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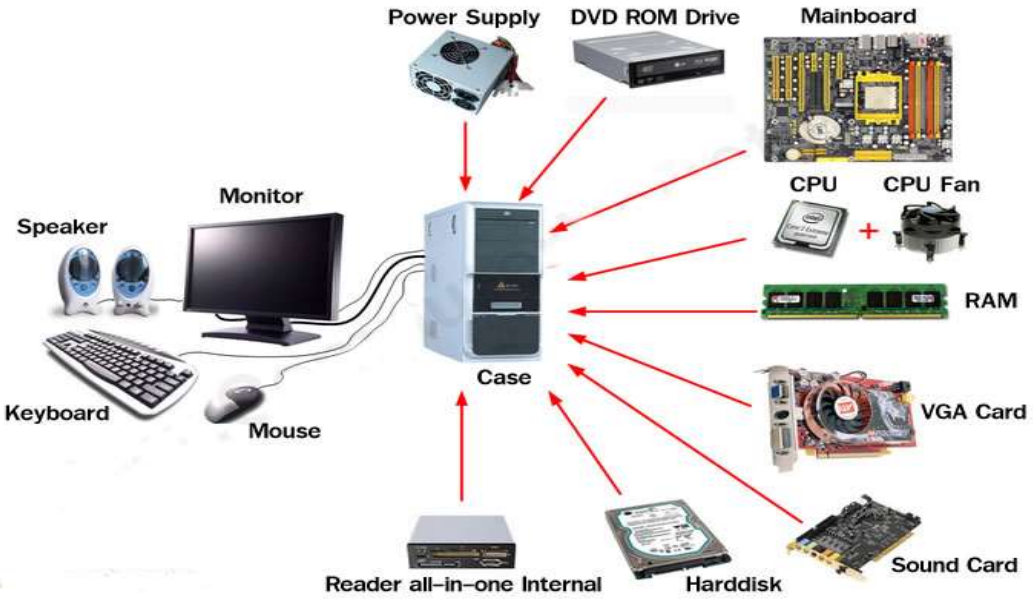
UNIT - I
BASICS OF COMPUTER



Introduction to Computer:

Define computer? **Jan-16**

A computer is a device that takes in information, which is usually in digital form. It processes this information according to a set of instructions or a program. The goal is to produce a result based on the data it has received.

- Computer is an electronic device that is designed to work with Information.
- Electronic device for processing and storing data.
- Executes instructions (software) to perform tasks.
- Used for various applications, from calculations to entertainment.
- Computers store decimal numbers as binary digits (0s and 1s) on hard disks
- Computer cannot do anything without a Program

Describe about the history & generation of computers? **Jun-18, Jan-16**

History of Computer

The history of computers dates back several centuries, with significant advancements and milestones achieved along the way. Here is a brief overview of the key developments in the history of computers

- **19th Century** : Mechanical calculators, like **Charles Babbage's** designs.
- **20th Century** : Electronic computers, starting with **ENIAC** in the 1940s.
- **1970s -80s** : Personal computers (PCs) introduced.
- **1990s -Present** : Rapid advancements in computing technology.

Name of Device	Year of Invention	Name of the Inventor
Abacus	3000 Years ago	Ancient Babylonians
Slide Rule	1620	William Oughtred
Arithmetic Engine or Pascaline	1642	Blaise Pascal
Difference Engine	1822	Charles Babbage
Analytical Engine	1837	

Finger Counting : The first way people did calculations was by using their fingers.

Charles Babbage : He is called the father of computing because he designed early computers.

Ada Lovelace : She was the **first computer programmer**, working in 1840. She wrote the first program for Babbage's machine.

John Von Neumann : He was a Hungarian-American **mathematician** and physicist. He introduced the idea of storing programs in a computer.

What are the components used in the generations of computer? **Jun-15**

Generations of Computers: -

Computers are grouped into **different generations** based on **technology** and how they are **built**.

There are **five main generations** of computers.

Generation	Compound Used	Technological Advancements	Period
First Generation	**Vacuum Tube** or thermionic valve machine	• **Input** was given using **punched cards** and **paper tape**. • **Output** was shown on **printouts**. • **First generation computers** used the **binary code system** (**0s and 1s**). • Examples: **ENIAC, EDVA**	1940 to 1956
Second Generation	Transistor Technology	• **Second generation computers** were **smaller** than **first generation**. • **Second generation** computers also took **less time** to do tasks than the **first generation**.	1956 to 1963
Third Generation	Integrated Circuit (IC)	• **Third generation computers** were **smaller** than **second generation**. • They were **faster**, used **less power**, and made **less heat**. • **Maintenance costs** were **lower**. • They were **easier** to use for **business**.	1963 to 1971

Generation	Compound Used	Technological Advancements	Period
Fourth Generation	Microprocessor Technology. **VLSI** (Very Large-Scale Integration)	• **Fourth generation computers** made **very little heat**. • They were **much faster** and had **better accuracy**. • The **cost** to make them was **much lower** than before. • They became **affordable** for **everyday people**.	1972 to 2010
Fifth Generation	**AI,** Artificial intelligence, Quantum computation, Nanotechnology, Parallel processing, etc.	• **Fifth generation** added **software** with **hardware**. • They had **high power** and **large memory**. • Could do **many tasks at once**. • Technologies: **AI, Quantum computing, Nanotechnology**, etc.	2010 to Till

Describe the applications of computer? **Aug-23, Jan-20, Dec- 2019, Jul-2017**

Application of computer

Application	Description
Home	- Used for online bill payments, watching films, home tutoring, social media, and gaming. - Provides internet access and email communication. - Supports students with online learning. - Enables corporate employees to work from home.
Medical Field	- Keeps patient records and monitors patients. - Assists in surgeries with robotic devices. - Uses virtual reality for medical training. - Monitors pregnancies with advanced imaging.
Entertainment	- Used to watch films, play games, and listen to music. - MIDI instruments are used to create music. - Widely used for photo and video editing.
Industry	- High-performance computers aid in scientific simulations and research. - Useful in design, inventory management, video conferencing, and online marketing. - Essential for stock market activities.
Education	- Used for online classes, exams, e-books, and tutoring. - Audio-visual tools improve learning experiences.
Government	- Used for data processing and managing citizen databases. - Supports paperless office operations. - Important for defence, including missile development and satellite launches.
Banking	- Stores customer information and processes transactions. - Used in ATMs and helps reduce banking errors and costs.
Business	- Essential for processing transactions with suppliers, customers, and employees. - Aids in analysing sales, investments, and expenses.

Advantages of Computer

Computers offer numerous advantages across various aspects of life, work, and society. Here are some of the key advantages of computers:

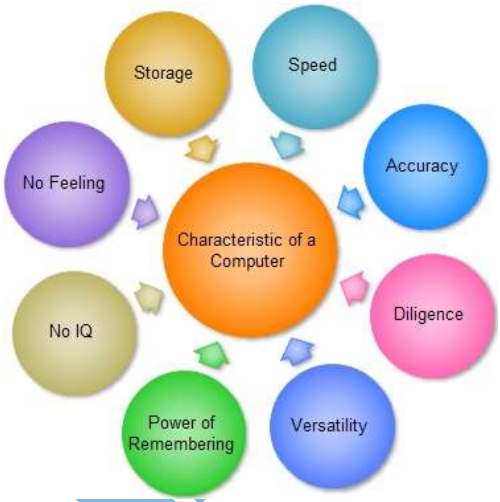
- ✓ Stores huge amount of data
- ✓ Accuracy
- ✓ Increases your productivity.
- ✓ Internet connection.
- ✓ Organizes the information.
- ✓ Keeps everyone connected.
- ✓ Helps to automate.
- ✓ Help physically challenged.

What are the characteristics of a computer? **Jun-19, Jul-17, Jun-15**

List out the characteristics of a computer? **Feb-2024**

Characteristics of Computer

- ✓ Speed
- ✓ Storage
- ✓ Versatility
- ✓ Diligence



Define speed? **Jan-17**

Speed

- Computers are much faster than humans at calculations.
- Can process millions of instructions per second.
- Speed is measured in **Hertz (Hz)** or **Gigahertz (GHz).**

Storage

- Computers can store large amounts of data (text, images, videos).
- Data can be quickly accessed.
- Primary memory is built-in; secondary storage includes CDs, pen drives, etc.

Diligence

- Computers can perform tasks repeatedly without getting tired.
- Always accurate and consistent.
- Their memory is superior to human memory.

Versatility

- Computers can do many different tasks.
- Can handle different types of data and software, making them useful in various industries.

TERMS RELATED TO COMPUTER

HARDWARE

These computer science terms connect to the physical components of a computer. Hardware represents the most tactile aspects of computer science and the materials computers are made of.

1. CPU (Central Processing Unit)

- The **"brain"** of the computer.
- It processes instructions from applications.

2. Bit - Binary Digit

- A bit is the smallest unit of data in a computer.
- Short for "binary digit."
- Can be either 0 or 1.
- The basic building block of digital data storage and processing.
- Represents a binary choice like "on/off," "true/false," or "yes/no."

3. RAM (Random Access Memory)

- Temporary storage for data being used by the processor.
- Data comes from long-term storage like a hard drive.

4. Secondary Storage

- Long-term data storage (e.g., hard disk drives, solid-state drives).
- Files are saved here.

5. ROM (Read-Only Memory)

- Memory that can only be read and not changed.
- Stores important start-up processes.

6. Input/Output Devices (I/O Devices)

- Devices used to input data (e.g., keyboard, mouse).
- Devices used to output data (e.g., printer).

SOFTWARE (Programs and Applications)

Software refers to the instructions and programs that computers use to function. These terms are about creating and managing these programs.

1. Algorithm

An algorithm is a step-by-step procedure used to solve problems. It helps computers do tasks efficiently, like finding the best route for delivery drivers.

2. API (Application Programming Interface)

An API allows two programs to talk to each other. For example, it lets your web browser send data to a mobile app safely.

3. Boolean

Boolean refers to choices with only two outcomes: "Yes or No" or "True or False." It is used in programming logic.

4. Bug

A bug is a mistake in a program that causes it not to work correctly. Debugging is the process of fixing these mistakes.

5. Camel Case

Camel case is a way of writing compound words in programming, where each word starts with a capital letter, like "StretchLength" or "FixedHeight."

6. Code

Code is the set of instructions written by programmers to make a program work. It tells the computer what to do.

7. Compiling

Compiling is the process of converting human-readable code into machine code so the computer can understand it.

8. Conditional Statements

These are "if-then" rules in programming. If certain conditions are met, the program moves to the next step. For example, "If it rains, bring an umbrella."

9. Integrated Development Environment (IDE)

An IDE is software that helps developers write and test code. It has tools like error checking and debugging to make coding easier.

10. Latency

Latency is the delay between an action and its response. High latency means a slow response, which can affect how fast websites or apps feel.

11. Scripts

Scripts are a series of instructions that automate tasks or create dynamic content on websites or in apps.

12. Structured Data

This is organized data, like names or addresses, which can be easily searched and used by programs.

13. Syntax

Syntax is the set of rules that defines how code must be written in a programming language. Each programming language has its own syntax.

Technical Industry (Computer Science and Tech Industry Terms)

1. Agile Development

Agile development is a way to manage projects, especially in software, by breaking them into small parts. It allows quick changes and improvements.

2. Big Data

Big data refers to huge amounts of information collected by companies. It can be used for analyzing trends or making forecasts.

3. Cloud Storage

Cloud storage is a way to save data on remote servers instead of your own device. It can be accessed through the Internet. Examples : Google Drive.

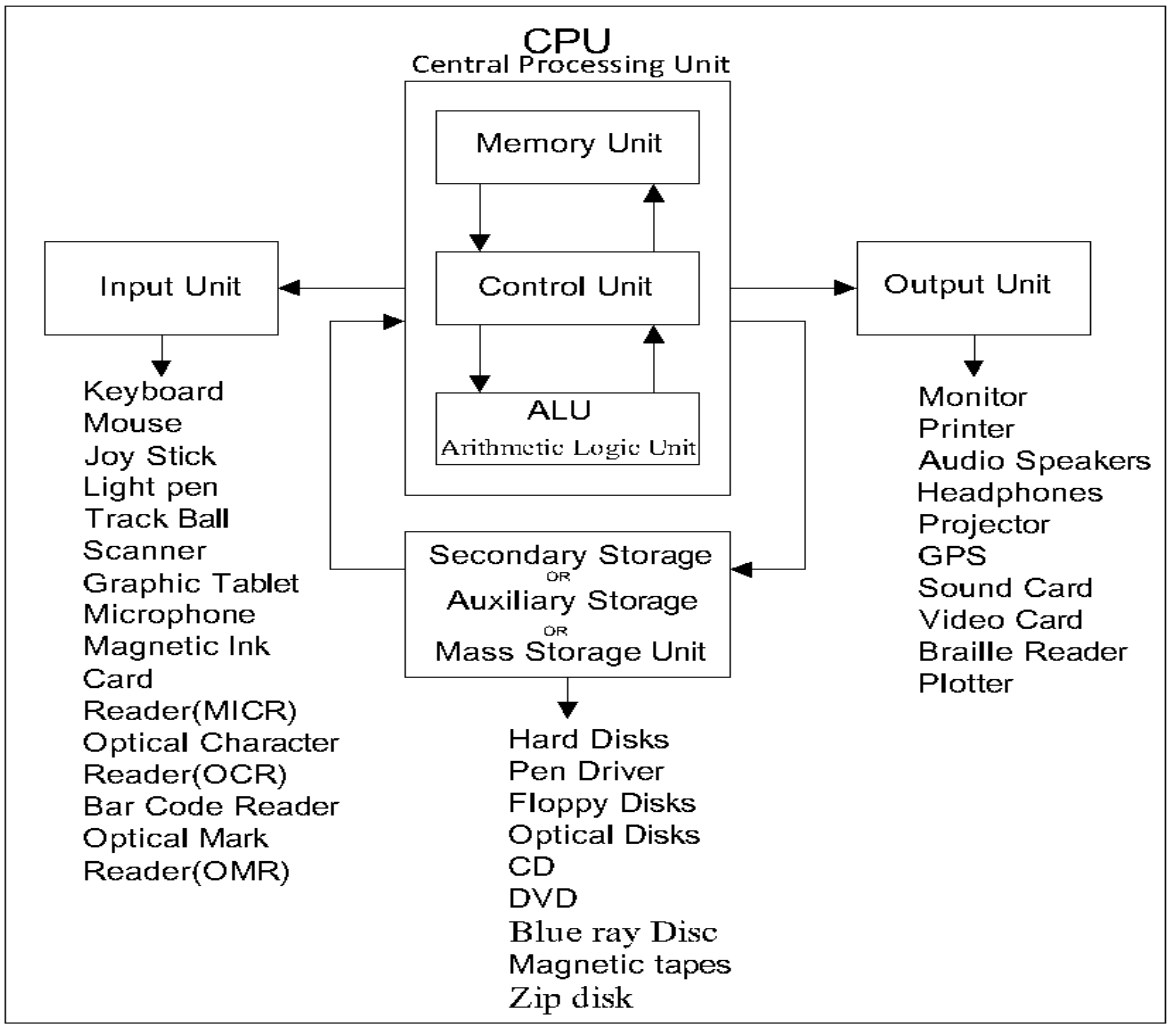
4. Cyber Security

Cyber security involves protecting computers and data from hackers and other threats. It is a growing industry as cyber threats increase.

Different between Hardware and Software

Hardware	Software
Hardware is further divided into four main categories: Input Devices Output Devices Secondary Storage Devices Internal Components	Software is further divided into Three main categories: Application Software (MS-Office, Open Office, etc.) System Software -OS (Winnows, Linux) Computer Language (Java, C & C++, Python, etc.)
Developed using electronic and other Materials	Developed writing using instructions using a programming language
When damaged, it can be replaced with a new component	When damaged it can be installed once more using a backup copy
Hardware is physical in nature and hence one can touch and see hardware	The software cannot be physically touched but still can be used and seen
Hardware cannot be infected by Viruses	The software can be infected by Viruses
Hardware will physically wear out over Time	Software does not wear out but it can be affected by bugs and glitches
An example of Hardware is hard drives, monitors, CPU, scanners, printers etc.	An example of software is Windows 10 , MS Office, Adobe Photoshop, Google Chrome etc.

