

Course: BBA Part I

Paper: V

Topic: Functions of Operating System

Teacher's Name: Prof. (Dr.) Reyazuddin

School: Commerce and Management

Date: 27/06/2020

Functions of Operating System

1. **Security –**

The operating system uses password protection to protect user data and similar other techniques. It also prevents unauthorized access to programs and user data.

2. **Control over system performance –**

Monitors overall system health to help improve performance. Records the response time between service requests and system response to have a complete view of the system health. This can help improve performance by providing important information needed to troubleshoot problems.

3. **Job accounting –**

Operating system keeps track of time and resources used by various tasks and users, this information can be used to track resource usage for a particular user or group of users.

4. **Error detecting aids –**

Operating system constantly monitors the system to detect errors and avoid the malfunctioning of computer system.

5. **Coordination between other software and users –**

Operating systems also coordinate and assign interpreters, compilers, assemblers and other software to the various users of the computer systems.

6. **Memory Management –**

The operating system manages the Primary Memory or Main Memory. Main memory is made up of a large array of bytes or words where each byte or word is assigned a certain address. Main memory is a fast storage and it can be accessed directly by the CPU. For a program to be executed, it should be first loaded in the main memory. An Operating System performs the following activities for memory management:

It keeps tracks of primary memory, i.e., which bytes of memory are used by which user program. The memory addresses that have already been allocated and the memory addresses of the memory that has not yet been used. In multi programming, the OS decides the order in which processes are granted access to memory, and for how long. It allocates the memory to a

process when the process requests it and deallocates the memory when the process has terminated or is performing an I/O operation.