Class IX Subject: Computer Chapter 3. Computer software

1. **Tick the correct answer.**
   1. Iii
   2. Ii
   3. Iii
   4. Iv
   5. Ii
   6. Ii
   7. Ii
   8. Iii
   9. Ii
   10. Iii
   11. Ii
   12. Ii
   13. Iv
   14. Ii
2. **Answer the following as true or false**
   1. T
   2. F
   3. F
   4. T
   5. T
   6. F
   7. T
   8. F
   9. T
   10. F
   11. F
   12. T
3. **Fill in the blanks.**
   1. Reservation system, accounting management system
   2. System
   3. Compiler
   4. DBMS
   5. Virus
4. **Very short answer** 
   1. Hardware and software are the two major components of computer system.
   2. Operating system is loaded in the main memory during the booting process.
   3. Example for CUI- MS-DOS and GUI- Windows 7.
   4. Bharat Operating system solutions (BOSS) operating system is developed in India by C-DAC.

e. The three categories of software with one example of each category are : System software e.g., MS-Windows 7, Application Software e.g., MS-Word 2010 and Utility Software e.g., McAfee .

f. Disk Defragmenter is utility software helps to store the scattered files in the contiguous memory blocks.

g. MS-PowerPoint and OpenOffice.org- Impress are two softwares which are used for creating multimedia presentations.

h. Interpreter is language processor converts a high level language program line by line into machine executable codes.. e.g., BASIC.

E. **Short Answer type questions**

a. (i) **Hardware**

1. Physical components of computer which can be seen or touch.

2 e.g., mouse, lightpen.

**Software**

1. Cannot be seen or touched. They are set of programs stored in computer.

2. e.g., MS-Windows 7, MS- Paint.

b. The use of system software :

1. Controls the internal functioning of the computer system.

2. Coordinates the working of various hardware components.

3. Acts as an interface between hardware and user.

c. **Application software**

Application software are the set of programs designed to handle a specific users job or task. e.g., MS-Office

**Utility software**

Utility Software are used to perform the maintenance and housekeeping functions of computer like checking or removing virus, recovering deleted files , etc.

e.g., Quick Heal, Disk defragmenters.

d. (1) **Operating system:** Operating system is one of the system softwares that runs the computer by managing its different resources like processor, input/output, storage devices, etc. and acts as an interface between user and computer. e.g., MS-Windows 7, LINUX, BOSS, etc

(2) **Assembler:** It translates an assembly language program to its corresponding machine code.**l**

**utions**

(3) **Device driver:** It is a software that enables the hardware device to interact with the computer.

(4) **Antivirus:** It is a utility softare which is used to locate and remove viruses from computer system. e.g., QuickHeal, McAfee.

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(5) **Defragmentation:** Process of locating the non-contiguous fragments of data into which a computer file may be divided is stored on a hard disc.

e. Mobile apps are so popular because these apps like Gmail, Calender, Camera, Music player, whatsapp, Google Drive, Facebook etc. are very easy to use on small device like mobile or tablet. Mobile apps have made our lives so easy and secure, and also helps us to stay updated of the happening around the globe.

f. Three benefits of mobile apps are:

1. Mobile apps have made communication so easy.

2. Mobile apps have made our lives so easy and secure,

3. Help us to stay updated of the happening around the globe.

g. **Device driver:** It is a software that enables the hardware device to interact with the computer.

F. Long Answer type questions:

a. Language processor are system software converts the user program into the binary codes so that machine can understand user problem to solve them.

Various language processors are:

**Compiler:** It converts high level language program into machine codes in one go.

**Interpreter:** It converts high level language to machine code, line by line.

**Assembler:** It translates an assembly language program to its corresponding machine code.

b. Some Utility softwares are:

**Antivirus software:** protects the computer from attack of viruses. e.g., QuickHeal, McAfee.

**Backup Utility:** helps to keep the duplicate copy of important information in some external storage device from where it can be recovered in case of some misshapenness. e.g.,backup Exec.

**Compression Utility:** Compress large files so that they take less space in the storage device. e.g., WINRAR.

**Disk Defragmenter:** It helps to remove the memory gaps to enhance the data access speed of the computer system.

**Encryption and Decryption Tool:**

Encryption is the process of converting sensitive information into the encoded form.

Decryption is the process of converting the encoded information to its original form.

c. Customised application softwares are very costly as compared to general purpose softwares because for their development, various software teams are established, software developers and testers are hired. Facility has to be created for development job.

d. Kernel is the inner layer of the operating system that is in direct communication with the hardware. It comprises of programs that communicate directly with the hardware through various system calls, such as open, read, write, delete, close etc. The kernel is actually the heart of an operating system. It acts as an interface between application software and the hardware. It also perform the function of converting the output generated into a form understandable by the user. (refer page number 42)

e. Shell is the outer layer of the operating system that communicates with the user and user application. It is the software through which a user issues commands to access various operating system functions and services. The shell of an operating system may be CUI or GUI. (refer page number 42)

f. **GUI** stands for graphical user interface.

It is a user interface which user interact with applications by making use of graphics.

In GUI more than one task can run simultaneously.

The user interacts by pointing the applications using devices like mouse.

It is a very user friendly interface.

Example(Windows, Linux)

**CUI** stands for character user interface.

In CUI user has to interact with the applications by making use of commands.

In CUI only one task can run at a time.

Additional information :-

CUI and GUI are user interface used in connection with computers

• CUI is the precursor of GUI and stands for character user interface where user has to type on keyboard to proceed. On the other hand GUI stands for Graphical User Interface which makes it possible to use a mouse instead of keyboard

• GUI is much easier to navigate than CUI

• There is only text in case of CUI whereas there are graphics and other visual clues in case of GUI

• Most modern computers use GUI and not CUI

• DOS is an example of CUI whereas Windows is an example of GUI.

g. More commonly known as a **driver**, a **device driver** or **hardware driver** is a group of [files](https://www.computerhope.com/jargon/f/file.htm) that enable one or more [hardware](https://www.computerhope.com/jargon/h/hardware.htm) devices to communicate with the computer's [operating system](https://www.computerhope.com/jargon/o/os.htm). Without drivers, the computer would not be able to send and receive data correctly to hardware devices, such as a [printer](https://www.computerhope.com/jargon/p/printer.htm).

h. The two types of Application softwares are:

**General Purpose Application Softwares:** These type of softwares are capable of handling general user problems like documentation, database management, etc. e.g., MS-Word, MSPowerPoint.

**Customised Application Softwares:** These type of softwares are designed as per the requirements of a particular user after studying their needs like billing system, fee collection system, etc. e.g., Billing System, Inventory management.

G. Application Software

a. He should install various graphics designing softwares like PageMaker, Adobe Photoshop, CorelDraw etc.

b. i.– 5

ii.– 3

iii.– 4

iv.– 1

v– 2

c. Disk Fragmentation has occurred. This problem can be reflected by running Disk Defragmenter software.