Draw the block diagram of a digital computer? Jun-15, Jan-16
With a neat block diagram, explain the working principle of a computer. Oct-22, Dec-18
Explain the working principle of a computer with the help of a block diagram.? Feb-2024
Explain The Basic Components of a computer with a neat diagram Jun-19
Block Diagram and Working Principle of Computer? (அவசியம் படிக்கவும்)



The working principle involves the following steps:

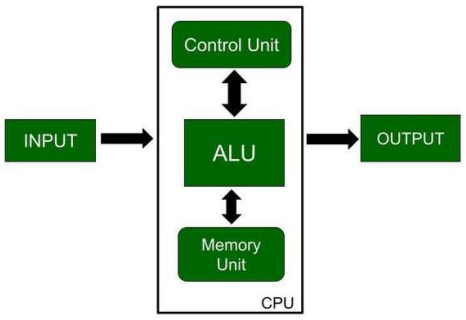
1. Input is received from input devices.
2. The CPU processes instructions stored in memory.
3. Data is fetched from memory into the CPU for processing.
4. The ALU performs calculations and logic operations.
5. Results are temporarily stored in memory.
6. Output is sent to output devices for display or printing.
7. The process repeats, allowing the computer to perform various tasks based on the executed program and user input.

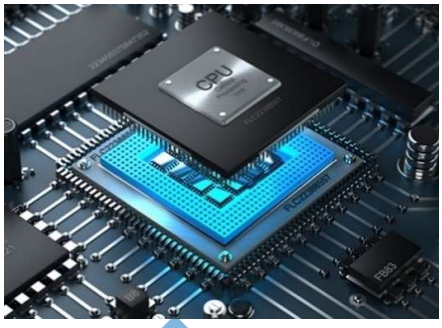
Input

An input device is any hardware device that sends data to a computer, allowing you to interact with and control it. Examples of **input devices include a keyboard, mouse, camera, and microphone.**

The keyboard and mouse are the most commonly used or primary input devices on a computer. However, other devices also input data into a computer.

CPU-Central Processing Unit





- Main computer component, often called the **"Brains."**
- Controls and processes information.
- Speed measured in **MHz (millions) or GHz (billions)** of instructions per second.
- Faster processors execute instructions more quickly.
- Overall computer speed depends on multiple components, not just the CPU.

What are the components of CPU? Explain? Feb-23

Explain about the Components of CPU? Feb-2024

What are the components of CPU? Jun-18

The CPU **(Central Processing Unit)** is a key component of a computer system responsible for executing instructions and performing calculations. It consists of several **components, including:**

- ✓ Arithmetic Logic Unit (ALU)
- ✓ Control Unit (CU)
- ✓ Registers
- ✓ Cache
- ✓ Bus Interface Unit (BIU)
- ✓ Instruction Decoder:

Arithmetic Logic Unit (ALU)

- Part of the CPU responsible for calculations.
- Performs arithmetic and logic operations.
- Includes bit shifting operations.
- Essential for data processing tasks.
- Integral to CPU's overall functionality.

What are the logical operations performed by ALU? **Dec-2019, Jan-20**

- **AND:** Combines two binary values, outputting 1 if both inputs are 1.
- **OR:** Combines two binary values, outputting 1 if at least one input is 1.
- **NOT:** Inverts a binary value, changing 1 to 0 and vice versa.
- **XOR (Exclusive OR):** Outputs 1 if inputs are different (one 1 and one 0).
- **Shift operations:** Moves bits left or right in a binary number.

These logical operations are fundamental for manipulating and comparing binary data in a computer's processing tasks.

Control unit (CU)

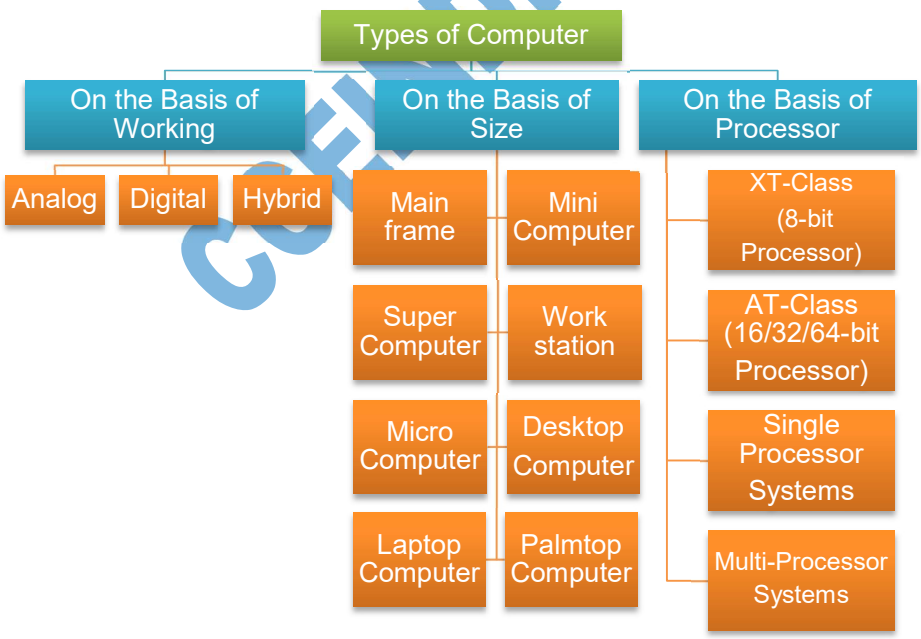
Part of the CPU.

- Manages data flow and execution of instructions.
- Coordinates and controls internal components.
- Decodes and fetches instructions from memory.
- Critical for overall CPU operation.

Briefly explain the types of computer? Explain in detail. **Jun-18, Jan-17**

How will you classify computer systems? **Mar-22**

TYPES OF COMPUTERS



Classify computer systems?

- ✓ Based on Working
- ✓ Based on Size and Capacity
- ✓ Based on Processor
- ✓ Based on Performance
- ✓ Based on Operating System

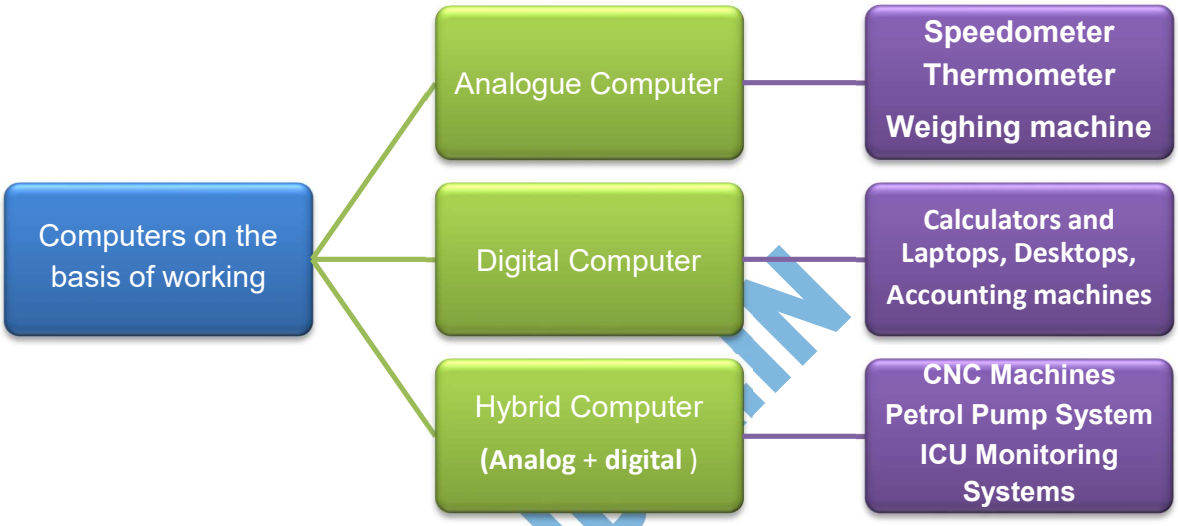
Describe the various types of computers based on working principle and size? Mar-22

Types of Computers on The Basis of Working? Feb -2023

List the types of Computers on the Basis o working? Aug-2023

CLASSIFICATION OF COMPUTERS ON THE BASIS OF WORKING

1. Analogue Computer
2. Digital Computer
3. Hybrid Computer



Analogue Computer

- Handles continuous data like temperature and speed.
- No storage needed as they measure in one step.
- Used in engineering and industries for control.
- Direct input from instruments with results on dials or charts.
- **Example:** Voltage, Pressure, Water Flow Slide Rule, Planimeter

Digital Computer

- Processes data using discrete binary digits (0s and 1s).
- Highly versatile and prevalent in modern computing.
- Used for a wide range of applications.
- Performs arithmetic and logic operations digitally.
- **Examples**: Calculators and Laptops, Desktops, Accounting machines.

Hybrid Computer

Hybrid computers combine the features of **analog** and **digital** computers.

- **Speed**: From analog computers.
- **Memory and accuracy**: From digital computers.

Key Features:

- Process **both continuous and discrete data**.
- Combine the **best features** of analog and digital systems.

Difference between Digital & analog Computer

Aspect	Analog Computers	Digital Computers
Data Type	Processes continuous data (e.g., temperature, speed)	Works with discrete data (1s and 0s)
Function	Measures changes directly from instruments	Uses binary signals (ON-OFF) to process data
Examples	Speedometers, thermometers	Calculators, accounting machines
Output	Displays readings on dials or charts	Outputs numbers or symbols on screens

TYPES OF COMPUTERS ON THE BASIS OF SIZE

- ✓ Main frame
- ✓ Mini Computer
- ✓ Super Computer
- ✓ Work station
- ✓ Micro Computer
- ✓ Desktop Computer
- ✓ Laptop Computer
- ✓ Palmtop Computer

Types of Digital computers

Mainframes

- **High Performance**: Mainframe computers handle large information processing jobs efficiently.
- **Used in Key Sectors**: Commonly found in institutions, research, healthcare, libraries, and large businesses.
- **Useful Tasks**: Support census taking, industry statistics, and transaction processing.
- **Business Applications**: Essential for enterprise resource planning and e-commerce.

Minicomputer

- **Mid-Range Computer**: Minicomputers are between mainframes and microcomputers in size and power.
- **Used by Small Organizations**: Commonly used in smaller businesses.
- **Changing Terminology**: The term "minicomputer" is less common today.
- **Now Known as Servers**: Often referred to as small or midsize servers that provide information to other computers.

Supercomputer

- **Fast and Powerful**: Processes large amounts of data quickly.
- **Key Fields**: Used in science, engineering, education, and defense.
- **Handles Large Databases**: Ideal for massive data and complex calculations.
- **Advanced Tech**: Utilizes multicore processors and GPUs.
- **High Performance**: Operates at top speeds compared to other computers.
- **Complex Tasks**: Used for weather forecasting, climate research, and scientific simulations.

Workstation

- **High-Performance:** Designed for a single user with advanced graphics and large storage.
- **More Powerful than PC:** Offers greater capabilities than personal computers but is less advanced than servers.
- **Uses:** Commonly used in fields requiring intensive tasks like graphic design, engineering, and scientific research.
- **Comparison to Desktop:** More powerful than a desktop computer, designed for specialized tasks.

Microcomputer

- **Definition:** A small computer with a microprocessor as its central processing unit (CPU).
- **Single Chip:** CPU, memory, and interface circuits are often on a single chip.
- **Early Models:** First marketed in the mid-1970s, used in personal computers and simple electronic games.
- **Modern Use:** Now used widely in business, engineering, and intelligent machines.

Desktop Computer

- **Personal Computer:** Designed for regular use at a single location, typically on a desk.
- **Common Configuration:** Includes a case, power supply, motherboard, storage drives, keyboard, mouse, and monitor.
- **Flexible Placement:** Can be oriented horizontally or vertically and placed in various positions on the desk.
- **Primary Use:** Main computing device for many users in both homes and workplaces.

Laptop Computer

- **Portable PC:** A small, portable personal computer with a screen and keyboard.
- **Clamshell Design:** Features a foldable design with the screen on one lid and keyboard on the other.
- **Mobile Use:** Suitable for transportation and can be used on a person's lap.
- **Versatile Applications:** Used for work, education, gaming, and general home use.

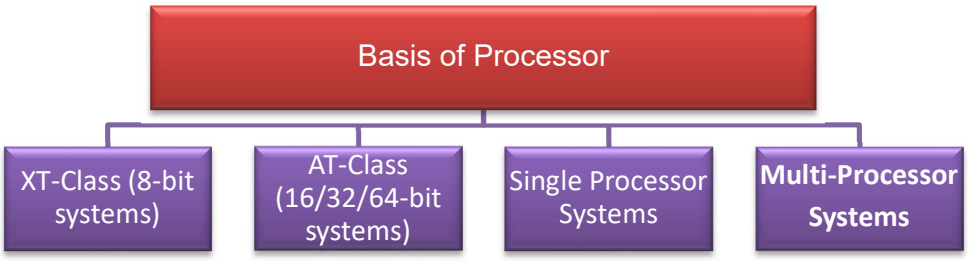
Palmtop Computer

- **Size**: Small, pocket-sized computer that fits in a shirt pocket.
- **Clamshell Design:** Features a horizontal design with an integrated keyboard and display.
- **IBM Compatibility:** Designed to be compatible with IBM PC architecture and DOS-based.
- **Functionality:** Could run standard PC software and had applications pre-installed in ROM.

What is AT/XT processor? **Oct-22**

TYPES OF COMPUTERS ON THE BASIS OF PROCESSOR

1. XT-Class (8-bit Processor)
2. AT-Class (16/32/64-bit Processor)
3. Single Processor Systems
4. Multi-Processor Systems



XT-Class (8-bit systems)

- PC/XT: Early personal computers (PC) with 8-bit 8088 processors.
- XT: Extended-technology PC with a hard disk for storage.
- ISA Bus: 8-bit bus for expansion, sending 8 bits of data in one cycle.

AT-Class (16/32/64-bit systems)

- AT: Advanced-technology PC with 16-bit or higher processors (e.g., Intel 286, 386, Pentium).
- AT Bus: 16-bit or greater system bus for faster data transfer.
- ISA Bus: 16-bit version of the original 8-bit bus.

1. Expansion Slot Types for AT-Class Systems

- 16-bit ISA
- 16/32-bit Extended ISA
- 16/32-bit MCA (Micro Channel Architecture)
- 32-bit Cardbus/PCMCIA
- 32-bit VL (VESA Local)
- 32/64-bit PCI (Peripheral Component Interconnect)
- 32-bit AGP (Accelerated Graphics Port)

2. Higher Processor AT Systems (386 or Above)

- Support better memory addressing and management.
- Use 32-bit or 64-bit bus architectures for faster data access.

Single Processor Systems

- Have one CPU to handle all tasks.
- Used in personal computers and basic devices.

Multi-Processor Systems

- Have multiple CPUs for parallel processing.
- Used in servers and high-performance systems.

Types of Intel Processors

Pentium

- Basic processor, good for simple tasks like web browsing and word processing.

Core i3

- Affordable with better performance than Pentium.
- Not ideal for heavy multitasking or video editing.

Core i5

- Great for multitasking, photo, and light video editing.
- Offers solid performance without the high price of i7.

Core i7

- Faster than i5, good for demanding tasks.
- Costs more, but adds extra performance for quicker processing.
- Suitable for users who need more speed.

Core i9

- High-performance processor for heavy tasks like editing large videos.
- Overkill for most users, but incredibly fast.

Write the difference between XT and AT systems? **Aug-23**

Differences between PC/XT and AT Systems

PC/XT (Personal Computer/XT) and AT (Advanced Technology) systems. Here are the key differences.

