**Question 1. Write short note on Process Life cycle**

**Answer:** The **process life cycle** can be defined by a state diagram. Which has states representing the execution status of process at various time and transitions. That shows the changes in the execution status. To maintain the management information about a process the operating system uses the process control block **(PCB).**

The process control block is also known as task control block. PCB contains various kind of information about a particular process such as.

* Process state
* Program counter
* CPU registers
* CPU scheduling information
* Memory management information
* Accounting information
* I/O status information

**Question 2. What role does an operating system perform?**

**Answer:** An Operating System acts as a communication bridge (interface) between the user and computer hardware. The purpose of an operating system is to provide a platform on which a user can execute programs in a convenient and efficient manner. An operating system is a piece of software that manages the allocation of computer hardware. The coordination of the hardware must be appropriate to ensure the correct working of the computer system and to prevent user programs from interfering with the proper working of the system. Example: Just like a boss gives order to his employee, in the similar way we request or pass our orders to the Operating System. The main goal of the Operating System is to thus make the computer environment more convenient to use and the secondary goal is to use the resources in the most efficient manner.

**Question 3. What is a process?**

**Answer:** In computing, a **process** is the instance of a computer program that is being executed by one or many threads. It contains the program code and its activity. Depending on the **operating system** (**OS**), a **process** may be made up of multiple threads of execution that **execute** instructions concurrently.

**Question 4. What is the job of a long term scheduler?**

**Answer: Long Term Scheduler**

It is also called a job scheduler. A long-term scheduler determines which programs are admitted to the system for processing. It selects processes from the queue and loads them into memory for execution. Process loads into the memory for CPU scheduling.

**Question 5. What is Response time?**

**Answer:** Response time, in the context of computer technology, is the elapsed time between an inquiry on a system and the response to that inquiry. Used as a measurement of system performance, response time may refer to service requests in a variety of technologies. Low response times may be critical to successful computing.

Response time is a factor in many different computing technologies, including disk I/O, database queries, memory handling and loading web page. Monitor response time measures how quickly pixels change from black to white or to a different shade of grey. Quick monitor response times are important for gaming.