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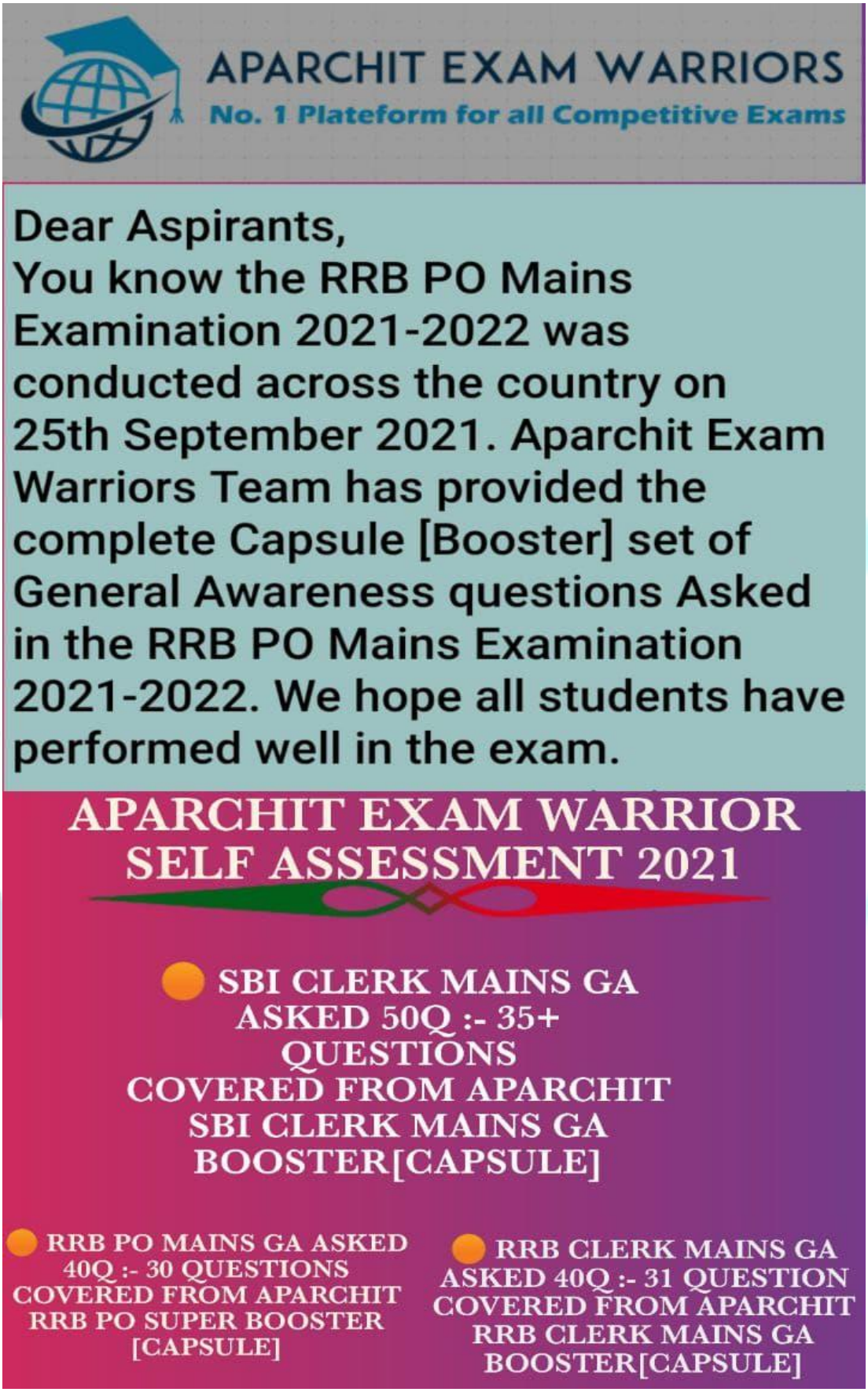
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Dear Aspirants,
You know the RRB PO Mains Examination 2021-2022 was conducted across the country on 25th September 2021. Aparchit Exam Warriors Team has provided the complete Capsule [Booster] set of General Awareness questions Asked in the RRB PO Mains Examination 2021-2022. We hope all students have performed well in the exam.
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INDEX

S. No.	Chapter	Page No
Chapter - 1	Introduction to Concepts of Computer Details With MCQs	5 -18
	Computer Questions Asked in Previous Year IBPS RRB PO/ Clerk Mains Exams	19 - 29
Chapter - 2	Main Parts of computer (Hardware, Input, Output) Details With MCQs	30 - 66
Chapter - 3	Software Details With MCQs	67 - 87
Chapter - 4	Memory Details With MCQs	88 - 125
Chapter - 5	Microsoft Office (MS Word, Excel, PowerPoint) Details With MCQs	126 - 166
Chapter - 6	OPERATING SYSTEM Details With MCQs	167 - 184
Chapter - 7	NETWORK_AND_INTERNET Details With MCQs	185 - 214
Chapter - 8	DATABASE MANAGEMENT SYSTEM Details With MCQs	215 - 231
Chapter - 9	COMPUTER TERMINOLOGY Details With MCQs	232 - 235
Chapter -10	COMPUTER ABBREVIATION Details With MCQs	236 - 247
	Important one Liner	248 - 250
	Practice Set 01 Practice Set 02 Practice Set 03 Practice Set 04 Practice Set 05	251 - 258 259 - 266 267 - 274 275 - 282 283 - 290

CHAPTER 01

INTRODUCTION TO CONCEPTS OF COMPUTER

BY – APARCHIT EXAM WARRIORS

HISTORY OF COMPUTER

The word Computer in earlier times meant a person who performed calculations or computations. With years its definition changed to a machine that performs calculations. It can perform all type of mathematical and logical. operations; it can accept data, store data, retrieve data, process data and produce output. Charles Babbage was known as father of computer. He invented two machines in 1822 introduced Difference Engine and in 1834, introduced Analytical engine.

Invention	Inventor	Characteristics	Applications
Abacus 1602	**China**	**First mechanical calculating device. A horizontal rod represents the one, tens,hundred, etc.**	**Used for addition and subtraction operations. Calculation of square roots can also be performed.**
Napier's Bones 1617	**John Napier (Scotlan[D]**	**Three dimensional structure. Holding numbers from 0 to 9 only. Represent graphical structure of calculating result.**	**Perform multiplication on numbers. Technology used for calculation called Rabdologia.**
Pascaline 1642	**Blaise Pascal (France)**	**First mechanical addingmachine. It was structured like rectangular box, with eight disc (represent number of units).**	
Tabulating Machine [1890]	**Herman Hollerith(Americ[A]**	**It used punched cards with round holes. It was the first electromechanical machine, designed to process the data forcensus in 1890.**	**Read one card at a time.**
MARK-1 1944	**Howard Aiken(Americ[A]**	**Consists of interlocking panels of smallglass, counters, switches and control circuits. Data can be entered manually.**	**Mainly used in the war effort during WorldWar-II. Magnetic drums are used for storage.**
ENIAC 1946	**JP Eckert and JW Mauchly**	**First electronic digital computer.**	**Used for weather prediction, atomic energy**

ENIAC was the first digital computer and it was invented by J.Presper Eckert and John Mauchly at the University of Pennsylvania and began construction in 1943. It uses 18000 vacuum tubes as a storing device. They were also founders of the first computer company, it was initially namedElectronic Controls Company which was later changed to Eckert–Mauchly Computer Corporation, and released a series of mainframe electronic digital stored-program computer under the name of UNIVAC. MIT introduces the whirlwind machine (first computer with RAM) on March 8, 1955.

IMPORTANT ONE LINER

- Father of Computer - CHARLES BABBAGE
- Father of Modern Computer Science - ALAN TURING
- First Un Programmable Digital Computer - ATANASOFF BERRY COMPUTER (AB[C]
- First Electronic Digital Computer - ENIAC
- ENIVAC stands for - ELECTRONIC NUMERIC INTEGRATOR AND CALCULATOR
- World'S Fastest Computer - Sunway TaihuLight, in China.
- India's Fastest Computer -ParamYuva II
- ParamYuva II developed by - Centre for Development of Advanced Computing (CDA[C]

Introduction to Concepts of Computer

A computer is an electronic machine that can be instructed to carry out sequences of arithmetic or logical operations automatically via computer programming. Commonly consisting of digital circuitry, that accepts (inputs), stores, and generates (outputs) data as numbers, text, graphics, voice, video files, or electrical signals.