Attribute	PC/XT (8-Bit)	AT (16/32/64-Bit)
Supported Processors	All x86 or x88	286 or higher
Processor Modes	Real	Real/Protected/Virtual
Software Supported	16-bit only	16-bit or 32-bit
Bus Slot Width	8-bit	16/32/64-bit
Slot Type	ISA only	ISA, EISA, MCA, PC-Card, Cardbus, VL-Bus, PCI, AGP
Hardware Interrupts	8 (6 usable)	16 (11 usable)
DMA Channels	4 (3 usable)	8 (7 usable)
Maximum RAM	1MB	16MB/4GB or more
Floppy Controller Speed	250 Kbps	250/300/500/1,000 Kbps
Standard Boot Drive	360KB or 720KB	1.2MB/1.44MB/2.88MB
Keyboard Interface	Unidirectional	Bidirectional
CMOS Memory/Clock	None standard	MC146818-compatible
Serial-Port UART	8250B	16450/16550A or greater

Units, Representation

Memory unit is the amount of data that can be stored in the storage unit. This storage capacity is expressed in terms of Bytes. The following table explains the main memory storage units

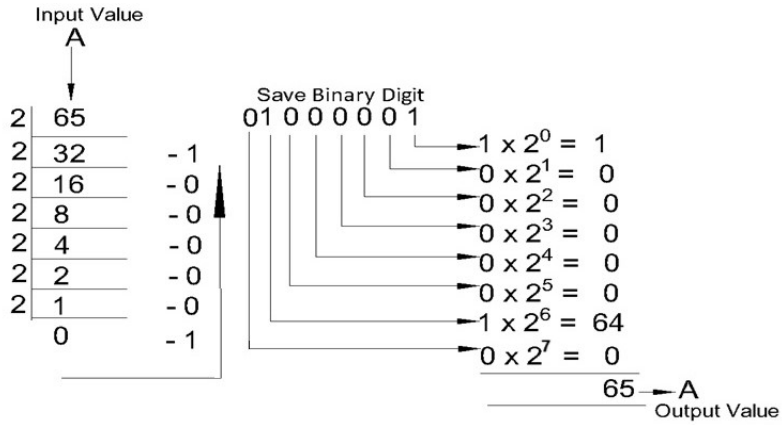
Memory Storage Units

UNITS	VALUE
1 Bit – (Binary Digit)	0 or 1 Binary Digit
4 Bit	1 Nipple (N)
8 Bits	1 Byte (B)
1024 Bytes	1 Kilo Byte (KB)
1024 Kilo Bytes (KB)	1 Mega Byte (MB)
1024 Mega Byte (MB)	1 Giga Byte (GB)
1024 Giga Byte (GB)	1 Terabyte (TB)
1024 Terabyte (TB)	1 Petabyte (PB)

ASCII (American Standard Code for Information Interchange)

It's a character encoding standard used for electronic communication.

To save the character "A" as a number in a hard disk and then convert it to decimal, you can follow these steps: **"A" in ASCII**: Decimal value **65**



Binary representation of 'A': The letter 'A' is represented as 01000001 in 8-bit binary format, which is accurate.

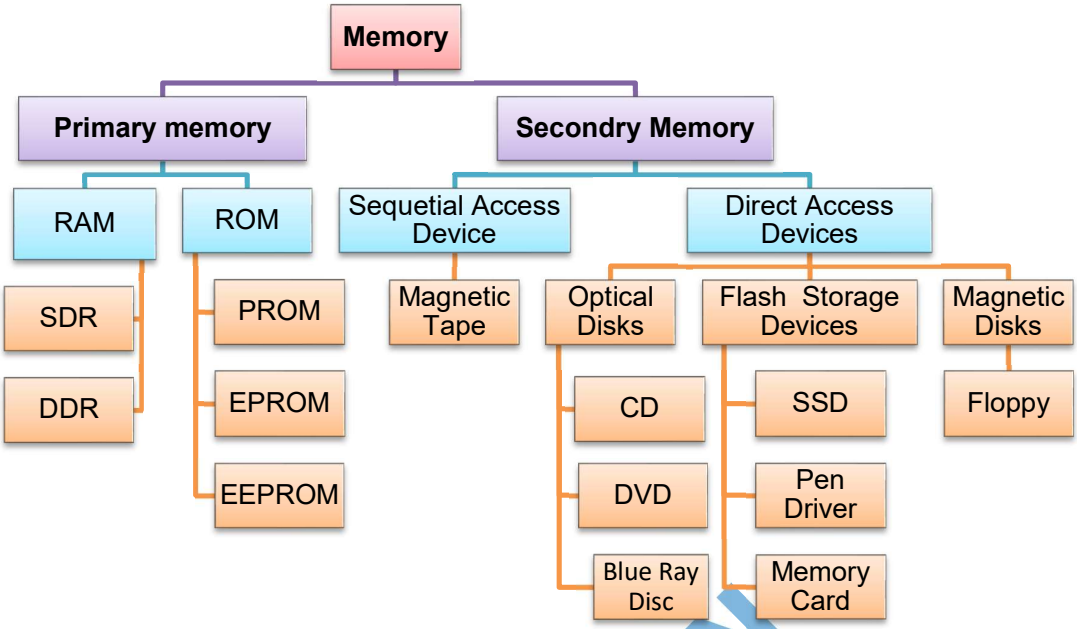
Hard disk storage: Hard disks store data in binary form (0s and 1s). All data, whether text, images, videos, or programs, is ultimately converted into binary digits for storage and processing by computers.

Explain about the memory units? **Feb-23**

What are the different types of memory? Explain in detail.? **Jan-17**

Type of Memory? Or Types of Storages?

1. Primary Memory (Main Memory)
2. Secondary Memory (Secondary Storage)
3. Cache Memory
4. Virtual Memory



Define Primary Memory?

Primary Memory:

- Primary memory is the computer memory that the processor uses first.
- It lets the processor access applications and services that are running.
- This memory stores data temporarily in a specific location.

Primary Storage (Main Memory):

- Primary storage holds the data, programs, and instructions that the computer is currently using.
- It is also called main memory.

Primary Memory: RAM, ROM, PROM, EPROM, EEPROM, DDR

RAM - Random Access Memory

- Temporary, volatile computer memory.
- Stores data and programs in active use.
- Provides fast access for the CPU.
- Data is lost when the computer is powered off.
- Crucial for multitasking and efficient program execution.

✓ **SDRAM** - Synchronous Dynamic Random-Access Memory.

✓ **DDR** - Double Data Rate, Types: SDRAM - DDR1, DDR2,DDR3,DDR4

✓ **DRAM** - Dynamic Random Access Memory.

✓ **SRAM** - Static Random Access Memory.

✓ **ROM** - Read-Only Memory.

ROM- Read Only Memory

- Permanent, non-volatile computer memory.
- Contains firmware and system instructions.
- Data is written during manufacturing and cannot be changed by users.
- Essential for booting up the computer and running low-level operations.
- Examples include BIOS and firmware in devices like game consoles.

Other Types of non-volatile memory include

PROM

- PROM stands for **Programmable Read-Only Memory**.
- **Data** can be written **only once** and will **stay forever**.
- PROM **keeps its data** even when the computer is **turned off**.
- It is made **empty** at first and is **programmed later** with a **PROM Programmer** or **burner**.

EPROM

- EPROM stands for **Erasable Programmable Read-Only Memory**.
- **Data** in this memory can be **erased** by **ultraviolet light**.
- Ultraviolet light **clears its contents**, allowing it to be **reprogrammed**.

EEPROM

- EEPROM stands for **Electrically Erasable Programmable Read-Only Memory**.
- Similar to **EPROM**, but data is **erased with an electrical charge** and can be **reprogrammed**.
- EEPROM **keeps its data** when the power is **turned off**.
- It is similar to **flash memory** but **writes and erases data one byte at a time**.
- This process makes EEPROM **faster than flash memory**.

Differentiate PROM and EPROM? **Jun-19**

Aspect	PROM (Programmable Read-Only Memory)	EPROM (Erasable Programmable Read-Only Memory)
Writing Data	Data is written once and cannot be changed.	Data can be erased and reprogrammed.
Erasing Data	Cannot be erased or modified.	Erased by exposure to ultraviolet light.
Programming Tool	Programmed using a PROM programmer or burner.	Reprogrammed after erasing with UV light.
Usage	Suitable for permanent storage of data.	Useful for situations where data needs updating.

There are four types of primary storage:

- ✓ Read Only Memory (ROM)
- ✓ Random Access Memory (RAM)
- ✓ Flash memory
- ✓ Cache memory

Secondary storage devices, also referred to as auxiliary storage devices, fixed storage, or permanent storage, are used for data retention

Define Secondary Storage?

Secondary Storage:

- Secondary storage is used to store data for a long time.
- It can be fixed or removable.
- Fixed storage stays inside the computer, like a hard disk.
- Removable storage can be taken out of the computer, like a USB drive**.**

Secondary Memory: Hard disk, SSD, CD, DVD, Blue ray Disc, Pen Drive, Magnetic tape & Zip disk

OPTICAL STORAGE DEVICES

Optical storage devices, including **CDs, DVDs, DIVX, and Blu-ray discs,** utilize a **polycarbonate base material** for data storage, featuring a thickness of **0.2 mm** and a diameter of **120 mm**)

1. **CD (Compact Disc):**
   - **Capacity:** 700 MB (Megabytes)
   - **Common Use:** Originally designed for audio, later adapted for data storage, music, and basic video.

2. **DVD (Digital Video Disc):**
   - **Capacity: 4**.7 GB (Gigabytes)
   - **Common Use:** Used for video, data storage, and software distribution.
3. **DIVX (Digital Video Express):**
   - **Capacity: 4**.7 GB (Single Layer), 9.4 GB (Double Layer)
   - **Common Use:** A proprietary format for video compression and distribution, though not as popular as DVDs.

4. **Blu-ray Disc:**
   - **Capacity:** 25 GB (Single Layer), 50 GB (Double Layer)
   - **Common Use:** Primarily used for high-definition video, gaming, and large data storage. Offers higher capacity and better video quality than DVDs.

Magnetic storage devices:

What are the capacities of floppy disk? Mention its advantages? **Jun-15**

1. A - Floppy 3 ½ Inch Diameter:

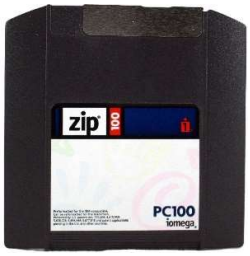
- **Capacity:** 1.44 MB
- Small, flexible disk used for basic data storage in the past.

2. B - Floppy 5 ¼ Inch Diameter:

- **Capacity:** 1.2 MB
- Older, larger floppy disk format for data storage.

Advantages of Floppy Disks:

- Portable and compact data storage.
- Universal compatibility with older computers.
- Inexpensive and easy to write data to.
- Useful for booting and transferring small files in the past.



Zip Disk:

- **Capacity:** 100 MB to 250 MB
- Removable storage medium for moderate-sized files.

Hard Disk:

- **Capacity:** 40 GB to 16 TB and beyond
- Mainstay storage for computers, **offering high capacities and performance.**

Flash memory-based devices:

Flash Memory (Semiconductor Memory) Uses **silicon wafers** for data storage.

- **SSD (Solid State Drive)**: Capacity ranges from 2GB to 2TB or more. High-speed storage for computers.
- **Pen Drive (USB Flash Drive):** Capacities vary from 2GB to 2TB. Portable for file storage and transfer.

- **Memory Card:** Capacities range from 2GB to 2TB, used in cameras, smartphones, and more.

Magnetic Tape

- Data storage medium using **magnetic recording.**
- Sequential access, not random like disks.
- Commonly used for backup and archival purposes.
- Historically significant in early computer data storage.

Write any two advantages of pen drive over CD? **Jan-17**

- ✓ Higher Storage Capacity
- ✓ Reusability and Portability

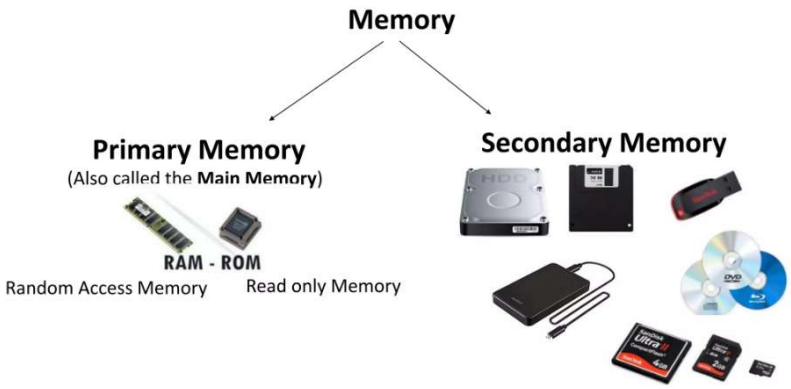
These advantages of higher storage capacity and reusability/portability make pen drives a popular choice for data storage, backup, and file transfer, especially when dealing with larger files or frequently changing data.

Differentiate ROM and RAM. **Feb-23**

RAM (Random Access Memory)	ROM (Read-Only Memory)
• Volatile memory. • Stores data temporarily. • Data is constantly read from and written to during operation. • Loses data when the computer is powered off. • Used for active program execution and data storage. • Data can be quickly read and modified as needed.	• Non-volatile memory. • Contains permanent data. • Data is written during manufacturing. • Retains data even when the computer is turned off. • Used for storing firmware and system instructions. • Data cannot be easily modified or overwritten.

Differentiate Primary and secondary memory. **Feb-2024, Mar-22**

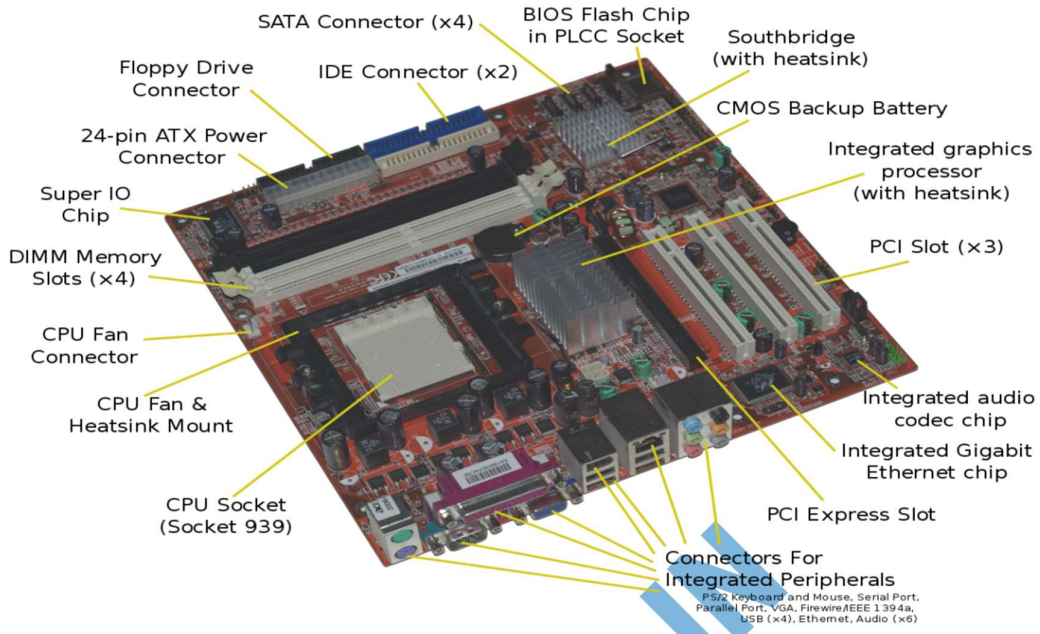
Primary Storage & Secondary Storage



Primary Storage	Secondary Storage
• Also known as RAM (Random Access Memory). • Volatile memory that temporarily stores data the CPU is actively using. • Data is quickly accessible but is lost when the computer is turned off. • Used for running programs and active data storage.	• Includes devices like hard drives, SSDs, DVDs, and USB drives. • Non-volatile memory that stores data even when the computer is powered off. • Slower to access compared to primary memory (RAM). • Used for long-term data storage and program installation.

Explain about Motherboard and SMPS **Aug-23**

Mother Board

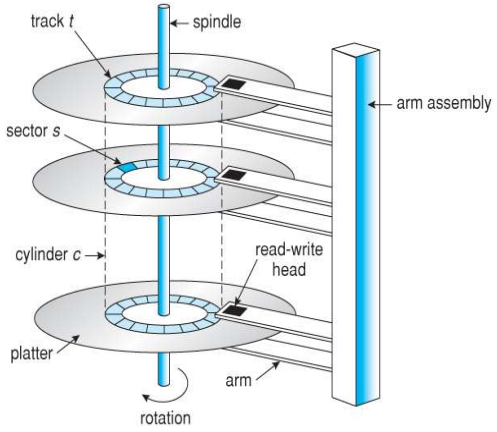


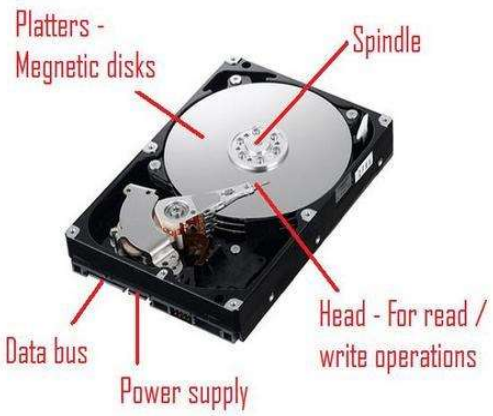
- The **main circuit board** in a computer.
- **Connects and manages** all hardware components.
- **Facilitates communication and data transfer** between components.
- Provides **slots for add-ons** like GPUs and other peripherals.
- Comes in different **form factors** (sizes and layouts) to fit various computers.
- Contains **BIOS or UEFI firmware** to start the system.
- Houses sockets and connectors for **CPU, RAM, and storage devices**.
- Includes **expansion slots** for extra cards, such as sound or network cards.
- Connects to the **power supply** and external devices.
- Acts as the **central hub** for interaction between all hardware parts in a computer.

