

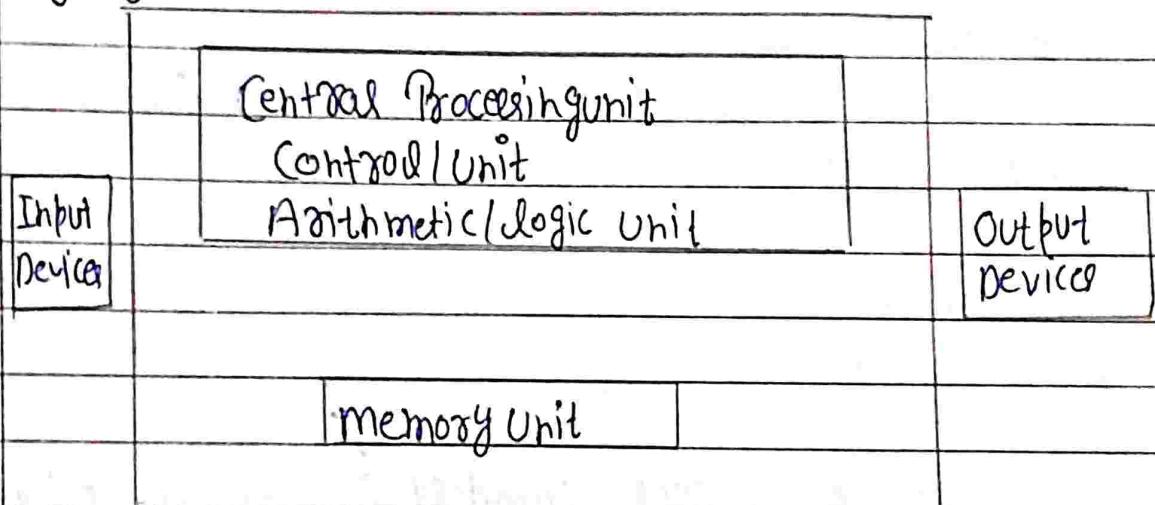
Assignment - 01

Q1 What are the four fundamental parts of Computer?

Explain in the help of diagram

Ans A computer is a fast system that is organized to accept, store and process data output results under the direction of a stored programme of instruction. The diagram explain how a computer system is organized. Basic organization of computer system includes input processing unit, memory unit and output device.

Organization of a computer



Input Device → Computer system use many devices for input purpose. Input devices include the mouse, input pen, touch screen and microphone. Regardless of the type of device, all are components of interpretation and communication between people & computer system.

Central Processing Unit (C.P.U) → It is the brain of the computer, with out this out

Computer unable to process.

Output device → Output device is used to show the result of the instructions Example: monitor, printer, Headphone etc.

Memory unit → A memory unit is the collection of storage units or devices together. The memory unit stores the binary information in the bits.

Q2 Discuss about the classification of computer based on size and capacity

Ans

Based on size and capacity, computer are classified as follows

- super computer
- mainframe computer
- mini computer
- micro computer

Super computer → Super computers are the most powerful and physically the largest by size. These are systems designed to process huge amount of data.

The fastest supercomputer can perform over one trillion calculation in a second. Supercomputer have thousand of processors. Because of their extraordinary speed, accuracy and processing power, supercomputer are well suited for solving highly complex problem of huge amounts of calculation.

Example → JAGUAR, ROADRUNNER etc.

Main frame Computer → Main frame computers are very large often filling an entire room and can

Process thousand of millions of instruction per second. In a mainframe environment, users connect to the mainframe through the many terminals wired to the mainframe. are capable of supporting hundred to thousand of users simultaneously. Some of the functions performed by a mainframe include I/O flight scheduling, reservation and connect to the server through network by using desktop computers.

Example → IBM mainframes z13

Micro Computer → Micro computers are the most frequently used type of computer. It is also known as Personal Computers (PC). A microcomputer is a small computer system designed to be used by one person at a time.

Example → Desktop computers, laptops.

Mini Computer → Mini computers are much smaller than mainframes. These computers are also less expensive. Sometimes referred to as a midrange server or midrange computer. They are typically larger, more powerful and more expensive than desktop computers. Midrange computers are usually used by small and medium-sized businesses as their servers. Users connect to the server through a network by using desktop computers.

Example → Apple iPad, CDC 160A

(Q3)

What is the meaning of computer generation? How many computer generation are defined? What technologies were used.

The evolution of digital computing is often divided into generations. Each generation is characterized by dramatic improvement over the previous generation in the internal organization of computer and programming language.

Five Generation of Computer

- 1) First Generation
- 2) Second Generation
- 3) Third Generation
- 4) Fourth Generation
- 5) Fifth Generation.

