FUNCTIONS OF OPERATING SYSTEM

- Operating system is a collection of programs that controls the operation of computer system.
- It manages the hardware and software components.
- It has the following function.

PROVIDES A USER INTERFACE

- The Operating system enables the user to easily interact with the Computer hardware.

- For example Windows OS provides us a GUI through which we can interact with the computer easily

MANAGES COMPUTER HARDWARE

- The Operating System controls and efficiently utilizes hardware components such as CPU, memory and I/O devices.

PROGRAM EXECUTION

- OS loads the program to be executed on the main memory.

- It allocates resources to program.

- It executes the programs and provides run time errors if any.

PROCESS MANAGEMENT

- Operating System enables user to execute more than one job at the same time.
- The CPU time is shared between jobs such that CPU utilization is optimal.

MEMORY MANAGEMENT

- It is not necessary that total program will be in main memory.

- When a program or data is required by CPU and it is not in main memory, it can be loaded into main memory from secondary memory.

- That is a program can be executed by loading the page on demand.

- If there is no vacancy in main memory then one of the page is replaced.

FILE MANAGEMENT

- Operating System allows copying, creating and deleting files.

- OS provides functions to read and write from file.

- OS creates a tree like directory structure for the user.

SECURITY MANAGEMENT

- OS protects stored information from malicious user.
- It ensures that the data and files stored cannot be accessed by unauthorized users.