SMPS –Switch Mode Power Supply

- **Voltage Conversion**: Computer SMPS efficiently converts high-voltage AC power from the wall outlet to multiple low-voltage DC power outputs needed by computer components.
- **Efficient Energy Conversion**: SMPS efficiently converts and regulates electrical energy.
- **Multiple Outputs**: It provides various DC voltage outputs for different computer components, including +12V, +5V, and +3.3V.

Hard Disk Drive (HDD)





1. **HDD Definition**: A traditional data storage device that uses spinning disks and magnetic technology to store and retrieve data.
2. **Capacity**: HDDs offer a wide range of storage capacities, from gigabytes to multiple terabytes.
3. **Speed**: Slower compared to Solid State Drives (SSDs) due to mechanical parts.
4. **Durability**: Susceptible to physical damage due to moving components.
5. **Price**: Generally more cost-effective in terms of storage per dollar compared to SSDs.
6. **Applications**: Commonly used in desktop computers, laptops, servers, and data centers for data storage.
7. **Challenges**: Prone to fragmentation and higher power consumption compared to SSDs.
8. It is a non-volatile storage medium

SSD - Solid-State Drives

1. **Definition**: SSDs are modern data storage devices that use flash memory to store and retrieve data.
2. **Speed**: Significantly faster than HDDs due to lack of moving parts.
3. **Durability**: Highly durable, resistant to physical shocks, and less prone to failure.
4. **Price**: Historically more expensive per gigabyte compared to HDDs, but prices have been decreasing.
5. **Applications**: Widely used in laptops, desktops, smartphones, and data centers for faster data access.
6. **Energy Efficiency**: SSDs consume less power compared to HDDs, prolonging battery life in laptops.
7. **Lifespan**: Limited by write cycles but typically lasts for many years of regular use.
8. **Fragmentation**: Unlike HDDs, SSDs are not significantly affected by fragmentation.

Types of DVDs:

DVDs can be divided into three main categories which are as follows:

DVD-ROM (Read-Only):

- These DVDs come with **data already recorded**, like movie DVDs.
- **Data cannot be erased or added**; they are **non-writable**.

DVD-R (Writable):

- You can **record or write** data on this DVD **once**.
- Once full, it becomes **read-only**.

DVD-RW (Rewritable or Erasable):

- This DVD can be **erased, written, and recorded many times**.

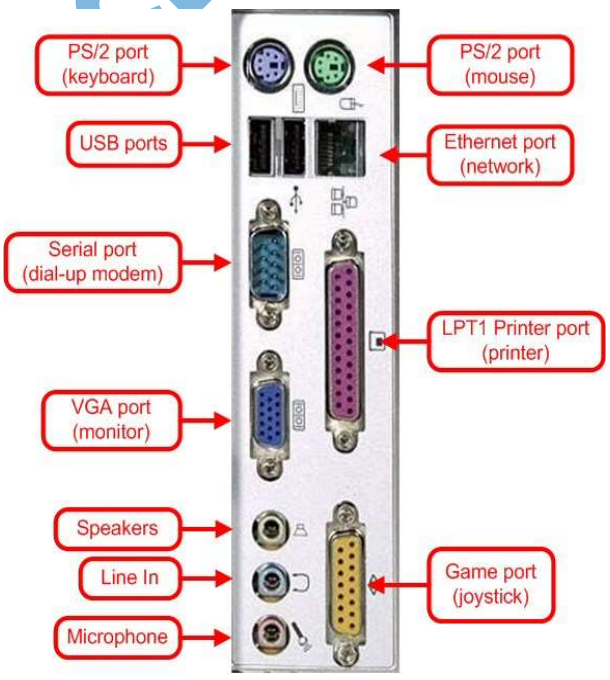
Differentiate Blu-ray from DVD? **Dec-17**

Blu-Ray DVD

Feature	Blu-ray DVD	Standard DVD
Storage Capacity	Up to 50 GB	4.7 GB to 8.5 GB
Video Quality	High-Definition (HD) and 4K	Standard-Definition (SD)
Audio Quality	Lossless audio (Dolby TrueHD, etc.)	Compressed audio formats
Laser Technology	Blue-violet laser (short wavelength)	Red laser
Backward Compatibility	Plays DVDs as well	Cannot play Blu-ray discs

List the connecting ports available in Computer? **Aug-23, Dec-17**

Connecting Ports



What is the use of port? **Jul-17**

Port Type	Description
LPT Port	- Stands for Line Printer Port. - Historically used for connecting printers. - Now mostly replaced by USB and network connections. - Rarely found on new computers.
Parallel Port	- 25-pin connector. - Used for high-bandwidth devices like older printers and scanners. - Largely replaced by faster USB and Ethernet ports. - Seen in older PCs.
Serial Port	- Connects devices like mice, modems, and older scientific equipment. - Uses 9 or 25 pins. - Slower than USB. - Common in older computers, now less frequently used.
USB Port	- Stands for Universal Serial Bus. - Widely used for keyboards, mice, storage devices, and mobile phones. - Comes in various types: USB-A, USB-B, USB-C. - Supports fast data transfer and charging.
Game Port	- Used for older game controllers and joysticks. - Typically found on older sound cards. - Replaced by USB for modern gaming devices. - Rare in modern computers.

All Computer Parts Glossary

Headphones : The device for listening to the recorded sounds without disturbing others.

Joystick : It is used for playing computer games.

Keyboard : This is used to enter data into the computer system.

Microphone : It is used for recording sound.

Monitor : It shows whatever you type on the keyboard or draw with the mouse.

Mouse : It is pointing device.

Scanner : It copies pictures and pages and turns into images that can be saved on a computer.

Speakers : These are used for listening to recorded sound.

Wed camera : It is used for taking live photos and videos.

Digital Camera : A Digital Camera records and it Stores photos in digital Form.

Computer Connecting Wire

Variety of cables : Many types are used in computers.

Hard to find one source : Information about their differences is scattered.

Purpose : This highlights the key computer cable types and their uses.

Connector Type	Description
20 + 4 Pin ATX Connector	Powers motherboard, RAM, low-end graphics cards, and PCI cards. Older boards use 20 pins, modern ones use 24 pins.
CPU 4 + 4 Pin Connector	12V connector for powering the processor. Some boards need 4 pins, others need 8 pins. Many power supplies offer split 8-pin (4 + 4) connectors.
SATA Power Connector	Powers SATA devices like hard drives and DVD drives.
Floppy 4 Pin Connector	Powers floppy drives. Rarely used now, but can still be useful.
Peripheral 4 Pin Molex	Powers IDE devices, fans, and case lights.
PCI-e 6 / 8 Pin Connector	12V connectors for mid to high-end graphics cards. Often available as 6+2 pins for flexibility.

COMPUTER CONNECTING CABLE

Cable Type	Description
VGA Cable	- Also called D-sub or analogue video cable. - Connects monitor or TV (PC input port) to a computer.
DVI Cable	- Connects one end to a computer monitor. - Connects other end to the DVI port on the computer.
HDMI Cable	- Connects one end to a monitor or television. - Connects other end to the HDMI port on the computer.
PS/2 Cable	- Used for PS/2 keyboards and mice. - Connects keyboard or mouse to a PS/2 port on the computer.
Ethernet Cable	- Also called RJ-45 cable. - Connects one end to a router or network switch. - Used for network connections.
USB Cable	- Used for USB connections to computers. - Two popular versions: USB 2.0 (older) and USB 3.0 (newer, faster).

TYPES OF PC CARDS

Graphics card

- Hardware component in computers.
- Specialized for rendering images and videos.
- Accelerates 2D and 3D graphics processing.
- Crucial for gaming, video editing, and graphic design.
- Connects to the monitor to display visuals.

What is sound card? **Jun-18**

Sound card

- Hardware component in computers.
- Enables audio input and output.
- Converts digital audio data to analog signals for speakers.
- Allows recording and playback of sound.
- Crucial for multimedia, gaming, and communication.

NIC - Network Interface Controller (Network card) What is NIC card? **Oct-22**

- Hardware component in computers.
- Connects to a network, enabling data exchange.
- Provides a unique MAC address for identification.
- Facilitates wired or wireless network connections.
- Essential for internet access and network communication.

What is the expansion of modem? **Dec-18**

Modem card

- Modem stands for "Modulator-Demodulator."
- It's a contraction, not an acronym.
- Converts digital data to analog for transmission and vice versa.
- Used for internet connectivity over phone lines or other media.

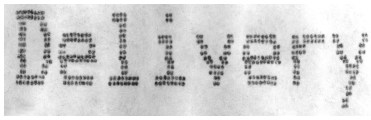
Types of Printers

Printer Name	Dot Matrix Printer	Inkjet Printer	Laser Printer
Type	Impact printer	Non-impact printer	Non-impact printer
Speed	Low speed	Medium speed	High speed
Colour Options	Single colour & multi-page	Multi-colour	Single colour
Cost	Very low cost	High cost	Low cost
Noise	High noise	Low noise	Low noise
Printing Technology	Ribbon-based (like a typewriter)	Ink-based (cartridge or ink tank)	Toner (monochrome)
Common Use	Billing purposes	Colour printing (photos)	Desktop Publishing (DTP) work

Plotter:

- ✓ **Large sheets:** Works on very large paper sizes.
- ✓ **High resolution:** Maintains excellent detail.
- ✓ **Versatile materials:** Prints on plywood, aluminium, steel, cardboard, and plastic.
- ✓ **Common use:** Ideal for AutoCAD drawings.

Dot Matrix Printer (DMP) - Impact Printer

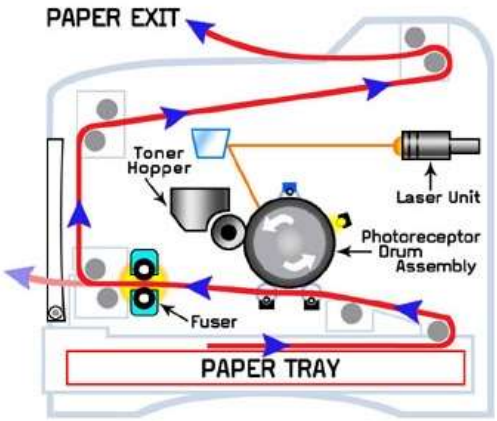


1. **Impact Printing**: Dot Matrix Printers (DMPs) use a printhead with a matrix of pins that strike an ink ribbon to create characters and images on paper.
2. **Versatile Paper Types**: They can print on various paper types, including multipart forms and carbon-copy sheets.
3. **Noisy Operation**: DMPs are known for their noisy operation due to the impact of the printhead against the paper.
4. **Reliability**: They are robust and reliable, making them suitable for industrial and business use.
5. **Low Resolution**: DMPs typically offer lower print resolution compared to modern inkjet and laser printers, resulting in less detailed output.

The printer supported a character generator for **128 characters** with a **Print Matrix of 7×5**.

Explain the working principle of laser printer.? **Jun-15**

Laser Printer (Non-Impact Printer)



1. **Electrostatic Image Formation**: Laser printers start by creating an electrostatic image of the printed page on a photosensitive drum using a laser beam.
2. **Toner Application**: The electrostatic image attracts positively charged toner particles, which are transferred from the toner cartridge onto the drum.
3. **Transfer to Paper**: The toner image is then transferred onto the paper, which is negatively charged, by applying heat and pressure.

4. **Fusing**: The paper with toner is passed through a fuser unit, which uses heat and pressure to melt and fuse the toner onto the paper permanently.
5. **Output**: The printed page is ejected, and the process repeats for each page. Laser printers are known for their high-speed and high-quality output.

Laser Printer is High Speed Printer

- **IBM** introduced the **first laser printer** in **1975** for its **mainframe computers**.
- In **1984**, **Hewlett-Packard** (HP) improved laser printing with its first **LaserJet** printer.
- Leading **laser printer manufacturers** include **HP, Lexmark, Okidata,** and **Xerox**.

What are the characteristics of laser printer? **Dec-19, Jan-20**

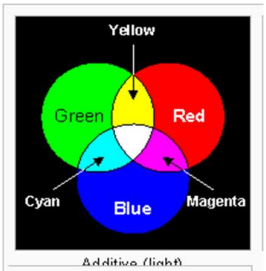
Laser printers are a type of computer printer that use laser technology to produce high-quality printed output. Here are some characteristics of laser printers:

- Printing Technology
- Non-impact Print
- High-Quality Output
- Fast Printing Speed
- Monochrome and Color Printing
- Duplex Printing
- High Paper Handling Capacity
- Network Connectivity
- Toner Cartridges
- Initial Cost and Operating Cost

Inkjet Printer (Non-Impact Printer)

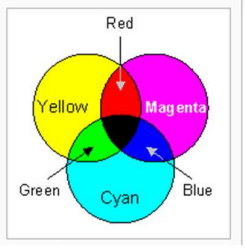
1. **Ink Droplet Ejection**: Inkjet printers work by propelling tiny ink droplets onto the paper through a printhead containing a matrix of nozzles.
2. **Resolution**: They achieve high print resolution by precisely positioning these droplets, resulting in detailed and sharp images and text.
3. **Color Mixing**: Inkjet printers often use multiple ink cartridges with different color inks (CMYK) to create a full range of colors through mixing.
4. **Versatility**: They can print on various types of media, including plain paper, photo paper, and more.
5. **Home and Office Use**: Inkjet printers are commonly used for home and office printing, offering cost-effective and versatile solutions for both text and image printing.

RGB & CYMK Colors



RGB (Red, Green, Blue): For screens; uses light.

- Used for electronic displays like computer screens and TVs.
- Combines red, green, and blue light to create a wide spectrum of colors.
- Primary colors for additive color mixing.



CMYK (Cyan, Magenta, Yellow, Key/Black): : For print; uses ink.

- Used in color printing, including magazines and flyers.
- Combines cyan, magenta, yellow, and black inks to reproduce colors.
- Primary colors for subtractive color mixing.

Types of Monitor or VDU -Visual Display Unit

- CRT – Cathode Ray Tube (Oldest One)
- LCD – Liquid Crystal Display
- LED – Light Emitting Diodes
- TFT – Thin Film Transistors

A touchscreen monitor, like those used in ATM machines and touch mobile devices, combines both input and output on the same screen.

CRT (Cathode Ray Tube):

- Older technology.
- Uses electron beams and phosphorescent screen.
- Bulky, consumes more power, and emits heat.
- Mostly obsolete now.

LCD (Liquid Crystal Display):

- Uses liquid crystals.
- Requires separate backlighting (CCFL or LED).
- Thinner, energy-efficient, and widely used.

LED (Light Emitting Diode):

- A type of LCD with LED backlighting.
- More energy-efficient, thinner, and offers better quality.
- Common in modern displays.

TFT (Thin Film Transistor):

- A technology used within LCDs.
- Uses transistors for improved image quality and response time.
- Enhances color accuracy and sharpness in LCD displays.

The different LCD and LED

LCD and LED may look similar, but LED offers higher picture quality.

Explain about the input and output devices.? **Dec-18, Dec-18,Jul-2017**

Input, Output Devices

Input and output devices allow the computer system to interact with the outside world by moving data into and out of the system.

An input device is used to bring data into the system. Some input devices are:

- ✓ Keyboard
- ✓ Mouse
- ✓ Microphone
- ✓ Bar code reader
- ✓ Graphics tablet

Elaborate on various output devices? **Jan-20, Dec 2019**

Explain about the input and output devices? **Jul-17, Dec-2018**

An output device is used to send data out of the system. Some output devices are:

- Monitor
- Printer
- Plotter
- Speaker

Input, Output devices or I/O devices.

- Input and output devices, also called I/O devices, connect the computer to the outside world.
- Allow data to be sent into and out of the computer.
- Help users interact with the computer and exchange information.

Input Device

- ✓ An input device is used to feed data into computer.
- ✓ Input devices are capable of converting data into a form which can be recognized by computer.
- ✓ A computer has several input device namely, Keyboard, Mouse, Trackball, Joystick, Scanner, Light pen, Bar Code Reader, OCR, OMR, MICR etc.

Keyboard

- Input device used to type text and control a computer.
- Common types include QWERTY and mechanical keyboards.

Keyboard Number of Keys:

- Standard keyboards typically have 101 to 104 keys.
- Variations include compact and ergonomic keyboards with fewer keys.
- Specialized keyboards may have more keys for specific functions, like gaming keyboards.