- Father of the computer - Charles Babbage
- Father of the modern computer - Alan Turing
- Basic Architecture of Computer: John Von Neumann (1947-49)
- First Programmer: Lady Ada Lovelace (1880)
- First Electronic Computer: ENIAC (1946) - J.P. Eckert &J.W. Mauchly
- A first computer for the home user introduced - IBM in 1981

Functioning of a Computer

➢ Computer performs four basic functions which are as follows -

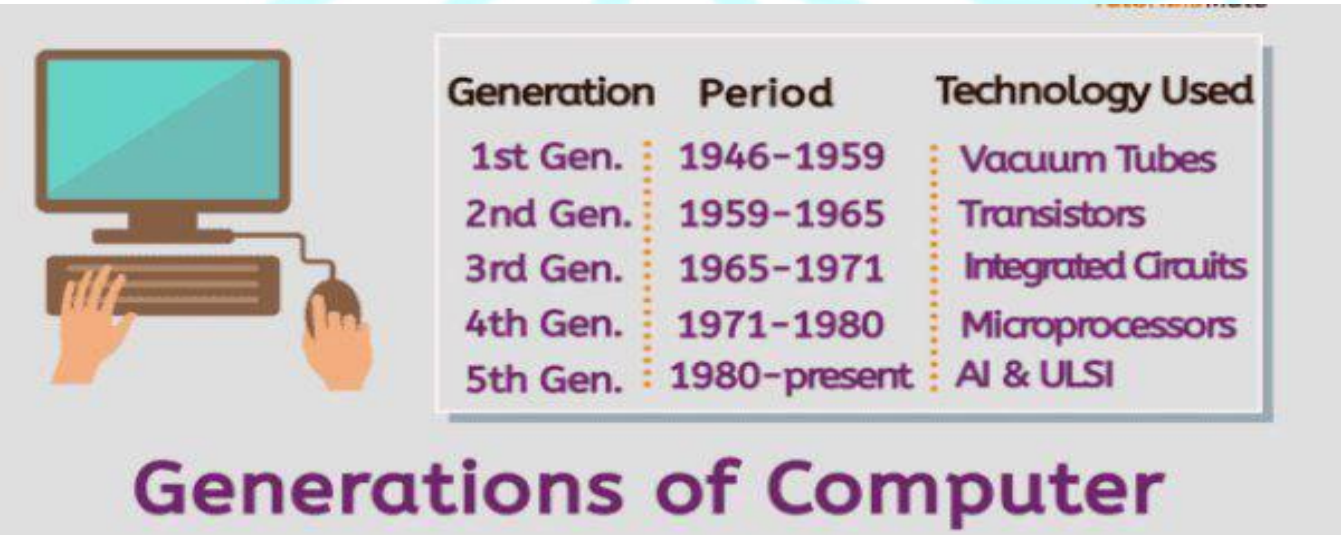
- Input Information or data that is entered into a computer is called input. It sends data and instructions to the Central Processing Unit (CPU).
- Processing It is the sequence of actions taken on data to convert it into information which is meaningful to the user. It can be calculations, comparisons or decisions taken by the computer.
- Output It makes processed data available to the user. It is mainly used to display the desired result to the user as per input instructions.
- Storage It stores data and programs permanently. It is used to store information during the time of program execution and possible to get any type of information from it. Features of Computer

➢ **The key features of computer are as follows**

- Speed The computer can process data very fast at the rate of millions of instructions per second.

- Accuracy Computers provide a high degree of accuracy. They respond to the user as per the input instructions.
- Storage Capacity Computers are capable to store huge amount of data which depends on the capacity of hard disk.
- Versatility Computers can do different types of work simultaneously. They can perform multiple tasks at a same time.
- Automation Once the instruction to do any work is given to the computer, the computer does its work automatically by itself.
- Diligence Unlike human beings, a computer is free from monotony, tiredness, lack of concentration, etc. and can work for hours without creating any errors.
- Secrecy Leakage of information is reduced by creating login system with password protection.
- 8. Reliability Computers are more reliable than human beings. Computers always produce exact results. The possibility of errors occur only if the input is wrong, i.e. the computers never make mistakes of their own accord.
- 9. Plug and Play Computers have the ability to automatically configure a new hardware and software component.

Generation of computer



THERE ARE FIVE GENERATIONS OF COMPUTERS

FIRST GENERATION

❖ 1946-1959 is the period of the first-generation computer. J.P. Eckert and J.W. Mauchy invented the first successful electronic computer called ENIAC, ENIAC stands for "Electronic Numerical Integrator And Computer".

Advantages

❖ It made use of vacuum tubes which are the only electronic component available during those days.
❖ These computers could calculate in milliseconds.

Disadvantages

- These were very big in size, weight was about 30 tones.
- These computers were based on vacuum tubes.
- These computers were very costly.
- It could store only a small amount of information due to the presence of magnetic drums.

SECOND GENERATION

- 1959-1965 is the period of a second-generation computer. Second-generation computers were based on Transistors instead of vacuum tubes.

Advantages:

- Due to the presence of transistors instead of vacuum tubes, the size of the electron component decreased. This resulted in reducing the size of a computer as compared to first-generation computers.
- Less energy and not produce as much heat as the first generation.
- Assembly language and punch cards were used for input.
- Low cost than first-generation computers.
- Better speed, calculate data in microseconds.

Disadvantages:

- A cooling system was required.
- Constant maintenance was required.
- Only used for specific purposes.

THIRD GENERATION

- 1965-1971 is the period of the third-generation computer. These computers were based on Integrated circuits. IC was invented by Robert Noyce and Jack Kilby In 1958-1959. IC was a single component containing a number of transistors.
- Examples: PDP-8 ,PDP-11, ICL 2900, IBM 360

Advantages:

- These computers were cheaper as compared to second-generation computers.
- They were fast and reliable.
- The use of IC in the computer provides the small size of the computer.

FOURTH GENERATION

- 1971-1980 is the period of the fourth-generation computer. This technology is based on Microprocessor. A microprocessor is used in a computer for any logical and arithmetic function to be performed in any program. Graphics User Interface (GUI) technology was exploited to offer more comfort to users.
- Examples: IBM 4341

Advantages:

- Fastest in computation and size get reduced as compared to the previous generation of computers.
- The heat generated is negligible.
- Small in size as compared to previous generation computers.

Disadvantages:

- Microprocessor design and fabrication are very complex.
- Air conditioning is required in many cases due to the presence of ICs.

FIFTH GENERATION :-

- The period of the fifth generation in 1980-onwards. This generation is based on artificial intelligence. The aim of the fifth generation is to make a device that could respond to natural language input and are capable of learning and self-organization. This generation is based on ULSI (Ultra Large Scale Integration) technology resulting in the production of microprocessor chips having ten million electronic components.
  Examples: Desktop, Laptop, Note-Book
- Digital computer -Digital computer is the most commonly used type of computer and is used to process information with quantities using digits, usually using the binary number system.
  Ex - MacBook.
- Analog Computer - A computer that operates with numbers represented by directly measurable quantities (as voltages or rotations) — compare digital computers, hybrid computers.
- Hybrid Computer - A computer that combines the characteristics of a digital computer and an analog computer by its capacity to accept input and provide output in either digital or analog form and to process information digitally.

CLASSIFICATION OF COMPUTERS

- ✓ **Digital computer** - Digital computer is the most commonly used type of computer and is used to process information with quantities using digits, usually using the binary number system.
- ✓ Ex - MacBook.
- ✓ **Analog Computer** - A computer that operates with numbers represented by directly measurable quantities (as voltages or rotations) — compare digital computers, hybrid computers.
- ✓ **Hybrid Computer** - A computer that combines the characteristics of a digital computer and an analog computer by its capacity to accept input and provide output in either digital or analog form and to process information digitally.