First generation → vacuum tubes (1940 - 1956) The first computer system used vacuum tubes for circuitry and magnetic drums for memory. These computers were very expensive to operate. Computers of this generation consumed a lot of electricity. First generation computers relied on machine language, the lowest-level programming language understood by computer to perform operation. They could only solve problem at a time, it would take operators days or even weeks to set-up a new problem. Input was displayed based on punched cards and paper tape, and output was displayed on printers. First computer generated a lot of heat which

displayed on printouts. (Not often the cause of malfunctions UNIAC (UNIVERSITY AUTOMATIC COMPUTER) computers are example of first generation computing. The UNIAC was the commercial computer delivered to a business client the US Census Bureau in 1951.

Second Generation - Transistors (1956-1963) The world wide Transistors replaced vacuum tubes in the second generation computer. The Transistor was invented at Bell labs in 1947 but did not see wider use on computers until the late 1950s but did not see wider use in computers until the late 1950s. Transistors were superior to the vacuum tubes allowing computers to become smaller, faster, cheaper, more energy-efficient and more reliable than their first-generation predecessors. Second-generation computers still relied on punched cards for input and printouts for output. Second-generation computers moved from binary machine language to symbolic or assembly language.

Third Generation Computer → Integrated circuits (1964-1971) The development of the third generation of computer. Transistors were replaced by integrated circuits which drastically increased the speed and efficiency of computers. Instead of punched cards and printout, users interacted with third-generation computers through key board.

and monitors. Computers for the first time became accessible to mass audience because they were smaller and cheaper than their predecessors.

Fourth Generation Computer - microprocessors (1971-Present)

The microprocessor brought the fourth generation of computer as though and of integrated circuits were built onto a single silicon chip. What in the first generation filled an entire room could now fit in the palm of the hand. In 1981, IBM introduced its first computer for the home user. In 1984, Apple introduced its Macintosh. Microprocessors also moved out to the desktop computer. Fourth generation computer also ushered the development of graphical user interface (GUIs), mouse and handheld devices.

Fifth Generation Computer → Artificial Intelligence (Present and Beyond)

Fifth generation computing devices based on artificial intelligence, are still in development. These are some applications such as voice recognition that are being used today. The use of parallel processing and superconductors in helping to make artificial intelligence a reality. Quantum computation and nanotechnology will radically change the face of computer in years to come. The goal of fifth to natural language input and are capable of learning and self-organization.

Q.4

Differentiate between volatile non-volatile memories?

Ans

Volatile

Non-volatile

1 Temporary storage

Permanent storage

2 Store data in RAM

Store data in ROM used to

3 Used in normal operation

start up process at computer

4 Writing data faster

Writing data in slower

Q.5

Distinguish among system software application software and other types of software and the basic of their feature.

Ans

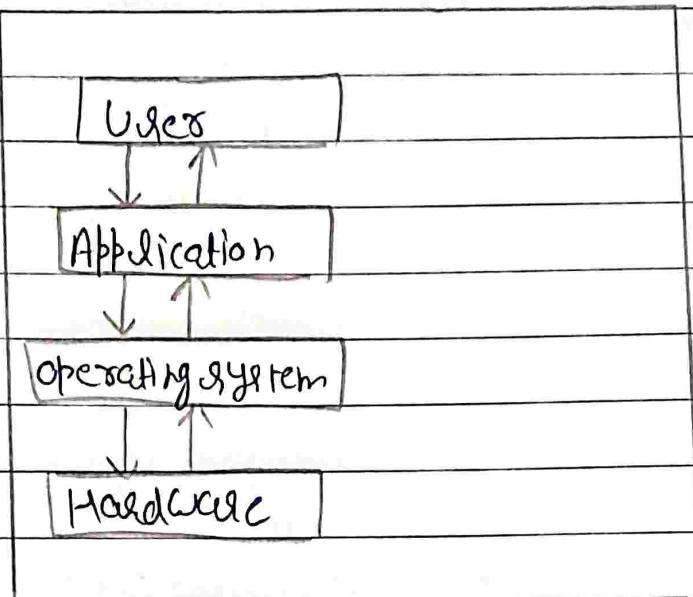
Software is a set of instructions used to operate computer and execute specific tasks.

Type of software - The software is used extensively for different purpose in several domains.

- It can be categorized into different types.

System software → It is a type of software that is designed to run a computer's hardware and application programs. Software like operating system compilers, editors and devices etc. come under this category. A computer cannot function without the presence of system software. If we think of the computer system as a layered model, the system software is the interface between the hardware and user application.

Operating system (OS) → operating system act as manager of all the resources of computer i.e. resources manager. It is system software the manages computer hardware and software resources and provides services. Thus, Operating system become an interface between user and machine.