Type of Keys in Keyboard

1. **Alphanumeric Keys**: These keys include letters, numbers, and symbols used for typing and basic data entry.
2. **Function Keys**: Located at the top, these keys (F1 to F12) have programmable functions for various tasks.
3. **Control Keys**: Control, Alt, and Shift keys modify the actions of other keys when pressed in combination.
4. **Navigation Keys**: These keys (Arrow keys, Home, End, Page Up, Page Down) are used for moving the cursor and navigating documents.
5. **Special Keys**: Include Enter, Backspace, Tab, Caps Lock, and the Spacebar, serving specific text editing and formatting functions.
6. **Numeric Keypad**: A separate set of keys for numeric input, arithmetic functions, and navigation.
7. **Modifier Keys**: Control, Alt, Shift, and Windows/Command keys modify the functions of other keys when pressed together or individually.

Mouse

Input Device: The mouse is a common input device used to interact with a computer's graphical user interface.

Pointing Device: It controls the movement of the cursor on the screen, allowing users to select, click, and manipulate objects.

Buttons: Typically includes a left button, a right button, and a scroll wheel, with additional buttons on some models.

Mouse actions and components. Here's a brief summary:

- **Clicking**: Pressing and releasing the mouse button to perform an action on the computer.
- **Double-click**: Quickly pressing the left mouse button twice to open a selected program or file.
- **Right-click**: Pressing the right mouse button once to access different contextual options or menus.
- **Single-click**: Pressing the left mouse button once for various purposes, such as selecting items or opening files.

There are two types of mouse.

1. Mechanical
2. Optical

Mechanical: This mouse has a small rubber ball underneath that moves against two rollers as it passes across a flat surface.

Optical: This mouse more accurate and has no moving parts. Ts use a laser to detect movement.

Write the steps to install a printer? **Oct-22**

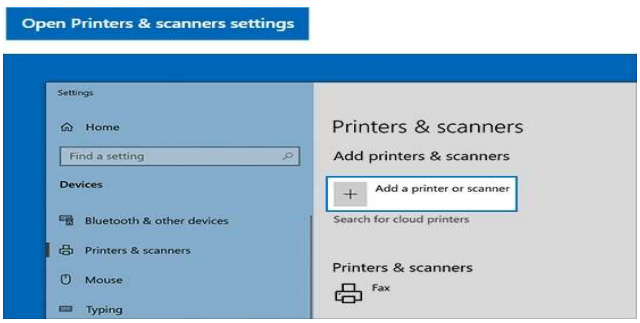
Installation of Scanner and Printer

Step 1: Connect: Plug in the scanner and printer to your computer.

Step 2: Power On: Ensure both devices are powered on.

Step 3: Automatic Setup: Windows will try to install drivers automatically.

Step 4: Not working Step 3 then Click the **Start** button, then go to **Settings** → **Devices** → **Printers & scanners** → **Add a printer or scanner.** Windows will search for nearby printers. Choose your desired printer and click **Add**



Step 5: Windows Update: If needed, Windows Update will download updated drivers.

Step 6: Complete Setup: Follow on-screen instructions to finish installation.

Step 7: Test: Print a test page to verify the printer is working.

Step 8: Scanner Software: Install any scanner software provided.

Step 9: Calibration (if needed): Follow calibration instructions for the scanner.

Connecting Monitor, Mouse, Keyboard to System Unit

To connect a monitor, mouse and keyboard perform the following steps:

Step 1: Locate Ports: Find the Input/Output (I/O) ports on the back of the system unit.

Step 2: Common Ports: Commonly found I/O ports include USB ports, VGA ports for the monitor, and power ports.

Step 3: Connect Keyboard and Mouse: Plug the keyboard and mouse into available USB ports.

Step 4: Connect Monitor: Connect a standard monitor to the VGA port.

Step 5: Power On: Turn on the console.

Step 6: Power Up: Connect the power cables for the server and wait for the green light on the operator panel to start flashing.

Step 7: Install OS: Install an operating system and update it if necessary.

These steps outline the process of connecting a monitor, keyboard, and mouse to a computer system

Key Words

Acronym	Full Form
AC	Alternating Current
ALU	Arithmetic and Logical Unit
ASCII	American Standard Code for Information Interchange
AT	Advanced Technology
BIOS	Basic Input Output System
Bit	Binary Digit
CAD	Computer-Aided Design
CD	Compact Disc
CD-R	CD-Recordable
CD-ROM	CD Read-Only Memory
CD-RW	CD-Rewritable
CNC	Computer Numerical Control
COMPUTER	Common Operating Machine Particularly Used for Trade, Education, and Research
CPU	Central Processing Unit
DOS	Disk Operating System
DP	Dot Pitch
DPI	Dots Per Inch
DVD	Digital Versatile Disc / Digital Video Disc
DVD-R	DVD-Recordable

Acronym	Full Form
DVD-ROM	DVD-Read Only Memory
DVD-RW	DVD-Rewritable
E-mail	Electronic Mail
EPROM	Erasable Programmable Read-Only Memory
GB	Gigabyte
HDD	Hard Disk Drive
HP	Hewlett-Packard
I/O	Input/Output
IBM	International Business Machines
IC	Integrated Circuit
IEEE	Institute of Electrical and Electronics Engineers
KB	Keyboard / Kilobyte
kHz	Kilohertz
LAN	Local Area Network
LCD	Liquid Crystal Display
LCR	Least Cost Routing
LED	Light-Emitting Diode
MAN	Metropolitan Area Network
Mb	Megabit
MB	Megabyte

MICR	Magnetic Ink Character Recognition
MS-DOS	Microsoft DOS
OCR	Optical Character Recognition
OMR	Optical Mark Recognition
RAM	Random Access Memory
RGB	Red, Green, Blue

ROM	Read Only Memory
SDRAM	Synchronous Dynamic Random Access Memory
SSD	Solid State Drive
UPS	Uninterruptible Power Supply
USB	Universal Serial Bus
VGA	Video Graphics Adapter

TWO MARKS QUESTIONS

1. List out the characteristics of computer. Feb-2024
2. What are the components of CPU? Feb-2024, Jun-18
3. Differentiate Primary and secondary memory. Feb-2024, Mar-22
4. List the types of computers on the basis of working. Feb-23, Aug-2023
5. What is AT/XT processor? Oct-22, Aug 2023
6. Differentiate ROM and RAM. Feb-23
7. What is NIC card? Oct-22
8. How will you classify computer systems? Mar-22
9. What are the characteristics of laser printer? Jun-2019, Dec-19, Jan-20
10. What are the logical operations performed by ALU? Dec-19, Jan-20
11. Differentiate PROM and EPROM. Jun-19
12. What is the expansion of modem? Dec-18
13. What is sound card? Jun-18
14. Differentiate Blu-ray from DVD. Dec-17
15. List the connecting ports available in Computer. Dec-17
16. What is the use of port? Jul-17
17. Define speed. Jan-17
18. Write any two advantages of pen drive over CD. Jan-17
19. Define computer or What is Computer? Jan-16
20. Draw the block diagram of a digital computer. Jun-15
21. What are the capacities of floppy disk? Mention its advantages. Jun-15
22. What are the components used in the generations of computer? Jun-15
23. Define Secondary Storage? Jun-15 Above
24. Define SMPS? Jun-15 Above
25. Difference between Digital & Analog Computer? Jun-15 Above
26. Types of Computer connecting wire? Jun-15 Above
27. Types of Monitor? Jun-15 Above
28. Types of Digital Computer? Jun-15 Above
29. Types of Printers? Jun-15 Above
30. Types of Storages? Jun-15 Above
31. Write the advantages of Hard Disk? Jun-15 Above
32. Write the advantages of SSD?

FIVE MARKS QUESTIONS

1. What are the components of CPU? Explain. Dec-18, Feb-23, Feb-2024
2. Explain the working principle of a Computer with the help of a block diagram. Feb-24,Dec-17
3. Explain about the memory units. Feb-23
4. With a neat block diagram, explain the working principle of a computer. Oct-22
5. Write the steps to install a printer. Oct-22
6. Describe the various types of computers based on working principle and size. Mar-22
7. Describe the applications of computer Dec-19, Jan-20
8. Elaborate on various output devices Dec-19, Jan-20
9. Explain the basic components of a computer with a neat diagram. Jun-19
10. Explain about the input and output devices. Jul-17, Dec-18
11. Briefly explain the types of computers. Jun-18
12. Describe about the history & generation of computers. Jan-16, Jun-18
13. Explain the characteristics of a computer. Jun-15, Jul-17
14. What are the different types of memory? Explain in detail. Jan-17
15. Explain about CPU with necessary diagram. Jan-16
16. Explain the working principle of laser printer. Jun-15

ONE MARKS BASICS OF COMPUTER						
S. No	**Question**	**Choice A**	**Choice B**	**Choice C**	**Choice D**	**✔**
1	_____ are used in the second generation of computers.	Transistor technology				**A**
2	_____ is a character encoding standard for electronic communication.	ASCII				**A**
3	____is the display area can be seen when log onto the computer	Downloads	Documents	Recycle bin	Desktop	**D**
4	_____ Convert AC power from an electrical outlet to the DC power need by system	Converter	SMPS	Power analyzer	Forward Converter	**B**
5	_____ is a device used to enhance the clarity of the display	Monitor	Graphics Card	Hard Disk	CPU	**B**
6	_____ is a device which connect the Audio component for multimedia application	Sound card	Speaker	Sound systems	Receiver	**A**
7	_____ Is also Called as the working memory of the CPU.	RAM	ROM	Brain	EROM	**A**
8	_____ is small electronic or mechanical devices	Modem	Computer	Printer	Electronic Gadgets	**D**
9	_____ is the best quality photo printer	Laser	LED	Inkjet	DMP	**C**
10	_____ Memory is a Nonvolatile Memory	RAM	ROM	-	-	**B**
11	_____ Storage device with the larger capacity	RAM	Hard disk	ROM	Volatile memory	**B**
12	_____ Unit is present in the CPU	Input Device	Output device	Control unit	Auxiliary memory unit	**C**
13	_____ converts AC power from an electrical outlet to the DC power need by the system.	SMPS				**A**
14	“Arithmetic Engine” was invented by Blaise Pascal.	TRUE	FALSE	-	-	**A**
15	1 Byte(B) = _____	8 Bits	10 bits	4 bits	9 bits	**A**
16	1 GB (Giga byte)	1024 MB	1045 MB	1200 Byte	1024 Byte	**A**
17	1 Kilobyte (KB)= _____	1,024 Bytes	-	-	-	**A**

18	1 Megabyte (MB) = _____	1,024 Kilobytes				**A**
19	1 Megabyte is equal to	1024 bytes	1024 Kilobytes	1024 GB	1024 bits	**B**
20	1 PB (Peta Byte)	1045 Byte	1045 TB	1024 TB	1024 Byte	**C**
21	1 Petabyte (PB) =	1,024 Terabyte	-	-	-	**A**
22	1 TB(Terabyte)	1024 byte	1060 GB	1045 byte	1024 GB	**D**
23	1 Terabyte (TB) = 1204 Giga Byte (GB)	TRUE	FALSE	-	-	**A**
24	1024 Bytes is equal to	1 GB	1 MB	1 KB	1 TB	**C**
25	3.5" floppy disk	1.44 MB	1.22 MB	1.5 MB	2.0 MB	**A**
26	4 Bye (B)= _____	1 Nibble	-	-	-	**A**
27	8 bits form a byte	TRUE	FALSE	-	-	**A**
28	A _____is a computer hardware component that connects a computer to a computer network.	Network interface card (NIC)				**A**
29	A CD has more storage capacity than a Floppy disk	TRUE	FALSE	-	-	**A**
30	A computer can perform every calculation with the same accuracy.	TRUE	FALSE	-	-	**B**
31	A computer can understand what we dictate and write its own.	TRUE	FALSE	-	-	**A**
32	A computer free from tiresome and Boredom is called_____.	Diligence	-	-	-	**A**
33	A digital computer is a device that operates by directly computing numbers.	TRUE	FALSE	-	-	**A**
34	A dual-layer Blu-ray disk is able to store up to _____	50 GB	-	-	-	**A**
35	A DVD disk differs from a CD	TRUE	FALSE	-	-	**A**
36	A DVD is an example of an optical disc.	FALSE	TRUE	-	-	**B**
37	A floppy disk that contains the files MS DOS.SYS, COMMAND.COM and IO.SYS is referred to as system floppy disk	TRUE	FALSE	-	-	**A**
38	A Floppy is separated into tracks and sectors.	TRUE	FALSE	-	-	**A**

39	A hybrid is a combination of _____	Digital and analog computers				**A**
40	A Joystick is an _____	Input device	-	-	-	**A**
41	A keyboard and mouse are _____	Input device	-	-	-	**A**
42	A laser printer is faster than an Inkjet printer.	TRUE	FALSE	-	-	**A**
43	A pixel is a tiny dot on the screen	TRUE	FALSE	-	-	**A**
44	A printer is an _____	Output Device	-	-	-	**A**
45	A printer may be called as an output device.	TRUE	FALSE	-	-	**A**
46	A processor's speed is measured in _____or millions of instructions per second; and _____ or billions of instructions per second.	Megahertz (MHz), Gigahertz (GHz),				**A**
47	A single Blu-ray disk is able to store up to _____	25 GB	-	-	-	**A**
48	Abacus invented about 3000 years ago	TRUE	FALSE	-	-	**A**
49	AI-	Artificial intelligence				**A**
50	ALU -	Arithmetic Logic Unit				**A**
51	ALU is a supervisor in a computer.	TRUE	FALSE	-	-	**B**
52	ALU is an input device.	TRUE	FALSE	-	-	**B**
53	An AT Keyboard has 104 keys.	TRUE	FALSE	-	-	**A**
54	An ink jet printer’s ink cartridge cannot be refilled.	TRUE	FALSE	-	-	**B**
55	An octal number system has eight symbols.	TRUE	FALSE	-	-	**A**
56	Analog computers do not computer directly with numbers	FALSE	TRUE	-	-	**B**
57	Analytical Engine	Blaise Pascal	Charles Babbage	First generation	Secondary Memory	**B**
58	API -	Application Programming Interface				**A**
59	Arithmetic and language unit is also known as brain of computer.	FALSE	TRUE	-	-	**A**

60	Arithmetic Engine	Fourth Generation	Blaise Pascal	Second Generation	Charles Babbage	**B**
61	Artificial intelligence	Configuration file	0 and 1	VLSI	Search Engine	**D**
62	Artificial intelligence is fourth generation computer.	TRUE	FALSE	-	-	**B**
63	ASCII Means_____	All-purpose scientific code for information interchange	American security code for information interchange	American Scientific code for information interchange	American standard code for information interchange	**D**
64	Assembly languages are machine oriented.	TRUE	FALSE	-	-	**A**
65	AT -	Advanced-Technology				**A**
66	Auxiliary memory is popularly known as primary memory.	TRUE	FALSE	-	-	**B**
67	Binary Digit	1 and 0	0 and 2	2 and 1	0 and 3	**A**
68	Binary number system is used in the computers.	TRUE	FALSE	-	-	**A**
69	BIOS-	Basic Input/ Output System				**A**
70	Bit	0 and 1	2 and 1	2 and 0	3 and 0	**A**
71	Bit -	Binary Digit	-	-	-	**A**
72	Blaise Pascal	Arithmetic engine	Charles Babbage	Secondary Memory	Search Engine	**A**
73	Blaise Pascal is called as Father of Computer Science.	TRUE	FALSE	-	-	**B**
74	Blu-Ray use the _____	Violet Laser	-	-	-	**A**
75	Blu-Ray wavelength _____	405nm	-	-	-	**A**
76	By printing you create a _____	Hard copy of data.				**A**
77	Byte	Message	Collection of records	System file	Word length	**D**
78	CD -	Compact Disc	-	-	-	**A**
79	CD can store data up to _____	700 MB or 80 minutes of Audio.				**A**