CLASSIFICATION ON SIZE :-

- **Mainframe computer** - A mainframe computer is a very large computer capable of handling and processing very large amounts of data quickly. They are used by large institutions, such as government agencies and large corporations.
- **Mini Computer** - a computer with processing and storage capabilities smaller than those of a mainframe but larger than those of a 75microcomputer.
- **Micro computer** - A microcomputer is a complete computer on a smaller scale and is generally a synonym for the more common term, personal computer or PC , a computer designed for an individual.
- **Personal computer** - A personal computer (P[C] is a small, relatively inexpensive computer designed for an individual user. In price, All are based on the microprocessor technology that enables manufacturers to put an entire CPU on one chip.

- **Supercomputer** - The fastest type of computer.Supercomputers are very expensive and are employed for specialized applications that require immense amounts of calculations.

Question & Answer

Q. Which type of computer is used in automatic aircraft landing?

[A] General computer [B] Supercomputer

[C] Special purpose computer [D] Microcomputer

Answer :- C

Q. Which of the following is the smallest and fastest computer imitating brain working? [IBPS PO 2012]

[A] Supercomputer [B] Quantum computer

[C] Param-10000 [D] IBM chips

Answer :- B

Q. In which of the following computers are used?

[A] Banking [B] Education

[C] Offices [D] All of these

Answer:-D

Q. It is the science that attempts to produce machines that display the same type of intelligence that humans do

[A] Nano science

[B] Nano technology

[C] Simulation

[D] Artificial Intelligence (AI)

Answer:-D

Q. Which of the following deals with the design, construction, operation and use of robots?

[A] Robotics [B] Artificial Intelligence

[C] Nano computer [D] Quantum computer

Answer:- A

Q. A/An ……. system is a small, wireless handheld computer that scans an item's tag and pulls up the current price (and any special offers) as you shop.

[A] PSS [B] POS

[C] inventory [D] None of these

Answer :B

Q. Which of the following is NOT one of the four major data processing functions of a computer?

[A] gathering data

[B] processing data into information

[C]analyzing the data or information

[D] storing the data or information

Answer: C

Q. Surgeons can perform delicate operations by manipulating devices through computers instead of manually. This technology is known as?

[A] robotics

[B] computer forensics

[C] simulation

[D] Laptop

Answer:A

Q. ——is the science that attempts to produce machines that display the same type of intelligence that humans do.

[A] Nanotechnology

[B] Nanotechnology

[C] Simulation

[D] Artificial intelligence (AI)

Answer:D

Q—- are specially designed computers that perform complex calculations extremely rapidly.

[A] Servers

[B] Supercomputers

[C] Laptops

[D] Mainframes

Answer:B

Q. Which of the following is the correct order of the four major functions of a computer?

[A] ProcessOutputInputStorage

[B] InputOutputProcessStorage

[C] ProcessStorageInputOutput

[D] InputProcessOutputStorage

Answer :D

Q. In analog computer?

[A] Input is first converted to digital form

[B] Input is never converted to digital form

[C] Output is displayed in digital form

[D] All of above

Answer:B

Q. In the latest generation computers, the instructions are executed?

[A] Parallel only

[B] Sequentially only

[C] Both sequentially and parallel

[D] All of the above

Answer:C

Q. Who designed the first electronics computer – ENIAC?

[A] Van–Neumann

[B] Joseph M. Jacquard

[C] J. Presper Eckert and John W Mauchly

[D] All of the above

Answer:C

Q. Modern Computer are very reliable but they are not?

[A] Fast

[B] Powerful

[C] Infallible

[D] Cheap

Answer:C

Q. IBM launched its first personal computer called IBM-PC in 1981. It had chips from Intel, disk drives from Tandon, operating system from Microsoft, the printer from Epson and the application software from everywhere. Can you name the country which contributed to the video display?

[A] India

[B] China

[C] Germany

[D] Taiwan

Answer: D

Q. What is meant by a dedicated computer?

[A] Which is used by one person only

[B] Which is assigned one and only one task

[C] Which uses one kind of software

[D] Which is meant for application software

Answer : B

Q. A computer which CPU speed around 100 million instruction per second and with the word length of around 64 bits is known as

[A]Super computer

[B] Micro computer

[C] Macro computer

[D] None of these

Answer: A

Q.The storage subsystem in a microcomputer consists mainly of_or__media with varying capacities.

[A] Memory or video

[B] Magnetic or optical

[C] Optical or memory

[D] Video or magnetic

Answer: B

Q. A hybrid computer

[A] Resembles digital computer

[B] Resembles analog computer

[C] Resembles both a digital and analog computer

[D] None of these

Answer:C

Q. The personal computer industry was started by

[A] IBM [B] Apple

[C] Compaq [D] HCL

Answer: A

Q. In the IBM PC-At, what do the words At stand for

[A] Additional Terminals [B] Advance technology

[C] Applied technology [D] Advanced terminology

Answer: B

Q. Which "was" the most popular first generation computer?

[A] IBM 1650 [B] IBM 360

[C] IBM 1130 [D] IBM 650

Answer:D

Q. One millisecond is

[A] 10 seconds [B] 10 seconds

[C] 1000 seconds [D] 1/1000 seconds

Answer:D

Q. Number crunchier is the informal name for

[A]Mini computer [B] Super computer

[C] Microcomputer [D] Mainframe computer

Answer:B

Q. Which company is the biggest player in the microprocessor industry?

[A] Motorola [B] IBM

[C] Intel [D] AMD

Answer : C

Q. Symbolic logic was discovered by

[A] George Boole [B] Herman Hollerith

[C] Van Neumann [D] Basic Pascal

Answer: A

Q. Palmtop computer is also known as

[A] personal computer [B] notebook computer

[C] tablet PC [D] handheld computer

Answer: D

Q. A central computer that holds collections of data and programs for many PCs, workstations and other computers is a

[A] supercomputer [B] minicomputer

[C] laptop [D] server

Answer : D

Q. Which computer is used for Computer Aided Design (CA[D] calculations?

[A] Minicomputer [B] Mainframe computer

[C] Supercomputer [D] Microcomputer

Answer: A

Q. Which of the following is generally costlier? [SBI Clerk 2012, IBPS Clerk 2015]

[A] Server [B] Notebook computer

[C] Personal computer [D] Mainframe

Answer : A

Q. The user generally applies ..... to access mainframe or supercomputer.

[A] terminal [B] node

[C] desktop [D] handheld

Answer :- A

Q. These are specially designed computers that perform complex calculations extremely rapidly.

[A] Servers [B] Supercomputers

[C] Laptops [D] Mainframes

Answer: B

Q. A____ is a large and expensive computer capable of performing scientific and business applications.

[A] supercomputer [B] mainframe computer

[C] minicomputer [D] handheld computer

Answer : B

Q. First supercomputer developed in India is

[A] PARAM [B] CRAY-1

[C] PARAM ISHAN [D]EPRAM

Answer – A

Q. Pratyush is___ fastest supercomputer in the world.

[A] first [B] second

[C] third [D] fourth

Answer - D

Q. Pratyush supercomputer is dedicated for

[A] multimedia [B] weather forecasting

[C] recreation [D] military personnel

Answer - B

Q. Which of the following is the India's first multi-petaflops (PF) supercomputer?

[A] PARAM [B]Pratyush

[C] PARAM Ishan [D] Tianhe-2

Answer –B

Q. Analog computer works on the supply of

[A] continuous electrical pulses [B] electrical pulses but not continuous

[C] magnetic strength [D] physical strength

Answer - A

Q. Seismograph is an example of

[A] Analog computer [B] Digital computer

[C] Hybrid computer [D] All of these

Answer - A

Q. These computers work by calculating the binary digits.

[A] Hybrid [B] Digital

[C] Analog [D] General purpose

Answer -B

Q. Choose the odd one out. [IBPS Clerk 2011]

[A] Microcomputer [B] Minicomputer

[C] Supercomputer [D] Digital computer

Answer - D

Q. A hybrid computer is the one having the combined properties of [SBI Clerk 2013]

[A] super and microcomputers [B] mini and microcomputers

[C]analog and digital computers [D] super and mini computers

Answer - C

Q. Which types of computer are used in hospitals like ECG and DIALYSIS?

[A] Digital

[B] Hybrid

[C] Analog

[D] Microcomputer

Answer- B

Q. General purpose computers are used for

[A] creating a small database

[B] performs calculation

[C] accounting

[D] All of the above

Answer : D

Q. Which is not the example of special purpose computer?

[A] Automatic aircraft landing

[B] Word processor

[C] Multimedia computer

[D] All of the above

Answer : B

Q. Which of the following is a small microprocessor based computer designed to be used by one person at a time? [SBI Clerk 2014]

