

WELLAND GOULGSMITH SCHOOL

CLASS-8

SUBJECT - COMPUTER SCIENCE

TOPIC – OPERATING SYSTEM

ANSWER SHEET:-

- A) 1) An operating system is system software which bridges the gap between the user and hardware of a computer.
- 2) A command prompt is a combination of text and symbols which is used to notify the user that the command line interface is ready to accept the commands.
- 3) A CUI is easy to understand and execute. But at the same time, a user may find it difficult to remember all the required commands. So, it is not user-friendly.
- 4) A Graphical User Interface provides icon, buttons, windows and menus on the screen which replace the commands that we needed to type in a CUI.
- 5) Two examples of GUI operating system are:-
- Microsoft Windows
 - Mac –OS
- 6) New versions of GUI operating systems:-
- Microsoft Windows
 - Apple macOS
 - Linux
 - Android
 - Apple's ios
- 7) The process of loading of n operating system onto the computer memory is called Booting.
- 8) Two examples of Multiuser Operating System:-
- Linux and Unix

B) Differences between:-

Application Software

- 1) This software is used to do tasks given by the user.
- 2) This software is used for one specific purpose.
- 3) Examples- Ms Excel, Ms Word etc.

System Software

- 1) This software is used to designed the programs to control the operations of a computer system.
- 2) The programs designed by this software helps to run the other software on a computer.
- 3) Examples- Operating System, Device Drive and Utility Software.

GUI

- 1) A CUI uses a keyboard to give input commands to the computer.
- 2) A user needs to type all the commands on the Commands Prompt(c :>).
- 3) A user needs to remember all the commands and their syntax.
- 4) Examples are MS-DOS and Linux bash shell.

CUI

- 1) A GUI uses a keyboard ,mouse, stylus or finger to give input commands or instruction to the computer.
- 2) A user needs to click on the icons, button, Windows and menus on the screen to give commands.
- 3) A user give commands by simply clicking on the icons and buttons on the screen.
- 4) Examples are Microsoft Windows and Mac os.

Single-user ,single task

- 1) This operating system manages the computer to let one user do one task at a time.
- 2) Example- Palm Operating System.

Single-user ,multi task

- 1)This operating system enable a single user to do several task at the same time.
- 2) Microsoft Windows and Mac OS by Apple.

C) Answer the followings:-

1) An operating system performs the following functions.

- Starting a computer

When we turn on a computer, its operating is loaded into its memory which is called as Booting.

- Memory management

- It allocates the memory space to a task.
- It keeps track of the data loaded into its memory and its usage.
- It deallocates the memory space after the task has been completed.

- Resource management

- It keeps track of the processes that have hardware or software requirement.
- It assigns the hardware or software to a process.
- It keeps track of processes that require the same hardware and software simultaneously.
- It maintains the order in which a resource is to be allocated to a process.

- Process management

An operating system assigns a task given by the user to the CPU and controls the order of its execution.

- Managing files and folders

- It allocates memory to store files and folders.
- It helps to store files under different folders or sub-folders.
- After that operating system deallocates the memory.

2) Advantages of a GUI over CUI:-

- A GUI is visually appealing and attractive.
- A GUI is easier to work on as compare to a CUI.
- It enables its users to view, control and switch between different applications at the same time.
- A GUI provides pop-up menus and other options. These can be used to control the access of files and folders. The user does not need to remember a whole lot of commands as were needed for using a CUI.
- A GUI provides the facility to access a computer at a far-of location which known as remote access.
- GUI enables its users to carry out multiple tasks at the same time. They can open different applications such as MS Word, Calculator and a web browser at the same time.

EXERCISE FROM THE TEXT BOOK:-

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(A) 1. a) software 2.b) operating system 3.a) operating system 4.a) CLI 5.b) c :\<>

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(B) 1. True 2. True 3. True 4. False 5. True

(C) 1. An operating system bridges the gap between the user and the hardware of a computer. It receives all the instructions and accordingly passes the control to the hardware devices.

2. See Q.C) 1. Of the worksheet given above.

3. See Q. B) of the worksheet given above.

4. See Q. C) 2 of the worksheet given above.

5. a) Single-user multi-task :

In this type of operating system they enable single user to do several tasks at the same time.ike we can use Microsoft Word while downloading a file from the internet as well as listening music. Examples Windows by Microsoft and Mac OS by Apple.

b) Single-user single task:

This type of operating system manages the computer to let one user do one task at a time. The Palm operating system for palm handheld computers is an example of this type.

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