80	CD & DVD diameter is _____	4.75 inch or 120 MM				**A**
81	CD or DVD made _____	Polycarbonate	-	-	-	**A**
82	CD- RW -	Compact Disc ReWritable				**A**
83	CD_ROM	1 GB	Read-only Memory	Hard disk	Capacity of Hard disk	**B**
84	CD_ROM is a magnetic disk.	TRUE	FALSE	-	-	**B**
85	CD_ROM is made us of polycarbonate.	TRUE	FALSE	-	-	**A**
86	CD-R -	Compact Disc Recordable				**A**
87	CDs and DVDs use the _____	Red Laser	-	-	-	**A**
88	CDs and DVDs wavelength _____	650 nm Wavelength				**A**
89	Charles Babbage invented the Different Engine Computer.	TRUE	FALSE	-	-	**A**
90	Charles Babbage's brain is still being safeguarded in the hunterian museum of England	TRUE	FALSE	-	-	**A**
91	Combination of Zeros and Ones is said to be machine language.	TRUE	FALSE	-	-	**A**
92	Computer is a single purpose machine.	TRUE	FALSE	-	-	**B**
93	Computer is an electronic data processing machine	TRUE	FALSE	-	-	**A**
94	Computer Language similar to human languages is called as high-level languages.	TRUE	FALSE	-	-	**A**
95	Computers are fast, accurate, reliable and provide huge capacity of storing data	TRUE	FALSE	-	-	**A**
96	Computers can be built into other products.	TRUE	FALSE	-	-	**A**
97	Computers can process _____ of instructions per second.	1,000,000 Millions				**A**
98	Computers operate by counting is called digital computer.	TRUE	FALSE	-	-	**A**
99	Computers play a major part in the manufacture of mobile phones	TRUE	FALSE	-	-	**A**
100	Configuration System	System File	Collection of records	Word length	DOS Command	**A**

101	CPU -	Central Processing Unit				**A**
102	CPU consists of only memory units.	TRUE	FALSE	-	-	**B**
103	CPU is sometimes called the _____ of the computer	Brain	-	-	-	**A**
104	CPU made by _____	Silicon	-	-	-	**A**
105	CPU Stands for Control Processing Unit.	TRUE	FALSE	-	-	**B**
106	CRT -	Cathode Ray Tube				**A**
107	CU -	Control Unit.	-	-	-	**A**
108	DDR	Double Data Rate	Local Area Network	Universal Serial Bus	First generation	**A**
109	DEFRAG command is used to arrange the fragmented files.	TRUE	FALSE	-	-	**A**
110	Digital	One of characteristics of computer	Double Data Rate	First generation	1 and 0	**D**
111	Digital Camera is an Output Unit	TRUE	FALSE	-	-	**B**
112	Digital camera records and its stores photos in_____ form	Analog	Super computer	Digital	Recorder	**C**
113	Diligence	Tiresome and Boredom				**A**
114	DMA -	Direct Memory Access				**A**
115	Double-sided dual-layer DVD, which is commonly used and able to store _____	17 GB of data	-	-	-	**A**
116	DVD -	Digital Versatile Disc or **Digital Video Disc**				**A**
117	DVD can store data up to _____	4.7 GB	-	-	-	**A**
118	DVD can provide a definition of _____	720x480 pixels	-	-	-	**A**
119	DVD was co-developed by _____ , and _____	Sony, Panasonic, Philips, and Toshiba in 1995				**A**
120	DVD-R -	Digital Versatile Disc Recordable				**A**

121	DVD-ROM -	Digital Versatile Disc Read-Only Memory				A
122	DVD-RW -	Digital Versatile Disc (Rewritable Or Erasable)				A
123	Early Computers were very expensive.	TRUE	FALSE	-	-	A
124	EEPROM -	Electrically Erasable Programmable Read-Only Memory				A
125	EEPROM stands for Electrically erasable programmable read only memory.	TRUE	FALSE	-	-	A
126	EPROM -	Erasable Programmable Read-Only Memory.				A
127	Expansion of CRT	Computer Resource Teacher	Combined Login and Telnet	Cathode Ray Tube	Computer Readout Time	C
128	Explain ALU_____	Arithmetic logical unit	Applied Laser Unit	Average Labor Unit	Associative Location Unit	A
129	Explain EEPROM_____	Easily Erasable Programmable Read Only Memory	Electrically erasable programmable read-only memory	Electrically erasable programmable rom only memory	None of the above	B
130	Fifth generation popular advanced technologies of the fifth generation include _____	Artificial intelligence, Quantum computation, Nanotechnology, Parallel processing, etc.				A
131	Fifth Generation the period _____	2010 to till	-	-	-	A
132	First generation	Output device	Vacuum tubes	VLSI	Input device	B
133	First Generation period	1940 to 1956	-	-	-	A
134	Flash memory	Video games	-	-	-	A
135	Floppy disks are made up of nonmagnetic materials.	FALSE	TRUE	-	-	A
136	Floppy drive store data _____	1.44 MB	-	-	-	A
137	FORTRAN is a computer language	TRUE	FALSE	-	-	A
138	Fourth generation	Vacuum tubes	VLSI	Laser	Personal account	B

139	Fourth Generation period _____	1972 to 2010	-	-	-	**A**
140	Functional keys_____	F1 to F12	-	-	-	**A**
141	Graphics tablet input device that enables a user to	hand-draw images				**A**
142	Hard disk, DVD belongs to primary memory	TRUE	FALSE	-	-	**B**
143	HDD -	Hard Disk Drive				**A**
144	High Speed Printer	Dot Matrix Printer	Ink Printer	Plotter	Laser printer	**D**
145	High-level language _____	C++	-	-	-	**A**
146	I/O -	Input/ Output Devices				**A**
147	IC is used in second generation computer.	TRUE	FALSE	-	-	**B**
148	IC means	Integrated Circuit	Industrial Circuit	Integrated Components	Institute Circle	**A**
149	IDE -	Integrated Development Environment				**A**
150	If the NUMLOCK key is turned off the keyboard will not work.	TRUE	FALSE	-	-	**B**
151	In comparison to the computers of the second generation, the size of the computers of the third generation was smaller _____	TRUE	FALSE	-	-	**A**
152	In comparison to the first generation, the size of second generation was smaller _____	TRUE	FALSE	-	-	**A**
153	In computers, SMPS converse AC to DC	TRUE	FALSE	-	-	**A**
154	In earlier days human used their fingers for counting and calculating.	FALSE	TRUE	-	-	**B**
155	In Inkjet printers characters and images are formed from dots.	TRUE	FALSE	-	-	**A**
156	In laser printers, printing is achieved by deflecting laser beam on to _____ surface of a drum.	Photosensitive	-	-	-	**A**
157	In PC_AT systems 8088 processor is used.	TRUE	FALSE	-	-	**B**
158	Input and Output devices are classified as peripheral devices	TRUE	FALSE	-	-	**A**

159	Input device	Graphics tablet	-	-	-	**A**
160	Input unit	Hard disk	Capacity of hard disk	Volatile memory	Joystick	**D**
161	Intel is a leading manufacturer of printers.	TRUE	FALSE	-	-	**B**
162	IRQ -	Interrupt Request				**A**
163	ISA -	Industry Standard Architecture				**A**
164	It is advisable to draw a flowchart in such a way that direction of flow is normally from bottom to top or from right to left.	TRUE	FALSE	-	-	**B**
165	It is possible that computers can do mistake by its own	TRUE	FALSE	-	-	**B**
166	Joy stick	Input device				**A**
167	Joystick can be used to play games and as well as drawing.	TRUE	FALSE	-	-	**A**
168	Joystick is mainly used in _____	playing computer games.				**A**
169	Keyboard	Output device	Liquid Crystal Display	Input device	Joystick	**C**
170	Lady Ada lava lace is the first ever programmer who developed computer programs.	TRUE	FALSE	-	-	**A**
171	Language translators' convent an object program into source program.	TRUE	FALSE	-	-	**B**
172	Laser beam is used in_____ memory device	Pen drive	CD-ROM	Hard disk	RAM	**B**
173	Laser Printer	Output device	Liquid Crystal Display	Input Device	Joystick	**A**
174	Laser printer in low cost device when compared with dot matrix printer	TRUE	FALSE	-	-	**B**
175	Laser Printer is a type of printer which uses pins impacting on ink ribbon to print.	TRUE	FALSE	-	-	**B**
176	Laser printers are high speed impact printer.	TRUE	FALSE	-	-	**B**
177	LCD -	Liquid Crystal Display				**A**

178	LED -	Light Emitting Diode				**A**
179	LED is the abbreviation of Liquid Emitting Display	TRUE	FALSE	-	-	**B**
180	LPT 1	Web browser	Port name	Data type	No limit	**B**
181	Machine language is the only language understood by the computer	TRUE	FALSE	-	-	**A**
182	Magnetic tape is a storage device.	TRUE	FALSE	-	-	**A**
183	Magnetic Tape medium is _____	Flexible Polyester				**A**
184	Main frame computers are used in homes.	TRUE	FALSE	-	-	**B**
185	Main memory is an internal memory.	TRUE	FALSE	-	-	**A**
186	Mainframe computers are powerful than supercomputers.	TRUE	FALSE	-	-	**B**
187	MCA -	Micro Channel Architecture	-	-	-	**A**
188	Memory	Second generation	One of characteristics of computer	1 and 0	First generation	**B**
189	MICR	Output Device	Input Device	Web Browser	No limit	**B**
190	MICR -	Magnetic Ink Character Recognition				**A**
191	MICR is an output device.	TRUE	FALSE	-	-	**B**
192	Microprocessors are the CPUs of personal computers.	TRUE	FALSE	-	-	**A**
193	Modem	Internet	-	-	-	**A**
194	Monitor is commonly used output device sometimes called as __	Visual Display Unit (VDU)				**A**
195	Monitors are connected with the computer are similar in appears to a _____	Television set.	-	-	-	**A**
196	Mother board is the_____ circuit board	Single Layer printed	Multiple layer printed	Integrate circuit	CPU	**B**
197	Mouse is an input device.	TRUE	FALSE	-	-	**A**

198	Mouse is an_____	Input Device	Output device	Control panel	Tools	**A**
199	NIC -	Network Interface Controller				**A**
200	Nowadays, the Monitor can also be used as a TV in homes.	TRUE	FALSE	-	-	**A**
201	Numbers in one system cannot be represented in another system.	TRUE	FALSE	-	-	**B**
202	OCR	Output device	Printer	Input Device	Capacity of Hard disk	**C**
203	OCR -	Optical Character Recognition				**A**
204	OCR recognizes is characters formed using special ink.	TRUE	FALSE	-	-	**B**
205	OMR -	Optical Mark Recognition				**A**
206	OMR stands for Optical Message Reader	TRUE	FALSE	-	-	**B**
207	One byte is equal to 8 bits	TRUE	FALSE	-	-	**A**
208	One can watch movies in a computer.	TRUE	FALSE	-	-	**A**
209	One KB is equal to 1024 bytes.	TRUE	FALSE	-	-	**A**
210	Output Unit	Search Engine	Volatile	Printer	Double Entry System	**C**
211	Pascal has been honored with a language name for his inventions.	TRUE	FALSE	-	-	**A**
212	PC/XT is superior to PC/AT	TRUE	FALSE	-	-	**B**
213	PC_XT Processors no _____	5600	9844	3877	8088	**D**
214	PCs -	Personal Computers				**A**
215	Pen drive storage capacity of the pen drive generally ranges from ___	2 GB to 128 GB				**A**
216	Pen drive also called _____	USB flash drive, thumb drive or a jump drive				**A**
217	Physical parts of a computer such as monitor, mouse, CPU are known as software.	TRUE	FALSE	-	-	**B**
218	Plotter differs from printers in that they draw lines using _____	Pens	-	-	-	**A**

219	Plotter is a _____that draws shapes on paper based on commands from a computer.	output device	-	-	-	**A**
220	Plotter is a graphical input Device	FALSE	TRUE	-	-	**A**
221	Plotter is having pens to draw figures.	TRUE	FALSE	-	-	**A**
222	Plotter is used in CAD application	TRUE	FALSE	-	-	**A**
223	Plotters are more expensive than printers	TRUE	FALSE	-	-	**A**
224	Plotters They used in engineering applications - CAD.	TRUE	FALSE	-	-	**A**
225	Polycarbonate is used to make CD_ROM	TRUE	FALSE	-	-	**A**
226	POST (Power on Self-Test) indicates System Booting.	TRUE	FALSE	-	-	**A**
227	Press and release of the primary mouse button is called_____	CLICK	SCROLL	SELECT	ENTER	**A**
228	Primary memory also called _____	Temporary memory or the main memory				**A**
229	Primary Memory is a volatile memory	TRUE	FALSE	-	-	**A**
230	Primary memory is a_____	Non-Volatile memory	Permanent memory	Volatile memory	Auxiliary memory	**C**
231	Primary storage is located on the _____	motherboard	-	-	-	**A**
232	Printer is an _____	Input Device	Hard Disk	Control Unit	Output Device	**D**
233	Programs are a set of instructions prepared by humans to run a computer.	TRUE	FALSE	-	-	**A**
234	PROM -	Programmable Read-Only Memory				**A**
235	RAM	Non-Volatile	Volatile	Printer	Second Generation	**B**
236	RAM -	Random Access Memory				**A**
237	RAM is a secondary memory	TRUE	FALSE	-	-	**B**
238	RAM is a volatile memory.	TRUE	FALSE	-	-	**A**
239	RAM Memory Called _____	Volatile OR Temporarily Memory				**A**

240	ROM -	Local Area Network	Read Only Memory	Double Data Rate	Red Ray Disc	**B**
241	ROM is a volatile memory.	TRUE	FALSE	-	-	**B**
242	ROM, Memory Called _____	Non-Volatile memory	-	-	-	**A**
243	Second generation computers used vacuum tubes.	FALSE	TRUE	-	-	**A**
244	Second generation of computers uses _____ as the components	Transistors	Printers	Modem	Fax	**A**
245	Second Generation period _____	1956 to 1963	-	-	-	**A**
246	Secondary Memory	Hard disk	RAM	1 and 0	Read-only Memory	**A**
247	Secondary memory also called the _____	Permanent memory or the auxiliary memory				**A**
248	Similar to the Chinese, Japanese also used Abacus for mathematical calculations.	TRUE	FALSE	-	-	**A**
249	SMPS-	Switched Mode Power Supply				**A**
250	SMPS provides DC input	TRUE	FALSE	-	-	**B**
251	SMPS stands for Simple Mode Power Supply	TRUE	FALSE	-	-	**B**
252	SSD -	Solid-State Drives				**A**
253	SSD are available with storage capacities ranging from _____	32 gigabytes up to 8 terabytes				**A**
254	SSD is made up of _____	NAND Flash Memory Chips				**A**
255	Standard keyboard: The standard keyboards have their basic layout. The average number of keys on a regular keyboard is ___	104	-	-	-	**A**
256	Storing capacity of mini floppy 5 1/4" DSHD is	1.2 MB	1.5 MB	1.7 MB	1.3 MB	**A**
257	Supercomputer	Oil and gas exploration				**A**
258	TFT -	Thin Film Transistors				**A**

259	The _____is the _____ of the computer	CPU , Brain	-	-	-	**A**
260	The _____ is the computer's main circuit board	Motherboard	-	-	-	**A**
261	The _____ are not performed by the Computer.	Storage and retrieval operations	Logic operations	Arithmetic operations	Printing documents	**D**
262	The Blu-ray high definition contains _____	1920 X 1080 pixel resolution				**A**
263	The copy cost of a Dot Matrix Printer is effectively less when compared to a Laser printer.	TRUE	FALSE	-	-	**A**
264	The CPU speed of a mainframe computer ranges from one and ten million interactions per second	TRUE	FALSE	-	-	**B**
265	The data entered into computer is directly stored in the hard disk	TRUE	FALSE	-	-	**B**
266	The expansion of IBM is Integrated Business Machines.	TRUE	FALSE	-	-	**B**
267	The first CD was created at a Philips factory on _____	August 17, 1982.				**A**
268	The first electronic computer was named as ABC.	TRUE	FALSE	-	-	**A**
269	The first generation computers were developed by _____	Vacuum tube or thermionic valve machine				**A**
270	The first generation computers worked on _____	Binary-Coded Concept				**A**
271	The fourth generation computers were developed by using _____	Microprocessors Technology				**A**
272	The function of output is to present processed data to the user.	TRUE	FALSE	-	-	**A**
273	The functions attached to the keys F1 to F12 are universal.	TRUE	FALSE	-	-	**B**
274	The hard drive is _____	Long-term storage				**A**
275	The Indian made super computer is popularly known as PARAM.	TRUE	FALSE	-	-	**A**
276	The Japanese Abacus slightly differed from the Chinese Abacus in its appearance.	TRUE	FALSE	-	-	**A**
277	The keyboards contain _____	101 keys or 104 keys.				**A**
278	The mixture of analog and digital computers are called as Hybrid Computers.	TRUE	FALSE	-	-	**A**