[A] Netbook

[B] Supercomputer

([C] All-in-one

[D] Personal Computer

Answer - D

Q. Desktop and personal computers are also known as [SBI Clerk 2012]

[A] supercomputers

[B] servers

[C] mainframes

[D] microcomputers

Answer - D

Q. Which of the following uses a handheld operating system? [SBI PO 2013]

[A] A supercomputer

[B] A personal computer

[C] A laptop

[D] A PDA

Answer – D

Q. PCs are considered fourth-generation and contain [SBI PO 2014]

[A] information

[B] data

[C] vacuum tubes

[D] microprocessors

Answer - D

Q. Which of the following options correctly expresses the meaning of the term 'PCs'?[IBPS PO 2012]

[A] Independent computers for all working staff

[B] Personal computers widely available to individual workers with which they can access information from layer systems and increase their personal productivity

[C] Packed computers system formed by joining together of various computerterminals

[D] Computer manufactured by the Pentium Company

Answer -B

Q. A complete electronic circuit with transistors and other electronic components on a small silicon chip is called a(n) [RBI Grade B 2012]

[A] workstation

[B] CPU

[C] magnetic disc

[D] integrated circuit

Answer-D

Q. Integrated Circuit (I[C] or chips used in computers are made with [IBPS Clerk 2014]

[A] copper

[B] aluminium

[C]gold

[D] silicon

Answer - D

Q. Name the first general purpose electronic computer. [IBPS PO 2012]

[A]ADVAC

[B]ADSAC

[C] ENIAC

[D]EDVAC

Answer - C

Q.The third generation computers were made with [SBI PO 2014]

[A] bio chips

[D] transistors

[C] integrated circuits

[D] vacuum tubes

Answer - C

Q. Chip is a common nickname for a(n) [IBPS Clerk 2014, 15]

[A] transistor

[B] resistor

[C] integrated circuit

[D] semiconductor

Answer - C

Q. Integrated Chips or IC's were started to be use from which generation of computers?[IBPS PO 2016]

[A] 1st Generation

[B] 2nd Generation

[C] 3rd Generation

[D] 4th Generation

Answer - C

Q. Time sharing became possible in .....generation of computers. [SBI PO 2011]

[A] first [B] second

[C] third [D] fourth

Answer - B

Q. Speed of first generation computer was in [IBPS Clerk 2012]

[A] nano seconds [B] milli seconds

[C] nano-milli seconds [D] micro seconds

Answer - D

Q. The Analytical Engine developed during first generation of computers used ..... as a memory unit. [RBI Grade B 2012]

[A] RAM [B] floppies

[C] cards [D] counter wheels

Answer - D

Q. First generation computers used .....languages. [SBI Clerk 2012]

[A] machine [B] assembly

[C] Both '1' and '2' [D] high level

Answer - A

Q. A computer cannot perform which of the following functions? [IBPS Clerk 2015]

[A] Addition [B] Subtraction

[C] Bake a cake [D] Division

Answer - C

Q. Part number, description and number of parts ordered are examples of [IBPS Clerk 2013]

[A] control [B] output

[C] processing [D] feedback

Answer – C

Computer Questions Asked in Previous Year

IBPS RRB PO/ Clerk Mains Exams

Q. The rate at which data is written to disk or read from disk is called as ____

[A] Data Transfer rate
[B] Track
[C] Sector
[D] Hard disk

Answer-A

Q. Which one records data bits as tiny magnetic spots?

[A] Data Transfer rate
[B] Track
[C] Sector
[D] Hard disk

Answer-B

Q. BIOS Stands for?

[A] Basic Input Output Server
[B] Basic Input Output Storage
[C] Basic Input Output System
[D] Basic Input Output Standard

Answer-C

Q. Which one is used in a program to execute a particular set of statements repeatedly?

[A] Visual basic
[B] Pseudocode
[C] Condition
[D] Looping

Answer-D

Q Which works on the supply of Continuous electrical pulses?

[A] Analog Computer
[B] Digital Computer
[C] Both A and B
[D] Super Compute

Answer-A

Q. The Characteristics of any entity are called it as _____

[A] Attributes
[B] Relationship
[C] Entity set
[D] Information

Answer-A

Q. Which key must be Unique?

[A] Alternate
[B] Primary
[C] Candidate
[D] Foreign

Answer-B

Q._____ are the actual data contained in the database at a particular point of line

[A] Schema
[B] Data mining
[C] Instances
[D] Information

Answer-C

Q. Dr EF Codd represented _____ rules for relational database management system(RDBMS) in 1970

[A] 9
[B] 12
[C] 14
[D] 11

Answer-B

Q. A set of possible data values is called as _____

[A] Tuple
[B] Attribute
[C] Degree
[D] Domain

Answer-D

Q.A device needed to communicate with computers using telephone lines is _____

[A] Disk
[B] CPU
[C] VDU
[D] Modem

Answer-D

Q.Which one of the following domain is used by Non-Profit Organisation?

[A] .com
[B] .gov
[C] .org
[D] .edu

Answer-C

Q. A _____ generator is used to print files on paper

[A] Printer
[B] Scanner
[C] Both A and B
[D] Report

Answer-D

Q. If we want to eliminate the duplicate values than _____ keyword is also to be used

[A] Values
[B] Groups
[C] Distinct values
[D] Columns

Answer-C

Q. A……'s main purpose is to prohibit unauthorized access to your computer via the Internet.

[A] popup blocker
[B] firewall
[C] spyware blocker
[D] spam assassin

Answer-B

Q.If configured correctly, the…….will prevent interaction with your computer after a specified time period.

[A] firewall
[B] filter
[C] screen saver
[D] popup blocker

Answer-D

Q. What is the name of the series of Laptop computers manufactured by IBM called?

[A]LapPad
[B]Vaio
[C] Aptiva
[D]Thinkpad

Answer-B

Q. Which one of the following command is used to show only the last query?

[A] List [B] Select

[C] Describe [D] R

Answer-A

Q. Which one is not a Necessary conditions for deadlock?

[A]Non pre-emptive [B] Preemptive

[C] Partial allocation [D] Circular wait

Answer-B

Q. Which one is true about generation of computers?

[A] The first generation (1942-1954)

[B] The second generation of computer (1954-1964)

[C] Third generation of computer (1965-71)

[D] Fourth generation of computer (1975-1984)

Answer-C

Q. In which one of the following errors are displayed for every instruction?

[A] Assembler [B]Complier

[C]Both C and D [D] Interpreter

Answer-D

Q. What does dots per inch (DPI) measure?

[A] Number of bits [B] Density of the pixels on a computer screen

[C] The density of bits on a disk [D] Density of graphic files stored on a hard disk

Answer-B

Q. What is the full form of 'MAN'?

[A] Man Area Network [B] Meter Area Network

[C] Metropolitan Area Network [D] Manage Area Network

Answer-C

Q.Which of the following is not a network protocol?

[A] HTTP [B] FTP

[C] SMTP [D] HTML

Answer-D

Q. What is access time?

[A] It is the time taken by the memory to store or retrieve a piece of data.

[B] It is the number marked on all memory chips.

[C] It is the memory clock.

