Indian Institute of Technology Kharagpur
Department of Computer Science and Engineering
CS31702 : Computer Architecture and Operating Systems (CAOS)
Date: 04-04-2018   Class Test - 2   Marks: 20   Time: 60 mins

Note: Answer the questions precisely to the point.

1. Briefly discuss the basic goals of an operating system.

2. What is an interrupt? How it will be handled?

3. Briefly discuss about client-server computing and peer-to-peer computing.

4. Mention the services offered by an operating system from user perspective.

5. What is the role of system calls? Give some example system calls in view of process control and file management.

6. What are the features involved in micro-kernels and module-based kernels? Provide examples to each.

7. What is process control block? Mention different pieces of information it contains.

8. With a neat diagram show the switching of CPU between two processes P0 and P1. Assume the sequence of execution is P0 – P1 – P0. Clearly mention all activities in view of the processes, CPU, and operating system.

9. How a new process is created ? How parent and child processes coordinate?

10. Why interprocess communication (IPC) is required? Mention two popular IPC techniques.