Girls' High School & College, Prayagraj
Worksheet No.: 1
Session: 2020-2021
Class: 8 Section: A, B, C, D, E
Subject: Computer

Chapter: Operating System and Graphical User Interface - Role and Functions

Instruction: Parents are expected to ensure that the child reads Operating System and Graphical User Interface - Role and Functions from any book or from the internet.
Link: https://youtu.be/GFAKuciQYTk

Topic: **Operating System (OS)**

Operating system acts as a central coordinator between hardware and software. Hardware provides the user with basic physical resources to work upon. The application or utility software empowers the user to perform a variety of functions on the computer, such as solving problems, creating documents, playing games, etc.

Functions of Operating System:

1. Processor Management: The operating system ensures that each application receives enough time from the processor to function properly.
2. Memory Storage and Management: An operating system manages the sharing of internal memory among the multiple applications.
3. File Management: A computer system uses a lot of data which is stored on secondary storage devices. The operating system keeps track of information regarding creation, deletion, transfer, copy and storage of files in an organised manner.
4. Device Management: An OS plays a very important role in coordinating various I/O (input/output) devices.
5. Security and Protection: The inbuilt security modules of any operating system protect the resources and the information stored on a computer system against unauthorized access.
6. Enforcement of Priority System: An operating system determines and maintains a specific order in which various jobs are executed in the computer system.
7. Provision of User Interface: An operating system provides a systematic user interface, which facilitates and structures the interaction between the user and a computer. It can either be a CUI (Character User Interface) or a GUI (Graphical User Interface).
8. Job Control: When a user wants to run a program it is mandatory to communicate the instructions to the operating system about the work to be done. Using a standard set of system commands called (Job Control Language) JCL, a user can communicate with the OS.

Answer the following questions:

1. What is an operating system?
2. Write any four functions of an operating system.
3. Define Job Control Language.
4. What is File Management?
5. What is an application software?
6. The operating system keeps track of information regarding creation, deletion, transfer, copy and storage of files in an organised manner. (True/False)
7. Write full forms :
   (a) OS
   (b) JCL
   (c) GUI
   (d) CUI
8. A computer interprets the instruction given by the user with the help of an………....
   (i) operating system
   (ii) device driver
   (iii) utility software
9. Fill in the blanks:
   (i) An OS plays important role in ……..various input/output devices.
   (ii) .... protect information on Computer system from unauthorized access.

END