[D] It is the transaction period between the CPU and the memory

Answer-A

Q. The data are modified to specific code and protected in the sender side while transferring, and the special key is used to retrieve the original data in the receiver side. What is the process used in receiver side to retrieve the original data?

[A] Decoding [B] Encoding

[C] Encrypting ne of these [D] Decrypting

Answer-D

Q. What is the term used to denote the repetition of data in DBMS?

[A] Repeating [B] Restrict

[C] Reappear [D] Redundancy

Answer-D

Q. ____ is the most important/powerful computer in a typical network.

[A] Network client [B] Desktop

[C] Network station [D] Network server

Answer-D

Q. The Artificial satellite which revolves around the earth and provide transmit information from earth is basically called _____

[A] Geosynchronous satellites [B] Geostationary satellites

[C] Low Earth Orbits [D] Sun-Synchronous orbits

Answer-B

Q, What is the name of the portal in computer, which allow additional devices to connect?

[A] Primary [B] Secondary

[C] Peripheral [D] Optional

Answer-C

Q. What is the short cut key to close currently opened document in Microsoft word?

[A] Ctrl + W [B] Ctrl + D

[C] Ctrl + T [D] Ctrl + B

Answer-A

Q.In the C coding '<stdio.h>' is used as a _ _ _ ___ _file.

[A] Subroutines [B] Footer

[C] Header [D] Increment

Answer-C

Q. Raw, unprocessed facts, including text, numbers, images, and sounds, are called _____

[A] Applets [B] Data

[C]Metaware [D] Product

Answer-B

Q All of the following are TRUE of Safe Mode EXCEPT:

[A] Safe Mode is a special diagnostic mode

[B] Safe Mode loads all non-essential icons

[C] Safe Mode allows users to troubleshoot errors.

[D] Safe Mode loads only the most essential devices

Answer-B

Q. Changing the appearance of a document is called

[A] Proofing [B] Editing

[C] Formatting [D] Correcting

Answer-C

Q. You can detect spelling and grammar errors by:

[A] Press Shit + F7 [B] Press Ctrl + F7

[C] Press Alt + F7 [D] Press F7

Answer-D

Q. Which of the following is necessary to track computer, while connecting to Internet?

[A] System Number [B] Memory

[C] IP [D] VP

Answer-C

Q. Which of following is not an example for simplex?

[A] Radio broadcasting [B] Television broadcasting

[C] Speaker [D] Walkie-talkie

Answer-D

Q. Which of the following layer is responsible for converting electrical impulse to bit streams?

[A] Presentation [B] Physical

[C] Data link [D] Network

Answer-B

Q. What is the maximum number, that each of the four parts of an IP Address can have?

[A] 345 [B] 255

[C] 197 [D] 301

Answer-B

Q. Which of the following extension is used to save image in the computer?

[A] .cmd [B] .xls

[C] .vlc [D] .jpeg

Answer-D

Q. Machine language sometimes also referred as:

[A] Binary language [B] High level language

[C] Middle level language [D] Low level language

Answer-A

Q. Which is an another name for functional language

[A] Machine
[B] Application
[C] Low-level language
[D] High-level language

Answer-B

Q. …….translates the semantic instructions developed by programmers into the machine language

[A] Assembler
[B] Interpreter
[C] Loader
[D] Compiler

Answer-A

Q. 'Chrome' is a _____ software

[A] Operating System
[B] Application
[C] System
[D] Utility

Answer-B

Q. SRAM retains data as long as power is provided to the memory chip and need not be refreshed periodically. What does 'S' represents?

[A] Stagnant
[B] Storage
[C] Simple
[D] Static

Answer-D

Q. The computer's capability of distinguishing spoken words is called _____

[A] Voice analysis
[B] Speech acknowledgment
[C] Speech interpretation
[D] Voice recognition

Answer-D

Q. While working in mail we may came under the 'BCC', what does B represents?

[A] Blink
[B] Black
[C] Blind
[D] Broad

Answer-C

Q. Deleted mails from the Inbox can be found in_____

[A] Trash
[B] Spam
[C] Promotions
[D] All Mail

Answer-A

Q. What is the components that are used in second generation computers?

[A] Vacuum tube
[B] LSI
[C] Punch cards
[D] Transistors

Answer-D

Q. ……is an artificial language designed to communicate instructions to a computer

[A] Programming language
[B] Machine Language
[C] Software Language
[D] Assembly Language

Answer-A

Q. Expand "MODEM"?

[A] Modern development
[B] Medium Development
[C] Modulation and Demolition
[D] Modulation and Demodulation

Answer-D

Q. What is the short cut to justify the paragraph?

[A] Ctrl + R
[B] Ctrl + J
[C] Ctrl + U
[D] Ctrl + E

Answer-B

Q. Which of the following is a non-volatile memory?

[A] RAM
[B] ROM
[C] Cache
[D] Primary

Answer-B

Q.OSI is an ISO standard for worldwide communications that defines a networking framework for implementing protocols. What does 'O' stands for?

[A] Operation
[B] Open
[C]Organisation
[D] Optical

Answer: B

Q An operation in which data is moved to a different location is referred as _____.

[A] Block move
[B] Street move
[C] Delete
[D] Shift remove

Answer: A

Q. Which among the following is not an Object Oriented Programming Language?

[A] Python
[B] C++
[C] Java
[D] PASCAL

Answer: D

Q. This is a standard way for a Web server to pass a Web user's request to an application program and to receive data back to forward to the user –

[A] Interrupt request
[B] Forward DNS lookup
[C] Data-Link layer
[D] Common gateway interface

Answer: D

Q. This type of software is designed for users who want to customize the programs they use.

[A] Shareware
[B] Open-source software
[C] Freeware
[D] Macros

Answer: A

Q.The effect of the ROLLBACK command in a transaction is the following_____

[A] Undo all changes to the data-base resulting from the execution of the transaction
[B] Undo the effects of the last UPDATE command
[C] Restore the content of the database to its state at the end of the previous day
[D] Make sure that all changes to the database are in effect

Answer: A

Q, A(n) -----system is a small, wireless handheld computer that scans an item's tag and pulls up the current price (and any special offers) as you shop.

[A] PSS
[B] POS
[C] Inventory
[D] data mining

Answer: A

Q. Single party disk relying on the disk controller for finding out which disk has failed is used by

[A] RAID level 5
[B] RAID level 2
[C] RAID level 4
[D] RAID level 3

Answer: D

Q. What happens when you click on insert>Picture>Clip Art

[A] It inserts a clipart picture into document
[B] It lets you choose clipart to insert into document
[C] It opens Clip Art taskbar
[D] It insets symbols

Answer:C

Q. Which one allows Movements in all directions (360 degree)?

[A] Mouse
[B] Joystick
[C] Light pen
[D] Track ball

Answer: B

Q. _____ and _____ refers to the action of clicking and holding down the mouse button while moving the mouse and realign it

[A] Drag, Click
[B] Drop, Drag
[C] Drag, Drop
[D] None of these

Answer: C

Q. File record length

[A] Should always be fixed
[B] Should always be variable

[C] Depends upon the size of file

[D] Should be chosen to match the data characteristics.

