SS1 DIGITAL TECHNOLOGIES- Computer Software

Computer software is a set of programs, instructions and related data that tells a computer what to do and how to perform different tasks. Software makes it possible for a computer to perform activities such as typing documents, calculating figures, browsing the internet, playing music, editing pictures and managing files.
A computer cannot perform useful tasks with hardware alone. It needs software to control its operations and help users carry out their work.

Examples of computer software: a) Microsoft Windows **b)** Microsoft Word **c)**Google Chrome
d) Microsoft Excel e) CorelDRAW f) Avast Antivirus g) VLC Media Player

Types of Computer Software

System Software:

System software is a collection of programs that manages and controls computer hardware and provides a platform on which application software can run.

Examples of system software: a) Microsoft Windows **b)** Linux **c)** macOS **d)** Android
e) Device drivers f) Language translators, such as compilers and interpreters

Types of system software

A. Operating system: An operating system (OS) is system software that manages the computer's hardware and software resources and provides an environment for users to operate the computer.
Examples: Microsoft Windows, Linux, macOS, Android, iOS

B. Device drivers

A device driver is system software that enables the operating system to communicate with and control a particular hardware device. Examples include: Printer driver, Graphics driver, Sound driver

C. Language translators

A language translator is system software that converts program instructions from one programming language or representation into another form that the computer can execute.

D. Firmware: Firmware is software stored in a device's non-volatile memory that provides low-level control over the device's operation. Examples include firmware in routers, printers and computer motherboards.

Application Software:

Application software is a computer program or group of programs designed to help users perform specific tasks.

Examples of application software:

Microsoft Word: Typing and formatting documents.
Microsoft Excel: Calculations, tables and charts.
CorelDRAW: Graphic design and illustration.
Google Chrome: Accessing websites and web applications.

Utility Programs

Meaning of utility programs

Utility programs are software tools designed to maintain, protect, manage and improve the performance, reliability or security of a computer system. They help keep a computer organised, detect problems, protect data and perform maintenance tasks.

Examples of utility programs

1. Antivirus software Detects, blocks or removes malicious software, depending on the product and its capabilities. Examples: Microsoft Defender Antivirus, Avast.
2. File compression utilities Reduce file size or combine files into archives to make storage and sharing easier. Examples: 7-Zip, WinRAR.
3. Disk cleanup utilities Help identify and remove unnecessary files, such as certain temporary files, to free storage space. Example: Windows storage cleanup tools.
4. Backup utilities Create copies of files or system data so that information can be recovered after loss or damage. Examples: Windows Backup, file backup applications.