279	The monitor of a computer can be called as input device as well as an output device.	TRUE	FALSE	-	-	**B**
280	The Mouse is used as a _____	Pointing device				**A**
281	The output displayed on the monitor is called _____	Soft copy output.				**A**
282	The output produced on a computer is called _____	Hard copy output.				**A**
283	The Output shown on the computer monitor is called	VDU	Hardcopy	Screen Copy	Softcopy	**D**
284	The plotter is used in the_____ application	CAD	Excel	MS Word	Writer	**A**
285	The printing quality of Dot Matrix Printer looks better when compared to a laser printer.	TRUE	FALSE	-	-	**B**
286	The scanner is a _____ which works more like a photocopy machine.	Input device	-	-	-	**A**
287	The second generation computers were developed by using ___	Transistor Technology				**A**
288	The Secondary storage media can be _____	Fixed or removable.				**A**
289	The second-generation computers were developed by using ___	Transistors	-	-	-	**A**
290	The smallest dot that can be displayed is called _____	Pixel	-	-	-	**A**
291	The smallest portion that can be addressed by a computer on its screen is called pixel.	TRUE	FALSE	-	-	**A**
292	The Speed of a computer is measured in the units of Hertz (Hz).	TRUE	FALSE	-	-	**A**
293	The speed of the dot matrix printer is expressed as	CPS	PPM	GB	HZ	**A**
294	The storage capacity of Compact Disc (CD) is	1.44 mb	700 mb	600 mb	4.7 GB	**B**
295	The term GIGO is related to _____	Speed	Accuracy	Reliability	Automatic	**B**
296	The third generation computer consumed less power and also generated less heat. _____	TRUE	FALSE	-	-	**A**
297	The third generation computers were developed by using the ___	Integrated Circuit (IC) technology				**A**
298	The transfer of data from a CPU to the peripheral devices of a computer is achieved through computer parts.	TRUE	FALSE	-	-	**A**

299	Third generation computers produced great heat.	FALSE	TRUE	-	-	**A**
300	Third Generation period _____	1963 to 1971	-	-	-	**A**
301	Today, we are using super computers in homes	TRUE	FALSE	-	-	**B**
302	Track is divided into sectors	TRUE	FALSE	-	-	**A**
303	Transformation of input to output is performed by _____	CPU - (Central Processing Unit)				**A**
304	Transistor	First Generation	Second Generation	Search Engine	Primary memory	**B**
305	USB -	Universal Serial Bus				**A**
306	USB enables parallel communication	TRUE	FALSE	-	-	**B**
307	USB hubs can be connected up to_____ peripherals to a single usb port	127	220	150	200	**A**
308	USB is expanded as	Universal Side Bus	Universal Serial Bus	Updated System Bus	Universal System Bus	**B**
309	Vacuum Tube	Double Date Rate	First generation	One of characteristics of computer	1 and 0	**B**
310	VDU -	Visual Display Unit				**A**
311	VDU is the computer monitor	TRUE	FALSE	-	-	**A**
312	Versatility	Accuracy and efficiency				**A**
313	Versatility refers to the capability of a computer to perform different kinds of works with same accuracy and efficiency	TRUE	FALSE	-	-	**A**
314	VLSI	Local Area Network	Universal Serial Bus	Fourth Generation	Second Generation	**C**
315	Volatile	Search engine	Primary memory	Second Generation	Collection of records	**B**
316	What type of computers are client computers (most of the time) in a client server system?	Mainframe	Mini-computer	Microcomputer	PDA	**C**
317	What type of device is a camera	Input	Output	Memory	Both(a) & (b)	**A**

318	Whenever a Floppy or Hard drive is formatted the existing contents will get erased.	TRUE	FALSE	-	-	**A**
319	Where are saved files stored in the computer	RAM	Cache	Hard disk	ROM	**C**
320	Where is RAM located	Expansion board	External drive	Motherboard	All the above	**C**
321	Which computer system supporting up to 250 users simultaneously	Super Computer	Mini Computer	Macro computer	Digital	**B**
322	Which is an odd one	Inkjet printer	CRT Monitor	Dot Matrix printer	Laser printer	**B**
323	Which memory device or storage medium that stores information temporarily?	RAM	ROM	PROM	EPROM	**A**
324	Which of the following groups consist of only Input devices?	Mouse, Keyboard, Monitor	Mouse, Scanner, Projector	Mouse, Keyboard, Plotter	Mouse, Keyboard, Scanner	**D**
325	Which of the following is a digital device?	Thermometer	Slide Rule	Dial gauge	PC	**D**
326	Which of the following is a storage device with the larger capacity	DVD	CD-ROM	Hard disk	Floppy disk	**C**
327	Which of the following is not a type of Computer on the basis of operation?	Remote	Hybrid	Analog.	Digital	**A**
328	Which of the following is not an output unit?	Joystick	Monitor	Laser printer	Ink-jet printer	**A**
329	Which of the following is Read and Write memory?	ROM	EPROM	EEPROM	RAM	**D**
330	Which of the following represents the primary memory?	Hard disk	Pen drive	CD-ROM	RAM chips	**D**
331	Which of the following the best quality photo printer	Inkjet	Laser	Line	Dot Matrix	**A**
332	Which one stores more data than a DVD?	CD ROM	Floppy Disc	Blue Ray Disc	Red Ray Disc	**C**
333	Who is the inventor of “Difference Engine”?	Allen Turing	Charles Babbage	Simmer Cray	Augusta Adaming	**B**
334	X-Y plotter is an output device.	TRUE	FALSE	-	-	**A**
335	XT _____	Extended Technology or Extended PC				**A**
336	Zip drive unique is having capability to hold up to _____	100 MB of data or 250 MB				**A**

PREVIOUS YEAR QUESTION PAPERS WITH ANSWERS

-4-

VI Write answers in detail: **6 x 5=30**

1.(a) Describe the various types of computers based on working principle and size. **(P-15)**

(Or)

(b) Discuss the various types of Computer Networks. **(P-165)**

2. (a) What is Linux? What are the features of Linux? **(P-57)**

(Or)

(b) Describe the various keyboard accelerators of windows. **(P-52)**

3. (a) Discuss the various ways of creating a table in open office writer. **(P-81)**

(Or)

(b) Describe the procedure to create the web page using MS-word. **(P-73)**

4. (a) How to sort and filter the data in Calc? Discuss it. **(P-120)**

(Or)

(b) Discuss briefly about creating and formatting charts in MS Excel. **(P-116)**

5. (a) Describe the procedure to create the report using report design in Open office-base. **(P-146)**

(Or)

(b) Discuss briefly about adding audio and video in Power point presentation. **(P-154)**

6. (a) Define Web browser. Discuss the types of web browser and its functions. **(P-173)**

(Or)

(b) Describe briefly about UC browsers and Skype. **(P-183)**

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944

March 2022

Time-Two hours ***(Maximum Marks: 100)***

[N.B: Answer all Questions]

I Fill in the blanks: **Marks: 10 x 1 = 10**

1. In laser printers, printing is achieved by deflecting laser beam on to **Photosensitive** surface of a drum.
2. **operating System** is computer software designed to operate the computer hardware and to provide platform for running applications software.
3. The maximum length of a filename in Linux is **255** Characters.
4. **Static** report contains the data in the selected fields at the time the report was created in open office - Base.
5. Word includes a series of predefined graphics called **Clip art** that can be inserted into a Word document.
6. The process of identifying specific rows and columns so that certain columns and rows are always visible on the screen is called **Freezing Panes.**
7. **Memo** data type is used to store text that is too long to be stored in a text field.
8. The terms DNS Stands for **Domain Name System**
9. **Slide transition** feature used to apply motion effects to different objects of a slide in open office - Impress.
10. If you have a large number of slides in your presentation, you may find it more convenient to use the **Slide Sorter** to view all slides and change their positions.

II Match the following: **10 x 1=10**

1. Open office -Impress	a	Redo and Undo **(6)**
2. Filter	b	Design template **(1)**
3. Open office -writer	c	.gov.org **(8)**
4. Note pad	d	F9 **(10)**
5. Page layout	e	Slide number **(7)**
6. Quick access Toolbar	f	txt **(4)**
7. Footer	g	Pipeline **(9)**
8. Domain code	h	Workspace **(2)**
9. Ellipse motion	I	odt **(3)**
10. Update formula	j	Orientation **(5)**

[Turn over...

-2-

III Choose the best answer: **10 x 1=10**

1. Which of the following groups consist of only Input devices?
   a. Mouse, Keyboard, Monitor b. Mouse, Scanner, Projector
   c. Mouse, Keyboard, Plotter **d. Mouse, Keyboard, Scanner**
2. What type of computers are client computers (most of the time) in a client server system?
   a. Mainframe b. Mini-computer **c. Microcomputer** d. PDA
3. What is the purpose of the Run option on the Start Menu?
   a. It is used to launch the Internet browser.
   b. It is used to open the Internet Explorer.
   c. It can be used to open any program. d. It is used to edit text files
4. What does "chmod 755 file" accomplish?
   a. Makes the file read/write/execute by the owner, read/execute by group and other
   b. Makes the file execute by the owner, execute/read by group and other
   c. Makes the file write/execute by the owner, execute by group and other
   d. Makes the file read by the owner, execute by group and other.
5. From which menu you can insert Header and Footer In Linux?
   a. Insert Menu b. View Menu c. Format Menu d. Tools Menu
6. Which function will you use to enter current time in a worksheet cell?
   a. =today() **b. =now()** c. =time() d. current Time()
7. Which of the following function will use to find the highest number in a series of number in Linux
   a. MAX(B1:B3) b. MAXIMUM (B1:B3)
   c. HIGH (B1:B3) d. HIGHEST(B1:B3)
8. The expression builder is an access tool that controls an expression for entering an expression
   a. Table **b. Box** c. Cell d. Palette
9. Web spiders and crawlers are examples of
   a. Browsers **b. Search Engines** c. HTML Programs d. Flames
10. You can embed a organization chart in a slide by
    a. Clicking the object command on the edit menu
    b. Clicking the insert new slide button on the standard toolbar, then double clicking the organization chart auto layout
    c. Clicking the MS organization chart button on the formatting toolbar
    d. Clicking the MS organization chart button on the standard toolbar

-3-

IV Say TRUE or FALSE **10 x 1 = 10**

1. Arithmetic and language unit is also known as brain of computer **(F)**
2. A DVD is an example of an optical disc. **(T)**
3. Notepad is a basic text editor that can be used to create simple documents. **(T)**
4. pwd command is used to change the password. **(F)**
5. "Ctrl+Down Arrow" is used to move the cursor one paragraph down. **(T)**
6. "Autocorrect" is a feature of Microsoft Excel 2007 that makes entering a series of heading easier by logically repeating and extending the series. **(T)**
7. F7 is used for Spell check in open office -Calc **(T)**
8. If you add a recipient's name using "CC" the name is not visible to other recipients of the message. **(T)**
9. The Linux OS is not affected by malware. **(F)**
10. A "Clip" may be a single media file, including art, sound, animation or movies. **(T)**

V. Write short answers for the following: **15 x 2 = 30**

1. How will you classify computer systems? **(P-14)**
2. Define Computer Networks. **(P-166)**
3. How can you add more icons to the desktop in windows? **(P-50)**
4. What are the components of Linux? **(P-57)**
5. Write the steps to insert header and footer in the MS Word. **(P-154)**
6. What are the key features of Open Office writer? **(P-85)**
7. Is it possible to prevent someone from copying the cell from your worksheet? Justify. **(P-103)**
8. What is IF function in Calc? **(P-94)**
9. How to create a simple query in Access 2010? **(P-113)**
10. What is index? How to create single field index In MS Access? **(P-113)**
11. How can you add bullets and numbers in impress? **(P-161)**
12. Write the steps to set line spacing in a power point presentation. **(P-157)**
13. Define Search engine. **(P-174)**
14. What are the benefits of blogs in the education field? **(P-170)**
15. Differentiate Primary and secondary memory. **(P-25)** **[Turn over...**

-4-

VI Write answers in detail: **6 x 5 =30**

1. (a) With a neat block diagram, explain the working principle of a computer. **(P-12)**

(Or)

(b) Write the steps to install a printer. **(P-36)**

2. (a) Write the steps to create user accounts in Windows operating systems. **(P-47)**

(Or)

(b) What are the features of Linux operating Systems. **(P-57)**

3. (a) Write the steps to open / create a word document. Explain copy, paste operation with suitable examples. **(P-70)**

(Or)

(b) With suitable example explain the drawing tools in OpenOffice Writer. **(P-84)**

4. (a) With an example explain the steps to create a Spreadsheet and Chart for the data. **(P-116)**

(Or)

(b) Write about Mathematical Operations in Spreadsheet. **(P-119)**

5. (a) Write the steps to create a table in MS Access. **(P-150)**

(Or)

(b) Write the steps to create a report in OpenOffice Base. **(P-137)**

6. (a) Write the steps to create a presentation with header and footer with title and author, slide number, date included in all slides **(P-154)**

(Or)

(b) Write the steps to scan an image using scanner. **(P-185)**

***

333 **Register No.:**

October 2022

Time – Two hours **(Maximum Marks: 100)**

[N.B: Answer all Questions.] **Marks**

I. Fill in the blanks: **10 x 1 =10**

1. **Transistor technology** are used in the second generation of computers.
2. SSD is made up of **NAND Flash Memory Chips**
3. Unix is an example for **Operating System**.
4. Quick Launch toolbar is used to add **Taskbar.**
5. Microsoft Word is **Word predecessor** Software.
6. **CD** is the Linux command used to change the directory.
7. **Writer** is the OpenOffice word processor.
8. **Spreadsheet** program lets to use an electronic ledger sheet for financial analysis.
9. The basic unit of any PowerPoint presentation is **Slide**
10. bcc is used to In **Hide Recipients** email

II. Match the following: **10 x 1 =10**

1. Versatility	a. OpenOffice Base **(3)**
2. ISDN	b. Spreadsheet **(9)**
3. Open-source DBMS	c. Accuracy and efficiency **(1)**
4. Slideshow	d. Operating system **(5)**
5. Linux	e. Notes Pane **(10)**
6. Microsoft word	f. Google Sheet **(8)**
7. Transition	g. Impress **(4)**
8. Google App	h. Word processor **(6)**
9. Cell	I. Animation **(7)**
10. Comments	j. Broadband **(2)**

[Turn over…

-2-

III. Choose the best answer: **10 x 1 =10**

1. Which of the following is not a type of Computer on the basis of operation?
   a. Remote b: Hybrid c. Analog d. Digital
2. cp command in Linux is used to
   a. change page b. change directory
   c. change mode **d. copy**
3. Dot or other symbol positioned at the beginning of a paragraph is called
   a. bullet b. logo c. cell d. target
4. Ctrl+Z means
   a. Undo last action b. redo the last action
   c. add the new page d. paste the contents from clipboard
5. Which function in Excel is used to get how many numeric entries are there?
   a. NUM **b. COUNT** c. SUM d. CHKSUM
6. Text operator in OpenOffice Calc is
   a. + b. % c. **&** d. A
7. Which of the following is not a type of MS Access database object?
   a. Table b. Form
   c. Word sheet d. Modules
8. Clipart in power point can be included by using the following menu.
   a. File b. Animation
   c. Insert d. View
9. Which of the OpenOffice suite program is used to create Worksheet?
   a. Calc b. Writer c. Impress d. Draw
10. Which of the following icon is used to add an attachment to an email?
    a. Stationery icon **b. Paper clip icon**
    C. GIF icon d. Emoji icon

-3-

IV. Say TRUE or FALSE: **10 × 1 = 10**

1. SMPS provides DC input. **(F)**
2. The menu bar contains list of commands and options. **(T)**
3. The space left between the margin and the start of a paragraph is Indentation. **(T)**
4. dBase is part of OpenOffice Suite. **(F)**
5. Google Slides can be used offline. **(T)**
6. Auto fill feature in OpenOffice Calc is used to fill a series of numbers such as 2,4,6,8 and so on. **(T)**
7. OpenOffice Base will not operate with other databases. **(F)**
8. A form is a front end for date entry and editing. **(T)**
9. OpenOffice Impress is not a free presentation software. **(F)**
10. Trash option helps you to save unfinished email without sending it. **(F)**

V. Write short answers for any Fifteen Questions from the following: **15 x 2 = 30**

1. What is AT/XT processor? **(P-18)**
2. What is NIC card? **(P-31)**
3. Define operating system**. (P-40)**
4. What is thread? **(P-58)**
5. What is layout settings in word? **(P-70)**
6. What is cell reference? **(P-90)**
7. What is OpenOffice Calc Workbook and Worksheet? **(P-117)**
8. What is query in OpenOffice Base? **(P-126)**
9. What are the main parts of Impress Window? **(P-161)**
10. What is URL? **(P-171)**
11. How to find records in OpenOffice Base? **(P-144)**
12. Write the applications of Google Form. **(P-184)**
13. What is header and footer? **(P-76)**
14. How to include new slide in a presentation? **(P-157)**
15. How to change the background of slides? **(P-156)**
16. What is master template? **(P-157)**
17. What is Computer network? **(P-166)**
18. Define Browser. **(P-173)**

[Turn over...