Answer: B

Q. Which one is used to open a document or program?

[A] Click

[B] Double Click

[C] Right Click

[D] Drag and Drop

Answer: B

Q. _____is another pointing device which is an alternative to a mouse

[A] Track ball

[B] Joystick

[C] Light pen

[D] Mouse

Answer: A

Q. Laser printer can print ___ pages of text per minute and their resolution ranges from _____dpi

[A] 5-25, 400-1300

[B] 5-25, 400-1200

[C] 5-24, 400-1200

[D] 5-25, 500-1300

Answer: C

Q Electromagnetic printer can produce documents at a speed of over _____ lines

[A]10000

[B] 20000

[C] 30000

[D] 40000

Answer: B

Q. The main computer in a network is called

[A] host processor

[B] front-end processor

[C] commentator

[D] KIPS

Answer : A

Q. Caps lock and Num lock Keys are called as ____ keys

[A] Ctrl

[B] Shift

[C] Toggle

[D] Window

Answer: C

Q. If you change Windows 98 to Windows XP, you are actually performing?

[A] Upstart

[B] Update

[C] Upgrade

[D] Patch

Answer: C

Q. Which one performs simply an informal way of describing a program and it does not follow any Syntax Strictly?

[A] Mnemonic
[B] Opcode
[C] Pseudocode
[D] Operand

Answer: C

Q. Which one is a typical rectangular shaped monitor that you see on a desktop computer?

[A] CRT
[B] LCD
[C] LED
[D] BIOS

Answer:A

Q. A pixel is_____

[A] Picture element or dot on a screen
[B] Point of ink on a user printed paper
[C] Point of ink on a inkjet printed page
[D] Light beam used in printing paper

Answer: A

Q. In which printers, Printing is achieved by deflecting laser beam on to photosensitive surface of a drum?

[A] Dot Matrix
[B] Daisy Wheel
[C] Laser printer
[D] Electromagnetic printer

Answer: C

Q. First generation computer were based on?

[A] Vacuum tubes
[B] ICs
[C] Transistors
[D] Conductors

Answer: A

Q. Which language is directly understood by the computer without translation Program?

[A] Machine language
[B] C# Language
[C] High level language
[D] C language

Answer: A

Q. The speed of Which Generation Computer was in Pico Seconds?

[A] First
[B] Second
[C]FourtH
[D] Fifth

Answer:C

Q. JS kilby developed which chips?

[A] Silicon
[B] Silica
[C] Integrated
[D] Iron oxide

Answer: C

Q. First Super computer of World is_____

[A] PARAM
[B]Siddhart
[C] IBM -370
[D] CRAY-1

Answer:D

Q. Which one is example for Fifth Generation computer?

[A] DBMS
[B] Distributed System
[C] Real time System
[D] Artificial Intelligence

Answer:D

Q. Which Storage devices is used in Fourth Generation Computer?

[A] Magnetic drum
[B] Magnetic core technology
[C] Semiconductor memory
[D] Primary Storage medium

Answer: C

Q. PDP-8 is an example for Which Generation Computer?

[A] First
[B] Second
[C] Third
[D] Fourth

Answer: B

Q.Which Operating System is used in Third Generation Computer?

[A] Batch
[B] Time Sharing System
[C] Real-Time System
[D] GUI Interface

Answer: C

Q. Programming Language introduced in Which Generation?

[A] First
[B] Second
[C] Third
[D] Fourth

Answer: C

Q. Which one is generally used in banks to process the Cheques?

[A] OMR
[B] MICR
[C] OCR
[D] MIC

Answer: B

Q. Which one is an Optical disk storage medium designed to recapture the data normally in DVD format?

[A] Compact Disk
[B] Digital Video Disk
[C] Blue-ray Disk
[D] Floppy Disk

Answer: C

CHAPTER 02

Main Parts of computer (Hardware, Input, Output)

HARDWARE

Hardware, which is abbreviated as HW, refers to all physical components of a computer system, including the devices connected to it. You cannot create a computer or use software without using hardware. The screen on which you are reading this information is also a hardware.

Input	Mouse, keyboard, joystick, image scanner, webcam, graphics tablet, microphone
Output	Monitor, printer, loudspeaker
Both	Floppy disk drive, hard disk drive, optical disc drive, teleprinter
Short-range	RS-232, SCSI, PCI, USB
Long-range (computer networking)	Ethernet, ATM, FDDI

List of Computer Hardware

Here are some common individual computer hardware components that you'll often find *inside* a modern computer. These parts are almost always found inside the computer case, so you won't see them unless you open the computer:

- ✓ Motherboard
- ✓ Central Processing Unit (CPU)
- ✓ Random Access Memory (RAM)
- ✓ Power Supply Unit (PSU)
- ✓ Video card
- ✓ Hard Disk Drive (HDD)
- ✓ Solid-State Drive (SSD)
- ✓ Optical disk drive (e.g., BD/DVD/CD drive)
- ✓ Card reader (SD/SDHC, CF, etc.)Common hardware that you might find connected to the *outside* of a computer, although many tablets, laptops, and netbooks integrate some of these items into their housings:
- ✓ Monitor
- ✓ Keyboard
- ✓ Mouse
- ✓ Uninterruptible Power Supply (UPS)
- ✓ Flash drive

- ✓ Printer
- ✓ Speakers
- ✓ External hard drive
- ✓ Pen tablet
- ✓ Sound card
- ✓ Zip drive
- ✓ Network Interface Card (NIC)
- ✓ Expansion card (FireWire, USB, etc.)
- ✓ Hard drive controller card
- ✓ Analog modem
- ✓ Scanner
- ✓ Projector
- ✓ Floppy disk drive
- ✓ Joystick
- ✓ Webcam
- ✓ Microphone
- ✓ Tape drive

INPUT DEVICES

Input device enables the user to send data, information, or control signals to a computer. The Central Processing Unit (CPU) of a computer receives the input and processes it to produce the output.

Some of the popular input devices are:

- ✓ Keyboard
- ✓ Mouse
- ✓ Scanner
- ✓ Joystick
- ✓ Light Pen
- ✓ Digitizer
- ✓ Microphone
- ✓ Magnetic Ink Character Recognition (MICR)
- ✓ Optical Character Reader (OCR)
- ✓ Digital Camera
- ✓ Paddle
- ✓ Steering Wheel
- ✓ Gesture recognition devices
- ✓ Light Gun
- ✓ Touch Pad
- ✓ Remote
- ✓ Touch screen
- ✓ VR
- ✓ Webcam
- ✓ Biometric Devices

Keyboard

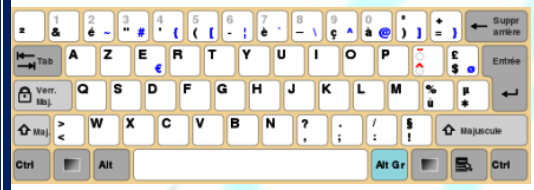
The keyboard is a basic input device that is used to enter data into a computer or any other electronic device by pressing keys. It has different sets of keys for letters, numbers, characters, and functions. Keyboards are connected to a computer through or a Bluetooth device for wireless communication.

Types of keyboards: There can be different types of keyboards based on the region and language used. Some of the common types of keyboards are as follows

i) QWERTY Keyboard:

It is the most commonly used keyboard with computers in modern times. It is named after the first six letters of the top row of buttons and is even popular in countries that do not use Latin-based alphabet. It is so popular that some people think that it is the only type of keyboard to use with computers as an input device.

ii) AZERTY Keyboard:



It is considered the standard French keyboard. It is developed in France as an alternative layout to the QWERTY layout and is mainly used in France and other European countries. Some countries have manufactured their own versions of AZERTY.

Its name is derived from the first six letters that appear on the top left row of the keyboard. The Q and W keys in AZERTY keyboard are interchanged with A and Z keys in QWERTY keyboard. Furthermore, in AZERTY keyboard M key is located to the left of the L key.

AZERTY keyboard differs from QWERTY keyboard not only in the placement of letters but also in many other ways, e.g., it gives emphasis on accents, which is required for writing European languages like French.

iii) DVORAK Keyboard:

This type of keyboard layout was developed to increase the typing speed by reducing the finger movement while typing. The most frequently used letters are kept in a home row to improve typing.

➢ Mouse

The mouse is a hand-held input device which is used to move cursor or pointer across the screen. It is designed to be used on a flat surface and generally has left and right button and a scroll wheel between them. Laptop computers

come with a touchpad that works as a mouse. It lets you control the movement of cursor or pointer by moving your finger over the touchpad. Some mouse comes with integrated features such as extra buttons to perform different buttons.

The mouse was invented by Douglas C. Engelbart in 1963. Early mouse had a roller ball integrated as a movement sensor underneath the device. Modern mouse devices come with optical technology that controls cursor movements by a visible or invisible light beam. A mouse is connected to a computer through different ports depending on the type of computer and type of a mouse.

