



STEPPING STONE
SCHOOL (HIGH)

CLASS : VIII

Subject: Computer Application

Date: 4/06/20

Topic: Operating System.

Time Limit: 1 hour 30 minutes.

Worksheet No. :6

[Minutely go through all the topics given below.]

Question 1

What is an operating system?

Answer:

An operating system is an organized set of software program to manage the overall operation of the computer. It generally allows running of a variety of software packages as well as it allows users to develop and execute programs of their own.

The operating system is the most important program that runs on a computer.

Operating system acts as an interface between computer and user.

Operating System is responsible for the management and coordination of activities and the sharing of the resources of the

computer. Operating System is the first program which is loaded in the main memory of the computer when the computer is switched on.

Question 2

Write the functions of an operating system.

Answer:

Following are the most important functions of an operating system.

a) Booting the computer :

Loading operating system into the memory of the computer(RAM) from hard disk is known as booting.

b) Managing Resources :

Operating system coordinates software and hardware in the computer system.

c) Detecting and correcting errors: Operating checks the working of the hardware and software and if there is any error operating system tries to rectify it.

d) Ensuring Data Security: Operating system keeps the different programs and data in such a way that they do not interfere with each other.

e) Maintaining internal clock of the system: Operating system maintains the internal clock of the even if the computer is switched off.

Question 3

What is user interface? Name two types of user interface.

Answer :

User Interface : User Interface comprises of everything the user can use to interact with the computer. It is basically the means by which the user and computer system can interact using input and output devices.

There are two type of interface

- a. CUI
- b. GUI

CUI :

Stands for Character User Interface or Command-line User Interface, **CUI** is a way for users to interact with computer programs by using keyboard. It works by allowing the user write commands as one or more lines of text. Examples CUIs are MS-DOS. In case of CUI user has to remember all the commands so it is not user friendly. DOS is an example of CUI.

GUI :

GUI: GUI stands for Graphical User Interface. This is a type of user interface where user interacts with the computer by using graphics or icons. By using mouse user can select icons. It is very user-friendly interface and user does not require remember commands. Eg: Windows has GUI.

Question 4

What is Batch processing? Write a short note on batch processing.

Answer :

In the batch processing system, there is no direct interaction between user and the computer. The user has to submit a job (written in a storage device) to a computer operator. Then computer operator places a batch of several jobs on an input device. Then a special program, manages the execution of each program in the batch. And output is shown in the monitor one after another. In this system jobs are done in order of their arrival, that is first come first serve basis. But it has several disadvantages.

- a) The system does not set any priority for the execution of the job.
- b) It is very time consuming.
- c) CPU time and memory is underutilised here.

Question 5

What is multi programming operating System? Write a short note on multi programming operating System.

Ans : In this type of system two or more independent programs can be executed by the same computer with the optimum utilisation of the main memory of the system. Multiprogramming means executing more than one program. In multiprogramming when one program is waiting for input/output transfer there is another program ready to utilize the CPU. Thus it is possible for several users to share the execution time of the CPU in a sequence. Multiprogramming is also known as multitasking as the computer handles many tasks or programs simultaneously. Whenever the processor is idle during execution of one process , it goes for execution for another program.