-4-

VI Write answers in detail: **6 x 5 =30**

1.(a) What are the components of CPU? Explain. **(P-13)**

(Or)

(b) Explain about the memory units. **(P-20)**

2.(a) Explain mail merge. **(P-78)**

(Or)

(b) Explain about the formatting of documents in Writer. **(P-69)**

3.(a) Write the steps to create and print chart in Calc. **(P-115)**

(Or)

(b) Explain how to set formulae in Excel. **(P-119)**

4.(a) Explain about importing data from other databases in Access. **(P-129)**

(Or)

(b)Explain about creating of reports in Base. **(P-137)**

5.(a) Write the steps for setting Animations in MS Power Point. **(P-154)**

(Or)

(b) Explain about printing handouts in Impress. **(P-159)**

6.(a) Explain about the applications of Google Forms and Google Sheets. **(P-184)**

(Or)

(b) Explain the different types of Computer Networks. **(P-167)**

***

303 Register No.:

February 2023

Time – Two hours **(Maximum Marks: 100)**

[N.B: Answer all Questions.]

Marks

II. Fill in the blanks: **10 x 1 =10**

1. Transformation of input to output performed by **CPU - (Central Processing Unit)**
2. **Folder** is a named location on a disk where files are stored
3. **Wall** command in Linux system is used to write a message to all users.
4. **Insert** Tab is used to add a table to a document.
5. Long text can be broken into many line within cell by **Wrap Text** option in formatting.
6. OpenOffice keeps a list of recently opened files under the **File** menu
7. In Access, **Tables** are used to store the data.
8. **Static** report contains the data in the selected fields at the time the report was created, in openOffice base.
9. In MS Power Point **F5** key is used to run the slide show from the beginning.
10. Cc in email is **Carbon Copy**

II. Match the following: **10 x 1 =10**

1. Joy stick	a calculator **(9)**
2. Android	b mail merge **(5)**
3. Cd	c clipboard **(4)**
4. Copy & Paste	d ODBC **(7)**
5. Word	e change directory **(3)**
6. Record	f Operating system **(2)**
7. Base	g network device **(10)**
8. Impress	h input device **(1)**
9. Calc	I collection of field **(6)**
10. Hub	j slide Transition **(8)**

-2-

III. Choose the best answer: **10 x 1 =10**

1 The _____ are not performed by the Computer.
a. storage and retrieval operations b. logic operations
c. arithmetic operations **d. printing of documents**

2. File _____ shrinks the size of a file so it requires less storage space.
a. compression b. defragmenting c. synthesizing d. scanning

3. Which one is not a tab in Microsoft Word 2010?
a. File b. Insert c. Home **d. Design**

4. Which of the following file extension is not compatible with OpenOffice Writer?
a. txt b. doc c. sxw **d. csv**

5. Page border in Excel; can be set
a. from border tab in format cells dialog box
c. from line style in drawing toolbar
b. from border tool in formatting toolbar
d. from Insert tab

6. The place where accessories are connected in Computer is____
a. Port b. Ring c. Bus d. Zip

7. The size of yes/no field is always_____ in OpenOffice base.
a. 1 bit b. 1 byte c. 1 character d. 1 kB

8. Which tool do you use to create a query object?
a. Table query wizard **b. Simple query wizard**
c. Simple filer wizard d. Database wizard

9. The file that consists of readymade styles that we can easily use for our presentation is known as:
a. Pre formatting **b. Template** c. Wizard d. AutoStyle

10. Which of the following command is used to count the total number of lines, words, and characters contained in a file?
a. wc b. wcount c. countw d. cw

-3-

IV. Say TRUE or FALSE: **10 × 1 = 10**

1. Auxiliary memory is popularly known as primary memory. **(F)**
2. When a file is moved to recycle bin, it will be immediately deleted from the computer. **(F)**
3. Directory is a type of file in Linux. **(T)**
4. Pressing the Printscreen key on your keyboard takes a 'picture' of what is displayed on the screen. **(T)**
5. Nested tables cannot be created in OpenOffice writer. **(F)**
6. If a formula consisting of relative references is copied from one cell to another, it will still be the same. **(F)**
7. In Excel, you can view the worksheet page wise with page break. **(T)**
8. In Excel, logical values are represented by numbers. **(T)**
9. In Impress, placeholders are areas on the slide that are enclosed by dotted borders. **(T)**
10. A network location of a web page is a URL. **(T)**

V. Write short answers for any Fifteen Questions from the Following:
15 x 2 = 30

1. List the types of computer on the basis of working? **(P-15)**
2. Differentiate ROM and RAM? **(P-25)**
3. Define operating System. What is multi-Tasking operating System? **(P-40, 45**)
4. What is Quick Launch tool bar? **(P-49)**
5. What are the components of Linux? **(P-57)**
6. How the text can be aligned in a writer? **(P-74)**
7. How to insert a table in MS Word? **(P-81)**
8. How to set the page break in MS Word? **(P-71)**
9. What is relative cell reference? **(P-90)**
10. What are the types of spread Sheet? **(P-114**)
11. What is a cell in calc? how it is addressed? **(P-89)**
12. What are the types of reports in Base? **P-135)**
13. How to create a database? **(P-148)**
14. What is a query? **(P-126)**
15. What is master Template in Impress? **(P-157**)
16. How to add text to the presentation? **(P-159**)
17. What is topology? **(P-169)**
18. Differentiate LAN and WAN? **(P-169)**

[Turn over...

-4-

VI Write answers in detail: **6 x 5 =30**

1. a). Explain about Motherboard and SMPS. **(P-26)**

   (Or)

   b). Explain connecting ports in computer. **(P-28)**

2. a) Write the steps to add header and footer in a word document in MS Word. **(P-77)**

   (Or)

   b). Explain about creating tables in OpenOffice Writer. **(P-81)**

3. a) Write the steps to apply border and shading to table in MS Excel.? **(P-118)**

   (Or)

   b). How to work with multiple sheets in Calc. **(P-118)**

4. a). Write the steps to create queries in Base **(P-134)**

   (Or)

   b). Explain in detail about adding transition effect to the presentation in MS PowerPoint. **(P-153)**

5. a). Explain the operations that can be performed on an e-mail. **(P-177)**

   (or)

   b). Write the applications of Google Sheets and Explain. **(P-185)**

***

2652 **Register No.:**

August 2023

Time – Two hours **(Maximum Marks: 100)**

[N.B: Answer all Questions.]

Marks

I. Fill in the blanks: **10 x 1 =10**

1. The second-generation computers were developed by using **Transistors**
2. A **Network interface card (NIC)** is a computer hardware component that connects a computer to a computer network.
3. **Operating System (OS)** is a program that acts as an interface between the user and the hardware.
4. A **Dialog Box** is a temporary window that an application creates to retrieve user input.
5. A **line spacing** is the distance between two lines in MS Word.
6. **AutoCorrect** is a feature used mainly to make automatic corrections during document typing in Writer.
7. **Spreadsheet** is a collection of cells organized in rows and columns in Calc.
8. The default extension of OpenOffice Base file is **.odb.**
9. In PowerPoint, the object on the slide used to hold the text are called as **Placeholders**
10. BCC in email stands for **Blind Carbon Copy**

II. Match the following: **10 x 1 =10**

1.	Supercomputer	a. Website address **(10)**
2.	Input device	b. Redo **(5)**
3.	RTOS	c. A1 **(6)**
4.	Rmdir	d. Oil and gas exploration **(1)**
5.	Ctrl+Y	e. Database **(7)**
6.	Absolute cell reference	f. Bing **(9)**
7.	Base	g. Robot **(3)**
8.	OpenOffice Impress	h. Graphics tablet **(2)**
9.	Search Engine	i. Remove directory **(4)**
10.	URL	j. Presentation software **(8)**

-2-

III. Choose the best answer: **10 x 1 =10**

1. Which memory device or storage medium that stores information temporarily?
   a. RAM b. ROM c. PROM d. EPROM

2. 1024 Bytes is equal to
   a. 1 GB **b. 1 MB** c. 1 KB d. 1 TB

3. Which of the following is an area at the bottom of a primary window that displays information about the current window's state?
   a. Status Bar b. scroll bar c. menu bar d. title bar

4. Which command is used to move a file or a directory from one location to another in Linux?
   a. Move **b. mv** c. CP d. wc

5. Where the ruler is located in MS-Word?
   a. View b. review c. design d. insert

6. Which of the following means the page is oriented horizontally in OpenOffice Writer?
   a. Landscape b. Portrait c. Margin d. Indent

7. Which shortcut key is used to go to the formula tab in MS Excel?
   a. Alt+M b. Alt+F c. Ctrl+F d. Ctrl+M

8. In OpenOffice Calc, colon represents which of the following. operator.
   a. Arithmetic operator **b. Range Reference Operator**
   c. Text operator d. Relational operator

9. In a presentation of PowerPoint, the special effects used to introduce slides are known as?
   a. Animations b. Effects **c. Transition** d. annotations

10. Which of the following is not a social networking site?
    a . Youtube b. Whatsapp c. Linkedin **d. AOL**

-3-

IV. Say TRUE or FALSE: **10 × 1 = 10**

1. Versatility refers to the capability of a computer to perform different kinds of works with same accuracy and efficiency. **(T)**
2. EEPROM stands for Electrically erasable programmable read only memory. **(T)**
3. cp command is used to change the current directory. **(F)**
4. Booting is the process of starting a computer. **(T)**
5. Regular is not a font style in MS Word. **(F)**
6. Ctrl+H is a keyboard shortcut key to center cell contents in Excel. **(F)**
7. Formula should begin with an = sign in Calc. **(T)**
8. In Base, a field is an attribute of a record in a database table. **(T)**
9. Blank slide is the default standard layout in PowerPoint. **(F)**
10. A tablet is a portable computing device with a larger screen than a Smartphone **(T)**

V. Write short answers for any Fifteen Questions from the following: **15 x 2 = 30**

1. List out the the applications of computer? **(P-7)**
2. Write the difference between XT and AT systems? **(P-19)**
3. Write about device management of operating system? **(P-41)**
4. What are the types of booting? **(P-46)**
5. What is the purpose of wall command in Linux? **(P-62)**
6. Write the steps to change page size in MS word? **(P-71)**
7. What is the use of clipboard in MS word? **(P-73)**
8. How to add styles to document in Writer? **(P-81)**
9. Mention the simplest method of copy paste in MS Excel? **(P-103)**
10. Write the simple steps to create pivot table in MS Excel? **(P-109)**
11. What is the purpose of text operator in Calc? **(P-118)**
12. How to create a new table in a new database in MS Access? **(P-127)**
13. What is dynamic report in Base? **(P-136)**
14. How to change slide layout in MS PowerPoint? **(P-156)**
15. How text can be added to the presentation in PowerPoint? **(P-159)**
16. How to create slide masters in Impress? **(P-162)**
17. Define web browser? **(P-173)**
18. What is WAN? **(P-168)**

[Turn over...

-4-

VI. Write answers in detail: **Marks: 6 x 5 = 30**

1.(a) Explain about the working principle of computer with a neat diagram. **(P-12)**

(or)

(b) Explain about the components of CPU. **(P-13)**

2.(a) Explain about the functions of OS. **(P-40)**

(or)

(b) Explain the following Linux commands. **(P-61)**

(i) sort (ii) pwd (iii) who (iv) mkdir (v) rmdir

3. (α) How will you create table of contents for books using MS-Word? **(P-78)**

(or)

(b) Write the steps for converting files to different formats. **(P-73)**

4.(a) Explain about creating charts and printing charts using OpenOffice Calc. **(P-115)**

(or)

(b) Explain about creating queries and creating reports using OpenOffice Base. **(P-134)**

5.(α) How to set animation in MS-PowerPoint? Explain. **(P-154)**

(or)

(b) Explain about slide transition. **(P-155)**

6.(a) Explain the steps to create an e-mail ID. **(P-180)**

(or)

(b) What is data communication? Explain the various types of computer networks. **(P-166)**

***

Register No:

2783

February 2024

Time-Two Hours **(Maximum Marks: 100)**

[N.B: Answer all Questions.]

I. Fill in the blanks: **Marks: 10 x 1 = 10**

1. **ASCII** is a character encoding standard for electronic communication.
2. **SMPS** converts AC power from an electrical outlet to the DC power need by the system.
3. The system tray appears on the right side of the **Taskbar**
4. **Diff** command compares files and shows where it differs.
5. In MS-Word, **Ctrl + N** is the shortcut key used for opening a new file.
6. Picture option is available in the **Insert** menu in MS-PowerPoint.
7. **10** types of charts are available in OpenOffice Calc.
8. The default extension of OpenOffice Base is .**odb**.
9. Slide transition of OpenOffice Impress is available in the menu **Slide show.**
10. A collection of interconnected network is called **Internet.**

II. Match the following: **Marks: 10 x 1 = 10**

1. Diligence	a	Operating System **(9)**
2. OpenOffice Calc	b	OpenOffice Base **(3)**
3. Database	c	Row in Column **(5)**
4. cp command in Linux	d	Primary Memory **(8)**
5. Transpose	e	Internet Browser **(7)**
6. Slide Transition	f	Tiresome and Boredom **(1)**
7. Edge	g	Envelop **(10)**
8. ROM	h	Spreadsheet **(2)**
9. Linux	i	Animation **(6)**
10. Mail Merge	j	Duplicate files **(4)**

[Turn over...

2-

II. Choose the best answer: **Marks: 10 x 1 = 10**

1.Maximum length of the filename in Linux is _____

(a) 32 bytes (b) 64 bytes (c) 125 bytes **(d) 255 bytes**

2.A list of instructions used by a computer is called as

(a) Language (b) Text **(c) Program** (d) Output

3.The default extension of Calc file is _____

(a).odf (b).odw **(c).ods** (d).odcalc

4.Subscript, Superscript, Strikethrough in MS-Word are also known as

(a) Font face (b) Font style **(c) Font Effects** (d) Font Format

5.We can MS-Word by selecting _____

(a) No Line **(b) No Outline** (c) White line (d) No Border

6.A web address is also called as

(a) URL (b) ULR (c) RLU (d) LUR

7._____ is the word processor component of OpenOffice.org.

(a) Impress (b) Calc (c) Base **(d) Writer**

8.Which of the following is not an option when printing handouts?

(a) Six slides per page **(b) Five slides per page**

(c) Three slides per page (d) Two slides per page

9.In Base, macros is found in _____

(a) File Menu **(b) Tool menu** (c) Data Menu (d) Insert Menu

10. A wireless technology built-in electronic gadget used for exchange data over a short distance is _____

(a) Bluetooth (b) WiFi (c) Modem (d) USB

-3-

IV. Say TRUE or FALSE: **Marks: 10 x 1 = 10**

1. The kill command is used to terminate the processes without logout or reboot the system. **(T)**
2. Table and Forms cannot be created by both Wizard and Design View. **(F)**
3. Bridges are network layer devices. **(F)**
4. Calc cannot be used for commercial purpose. **(F)**
5. The shortcut key Ctrl+N is used to apply center alignment to a paragraph. **(F)**
6. Field length does not appear when you open the table in the table design view in MS-Access. **(T)**
7. Laser Printer is a type of printer which uses pins impacting on ink ribbon to print. **(F)**
8. The transfer of data from a CPU to the peripheral devices of a computer is achieved through computer parts. **(T)**
9. Once a clipart image is added to a slide, it cannot be removed. **(F)**
10. The cd command displays the current working directory. **(F)**

V. Write short answer for any Fifteen Questions from the following:

Marks: 15 x 2 = 30

1. List out the characteristics of computer**. (P-8)**
2. Differentiate primary memory and secondary memory. **(P-25)**
3. Define hotkeys**.(P-52)**
4. What is quick launch tool bar**? (P-49)**
5. How to set footnotes and endnotes in MS-Word? **(P-78**)
6. Define spell check. **(P-79)**
7. What is anchoring objects in MS-Excel? **(P-106)**
8. Differentiate workbook and worksheet in Calc.**(P-117)**
9. Write the types of reports**. (P-124)**
10. How to create a new database in OpenOffice Base? **(P-134)**
11. What is manual break in MS-Excel? **(P-106)**
12. DefiSne printing handouts in OpenOffice Impress. **(P-159)**
13. How do you open a file in Impress? **(P-161**)
14. How can we insert date and time in MS-Excel? **(P-99)**
15. What is a search engine? **(P-174)**
16. Write the uses of Internet. **P-166)**
17. What is naming convention? **(P-173)**
18. What are thumbnails? **(P-72)**

[Turn over...

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