Common types of the mouse:

i) Trackball Mouse:

It is a stationary input device that has ball mechanism to move the pointer or cursor on the screen. The ball is half inserted in the device and can be easily rolled with finger, thumb or the palm to move the pointer on the screen. The device has sensor to detect the rotation of ball. It remains stationary; you don't need to move it on the operating surface. So, it is an ideal device if you have limited desk space as you don't need to move it like a mouse.

ii) Mechanical Mouse:

It has a system of a ball and several rollers to track its movement. It is a corded type of mouse. A mechanical mouse can be used for high performance. The drawback is that they tend to get dust into the mechanics and thus require regular cleaning.

iii) Optical Mouse:

An optical mouse uses optical electronics to track its movement. It is more reliable than a mechanical mouse and also requires less maintenance. However, its performance is affected by the surface on which it is operated. Plain non-glossy mouse mat should be used for best results. The rough surface may cause problems for the optical recognition system, and the glossy surface may reflect the light wrongly and thus may cause tracking issues.

iv) Cordless or Wireless Mouse:

As the name suggests, this type of mouse lacks cable and uses wireless technology such as IrDA (infrared) or radio (Bluetooth or Wi-Fi) to control the movement of the cursor. It is used to improve the experience of using a mouse. It uses batteries for its power supply.

Scanner

The scanner uses the pictures and pages of text as input. It scans the picture or a document. The scanned picture or document then converted into a digital format or file and is displayed on the screen as an output. It uses optical character recognition techniques to convert images into digital ones. Some of the common types of scanners are as follows:

Types of Scanner:

i) Flatbed Scanner:

It has a glass pane and a moving optical CIS or CCD array. The light illuminates the pane, and then the image is placed on the glass pane. The light moves across the glass pane and scans the document and thus produces its digital copy. You will need a transparency adapter while scanning transparent slides.

ii) Handheld Scanner:

It is a small manual scanning device which is held by hand and is rolled over a flat image that is to be scanned. The drawback in using this device is that the hand should be steady while scanning; otherwise, it may distort the image. One of the commonly used handheld scanners is the barcode scanner which you would have seen in shopping stores.

iii) Sheetfed Scanner:

In this scanner, the document is inserted into the slot provided in the scanner. The main components of this scanner include the sheet-feeder, scanning module, and calibration sheet. The light does not move in this scanner. Instead, the document moves through the scanner. It is suitable for scanning single page documents, not for thick objects like books, magazines, etc.

iv) Drum Scanner:

Drum scanner has a photomultiplier tube (PMT) to scan images. It does not have a charge-coupled device like a flatbed scanner. The photomultiplier tube is extremely sensitive to light. The image is placed on a glass tube, and the light moves across the image, which produces a reflection of the image which is captured by the PMT and processed. These scanners have high resolution and are suitable for detailed scans.

v) Photo Scanner:

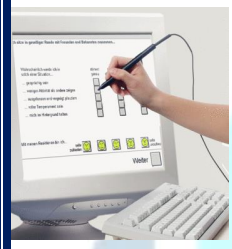
It is designed to scan photographs. It has high resolution and color depth, which are required for scanning photographs. Some photo scanners come with in-built software for cleaning and restoring old photographs.

Joystick

A joystick is also a pointing input device like a mouse. It is made up of a stick with a spherical base. The base is fitted in a socket that allows free movement of the stick. The movement of stick controls the cursor or pointer on the screen.

The frist joystick was invented by C. B. Mirick at the U.S. Naval Research Laboratory. A joystick can be of different types such as displacement joysticks, finger-operated joysticks, hand operated, isometric joystick, and more. In joystick, the cursor keeps moving in the direction of the joystick unless it is upright, whereas, in mouse, the cursor moves only when the mouse moves.

Light Pen



A light pen is a computer input device that looks like a pen. The tip of the light pen contains a light-sensitive detector that enables the user to point to or select objects on the display screen. Its light sensitive tip detects the object location and sends the corresponding signals

Digitizer

Digitizer is a computer input device that has a flat surface and usually comes with a stylus. It enables the user to draw images and graphics using the stylus as we draw on paper with a pencil. The images or graphics drawn on the digitizer appear on the computer monitor or display screen. The software converts the touch inputs into lines and can also convert handwritten text to typewritten words.

It can be used to capture handwritten signatures and data or images from taped papers. Furthermore, it is also used to receive information in the form of drawings and send output to a CAD (Computer-aided design) application and software like AutoCAD

Microphone

The microphone is a computer input device that is used to input the sound. It receives the sound vibrations and converts them into audio signals or sends to a recording medium. The audio signals are converted into digital data and stored in the computer. The microphone also enables the user to telecommunicate with others. It is also used to add sound to presentations and with webcams for video conferencing. A microphone can capture audio waves in different ways; accordingly the three most common types are described below:

i) Dynamic:

It is the most commonly used microphone with a simple design. It has a magnet which is wrapped by a metal coil and a thin sheet on the front end of the magnet. The sheet transfers vibrations from sound waves to the coil and from coil to electric wires which transmit the sound like an electrical signal.

ii) Condenser:

It is designed for audio recording and has a very sensitive and flat frequency response. It has a front plate called diaphragm and a back plate parallel to the front plate. When sound hits the diaphragm, it vibrates the diaphragm and alters the distance between the two plates. The changes in distance are transmitted as electric signals.

iii) Ribbon:

It is known for its reliability. It has a thin ribbon made of aluminum, duraluminum, or nanofilm suspended in a magnetic field. The sound waves cause vibrations in the ribbon, which generate a voltage proportional to the velocity of the vibration. The voltage is transmitted as an electrical signal. Early ribbon microphones had a transformer to increase the output voltage, but modern ribbon microphones come with advanced magnets to produce a strong signal.

Magnetic Ink Character Recognition (MICR)

MICR computer input device is designed to read the text printed with magnetic ink. MICR is a character recognition technology that makes use of special magnetized ink which is sensitive to magnetic fields. It is widely used in banks to process the cheques and other organizations where security is a major concern. It can process three hundred cheques in a minute with hundred-percent accuracy. The details on the bottom of the cheque (MICR No.) are written with magnetic ink. A laser printer with MICR toner can be used to print the magnetic ink.

The device reads the details and sends to a computer for processing. A document printed in magnetic ink is required to pass through a machine which magnetizes the ink, and the magnetic information is then translated into characters.

Optical Character Reader (OCR)

OCR computer input device is designed to convert the scanned images of handwritten, typed or printed text into digital text. It is widely used in offices and libraries to convert documents and books into electronic files.

It processes and copies the physical form of a document using a scanner. After copying the documents, the OCR software converts the documents into a two-color (black and white), version called bitmap. Then it is analyzed for light and dark areas, where the dark areas are selected as characters, and the light area is identified as background. It is widely used to convert hard copy legal or historic documents into PDFs. The converted documents can be edited if required like we edit documents created in ms word.

Digital camera:

It is a digital device as it captures images and records videos digitally and then stores them on a memory card. It is provided with an image sensor chip to capture images, as opposed to film used by traditional cameras. Besides this, a camera that is connected to your computer can also be called a digital camera.

It has photosensors to record light that enters the camera through the lens. When the light strikes the photosensors, each of the sensors returns the electrical current, which is used to create the images.

Paddle:

It is a simple input device that is widely used in games. It is a wheel that is held by hand and looks like a volume knob on a stereo that is used to increase or decrease the volume. Paddle moves or controls cursor or any other objects in the game in a back-and-forth motion. It is widely used as an alternative to the joystick. Besides this, the term paddle also refers to many handheld devices designed to control a function in an electronic device, computer, etc.

Steering wheel

It is used as an input device in racing video games such as car racing games or in driving programs as virtual simulators to steer a vehicle. It works like the real steering wheel by allowing you to take a right or left turn. A steering wheel may be provided with acceleration and brake pedal devices and a mechanism for shifting gears. Thus, it makes racing games more adventurous and entertaining.

Gesture recognition devices

These devices take human gestures as input. There are many such devices that respond to gestures. For example, Kinect is one such device that observes the movement of a player's body and interprets these movements as inputs to video games. This feature is also available in certain tablets and smartphones where you can perform certain tasks such as taking pictures using finger gestures such as swiping, pinching, etc.

