overview**

1. What is the relationship between operating systems and computer hardware?

2. How Buffering can improve the performance of a Computer system?

3. What are the primary differences between Network Operating System and Distributed Operating System?

4. What inconveniences that a user can face while interacting with a computer system, which is without an operating system?

**Operating Systems Process**

1. What is the Difference between a Job and a Process?

2. What are the advantages of multiprogramming?

3. What are the advantages of Multiprocessing or Parallel System?

**Operating Systems Types**

1. What are the differences between Batch processing system and Real Time Processing System?

2. What are the differences between Real Time System and Timesharing System?

3. What are the differences between multiprocessor and multiprogramming?

**Operating Systems Process Scheduling**

1. What is a process scheduler? State the characteristics of a good process scheduler?  
   OR  
   What is scheduling? What criteria affects the scheduler's performance?

2. Explain time slicing. How its duration affects the overall working of the system.

3. What is Shortest Remaining Time, SRT scheduling?

4. What is Highest Response Ratio Next (HRN) Scheduling?

5. What are the different principles which must be considered while selection of a scheduling algorithm?

6. Find out which algorithm among FCFS, SJF And Round Robin with quantum 10, would give the minimum average time for a given workload.

7. Explain pseudo parallelism? Describe the process model that makes parallelism easier to deal with.

**Operating Systems Memory Allocation**

1. What are the differences between paging and segmentation?

2. Explain various allocation algorithms.
3. When does a page fault occur? Explain various page replacement strategies/algorithms.

**Operating Systems Semaphores**

1. Explain semaphores and write a short note on it.