. Utility Programme → These Programme analyze and maintain a computer. These programs are focused on how OS works to perform the tasks to enable the smooth functioning of computer. This programme may come along with OS like Window defender, Windows disk cleanup tool, Antivirus, backup software, file manager, disk compression tool all are Utility software.

Application Software → It is software created for specific purpose, used by end users. I can be called an application or simply an app.

Example: word processor, accounting application, a web browser, an email client, media player etc.

Proprietary Software → It is a software that is owned by an individual or a company (generally the one that developed it). There are almost always major restrictions on its use. And its source code is almost always kept secret. The proprietary software is a non-free computer software for which the software publisher, or another person retains intellectual property rights usually copyright of the source code. It is also known as closed-source software.

Overview of Open Source technology - Open Source technology is defined as the development of software for allowing end users and developers to not only see the source code of software, but modify it as well.

Open Source Software (OSS) - It is a type of computer software in which source code is released under a license in which the copyright holder grants users rights to study, change and distribute the software to anyone and for any purpose. The Linux operating system (OS) is the best-known example of open source software technology.

Q6

Create file in MS-Word to insert a paragraph about "Yourself". Describe all steps in it.

Ans 1.)

1. Click on Start button.

2. Click on Microsoft Office.

3. Select Microsoft Office Word.

4. Click the Microsoft Office button.

5. Select how the new document dialog box appears.

6. Create a file.

7. Click the Microsoft Office button.

8. Select Save As → Word document the save as dialog box appears.

9. Select the location where you want to save the document. Using the drop-down menu.

10. Enter a file name Yourself for the document.

11. Click the save button.

Q7

Write steps regarding following :-

> To change the font style

> To change the font size

> To the font color

> To highlight (in yellow) the line that reads need to get LMS & address.

1. Select the text you want to modify.

2. Left click the drop-down arrow next to the font style box. The name tab me font style drop-down menu appears.

3. Now you'll cursor over the various font style A live preview of the font will appear in the document.

Left click the font style you want to use the font.

Style will change in the document.

3 Change the font colour-

1 Select the text you want to modify

2 Left click the drop-down arrow next to the font color/color box on the home tab. The font color menu appears.

3 Move your cursor over the various font colors. A live preview of color will appear in the document.

4 Left click the font color you want to use. The font color will change in the document.

To highlight (in yellow the line that) need to get

i) Select the text you want to modify.

(ii) Left Clicks the drop down arrow next to the highlight

(iii) Colour on the home tab. The font color menu appears.

(iv) Move your cursor over the various text highlighting colors (yellow). A live preview of the color will appear in the document.

(v) Left click on yellow color want to use the text colour will change.

Q7 Create a file in m.s word for the following document and save it with file name ms word
describe all steps involved.

1) Click on start button

2) Click on microsoft office

3) Select microsoft word

- 4 Click on Microsoft Office Fice button
- 5 Select New in the New Document dialog box appears.
- 6 Type MS Word on Work Sheet and MS Word.
- 7 Click Bold on Home tab Press Enter.
- 8 Type MS Word is a widely used Unmerical word processor user developed by Microsoft.
- 9 move your cursor over the Red color.
- 10 Left click the used font color - the font color changes document.
- 11 Select the "Word Processor" click Underline on Home tab Press Enter.
- 12 Select the text to format as a list.
- 13 Click the bullet or numbering commands on the Home tab.
- 14 Left click the bullet style to use it will appear in the document.
- 15 Position your cursor at the end of a list item and Press the enter key to add an item to list.
- 16 Select "Creating List" click the drop-down next to the font color.
- 17 move your cursor over the blue color click the blue font color the blue font color will change in the document.
- 18 Select saving and left click the Font this drop down or next to the font color box on the Home tab the font color menu appears.

- 18 move the cursor over the used ~~poor~~ Left Click the red font color that red font color changes the document click the Microsoft Office button.
- 19 Click the Microsoft Office button.
- 20 Select Save as - Word document you want to save the document using the drop-down menu.
- 21 Enter a file name "ms Word" for the document.
- 22 Click the save button.
- Q8 Create a file in ms-word for the following documents
Save it with file name equations are stored involved in it Equations
- $$x+y=30$$
- $$223+5=50$$
- $$A2+B8=42+78$$
- i) Click on Microsoft Office Button
- ii) Select New the new document dialog box appears
- iii) Type equation on worksheet and select "equations"
- (iv) Click Bold and Underline on home tab and press Enter
- v) Enter the text $42+45=30+15$
- vi) Place cursor in the document where you want to create a subscript or superscript.
- vii) Go to the Home tab on the Ribbon and click on Subscript and Superscript (x_2) (x^2) in the Font group.