Light Gun

As the name suggests, it is a pointing input device that is designed to point at and shoot the targets on the screen in a video game, or arcade, etc. The light gun was used for the first time on the MIT Whirwind computer. When the gun is pointed at the target on the screen and the trigger is pulled, the screen goes blank for a fraction of a second. During this moment, the photodiode, which is present in the barrel, determines where the gun is pointed. For example, shooting ducks in a duck hunt game.

Touchpad:

It is usually found in laptops as a substitute for the mouse. It allows you to move or control the cursor on the screen using your finger. Just like a mouse, it also has two buttons for right and left click. Using the touchpad, you can perform all the tasks that you do with a mouse, such as selecting an object on the screen, copy, paste, delete, open a file or folder, and more.

Remote

Its designed to control the functioning of a device, e.g., a TV remote that can be used to change channels, increase or decrease the volume, from a distance without leaving the seat. The first cordless TV remote was invented by Dr. Robert Adler of Zenith in 1956. The remote sends the electromagnetic waves to communicate with the device. These waves can be infrared rays, radio waves, etc.

Touch screen:

It is the display screen of a device such as a smartphone, tablet, etc., that allows users to interact or provide inputs to the device by using their finger. Today, most of the electronic devices come with touchscreen as an alternative to a mouse for navigating a graphical user interface. For example, by touching, you can unlock your phone, open emails, open files, play videos, etc. Besides this, it is used in lots of devices such as Camera, Car GPS

The concept of the touch screen was first introduced and published by E.A. Johnson in 1965. The first touch screen was developed at the beginning of the 1970s by CERN engineers Frank Beck and Bent Stumpe.

VR

VR stands for virtual reality. It is an artificial or virtual environment which is generated by computers. A person can interact with virtual objects of this artificial environment using some input devices such as headsets, gloves, headphones, etc. For example, he or she can find himself or herself walking on a beach, watching a football match, walking in the sky, etc., without actually doing all this.

Webcam

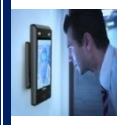
Any camera which is connected to a computer is called a webcam. The in-built camera provided on a computer can also be considered a webcam. It is an input device as it can take pictures, and can be used to record videos if required. The pictures and videos are stored in the computer memory.

and can be displayed on the screen if required. Although it works almost the same as the digital camera, it is different from a digital camera, as it is designed to take compact digital photos that can be uploaded easily on the webpages and shared with others through the internet.

Biometric Devices

Biometric refers to a process in which a person is identified through his or her biological features such as fingerprints, eye cornea, face structure, etc. It is done by using biometric devices, which can be of different types based on their scanning features and abilities, such as:

i) Face Scanner:



It is designed to identify a person by scanning his or her face. It takes the face measurements of a person. For example, the distance between eyes, nose, and mouth, etc., accordingly, it confirms the identity of a person. Besides this, it is smart enough to differentiate between a person's picture and the real person.

ii) Hand Scanner:

The hand of a person can also be used to verify his or her identity as every person has a unique pattern of veins in the palm, just like fingerprints. This device takes advantage of this feature; it identifies a person by scanning the palm of his hand. It uses infrared light to scan veins' patterns and blood flowing in them. Palm is even more unique than fingerprints.

iii) Fingerprint Scanner:

It scans the fingerprints to identify people or for biometric authentication. This device is developed, keeping in mind the fact that no two persons in the world can have the same fingerprints. It is widely used in companies as a fingerprint attendance system to mark the attendance of employees. This type of scanners captures the pattern of valleys and ridges found on a finger and store it in the memory or database. When you press your finger on the given space, it verifies the identity by using its pattern-matching software.

iv) Retina or Iris Scanner:

It scans the retina or iris of a person's eye to confirm the identity. This device is more secure than others as it is next to impossible to copy the retina or iris. It works by mapping the retina's blood vessel patterns of the eye. The blood vessels of retina absorb light more easily as well as can be identified with appropriate lighting.

In this scan, a beam of low-energy infrared light falls on the retina through the scanner's eyepiece. Then, the software captures the network of blood vessels in the retina and uses it to verify a person's identity.

v) Voice Scanner:

It records the voice of a person and digitizes it to create a distinctive voice print or template. The voiceprints are stored in the database, and are used to verify the voice of a person to confirm his or her identity. The person is required to speak in the normal or same voice that was used to create a voice template. It is not much reliable as it can be misused using a tape recording.

OUTPUT DEVICES

The output device displays the result of the processing of raw data that is entered in the computer through an input device. There are a number of output devices that display output in different ways such as text, images, hard copies, and audio or video.

Some of the popular output devices are:

➢ Monitor

- ❖ CRT Monitor
- ❖ LCD Monitor
- ❖ LED Monitor
- ❖ Plasma Monitor

➢ Printer

- Impact Printers

➢ **A. Character Printers**

- ❖ Dot Matrix printers
- ❖ Daisy Wheel printers

- B. Line printers

- ❖ Drum printers

- ❖ Chain printers

- **Non-impact printers**
- ❖ Laser printers
- ❖ Inkjet printers
- ➢ Projector

Monitor

The monitor is the display unit or screen of the computer. It is the main output device that displays the processed data or information as text, images, audio or video.

History of Monitors

- In 1964, the Uniscope 300 machine included a built-in CRT display, which was not a true computer monitor.
- A. Johnson invented the touch screen technology in 1965.
- On 1 March 1973, Xerox Alto computer was introduced, which had the first computer monitor. This monitor included a monochrome display and used CRT technology.
- In 1975, George Samuel Hurst introduced the first resistive touch screen display, although it was used only before 1982.
- In 1976, the Apple I and Sol-20 computer systems were introduced. These systems had a built-in video port that allowed them to run a video screen on computer monitor.
- In 1977, James P. Mitchell invented LED display technology. But even 30 years later, these monitors were not easily available to buy in the market.
- In June 1977, the Apple II was released, allowing for color display on a CRT monitor.
- In 1987, IBM released the IBM 8513, first VGA monitor.
- In 1989, VESA defined the SVGA standard for the display of computers.
- In the late-1980s, the color CRT monitors were able to support 1024 x 768 resolution display.

- EizoNanao manufactured the Eizo L66, the first LCD monitors for desktop computers, and released it in the middle-1990s.
- In 1997, the color LCD monitors were started developing by IBM, Viewsonic, and Apple that provide better quality and resolution than CRT monitors.
- In 1998, the color LCD monitors for desktop computers were manufactured by Apple.
- Later in 2003, CRT monitors outsell for the first time by LCD monitors. Till 2007, CRT monitors consistently outsell by LCD monitors, so they become more popular computer monitor.
- In 2006, Jeff Han released the first interface-free, touch-based monitor at TED.
- In 2009, the LED monitor MultiSync EA222WMe was released by NEC company. It was the first monitor released by NEC.
- AMD and Intel announced to end support for VGA in December 2010.
- In 2017, touch screen LCD monitors became more affordable for the customers as they started to decrease the price.

Types of Monitors

There are several types of monitors; some are as follows:

1. Cathode Ray Tube (CRT) Monitors -It is a technology used in early monitors. It uses a beam of electrons to create an image on the screen. It comprises the guns that fire a beam of electrons inside the screen. The electron beams repeatedly hit the surface of the screen. These guns are responsible for generating RGB (Red, Green, Blue) colors, and more other colors can be generated with the help of combining these three colors. Today's Flat Panel Monitors replace the CRT monitors.

2. Flat Panel Monitors-These types of monitors are lightweight and take less space. They consume less power as compared to CRT monitors. These monitors are more effective as they do not provide harmful radiation. These monitors are more expensive than CRTs. The flat-panel monitors are used in PDA, notebook computers, and cellular phones. These monitors are available in various sizes like 15", 17", 18" & 19" and more. The display of a flat-panel monitor is made with the help of two plates of glass. These plates contain a substance, which is activated in many ways.

Flat-panel monitor screens use two types of technologies, which are given below:

- ✓ **Liquid Crystal Display:** LCD (Liquid crystal display) screen contains a substance known as liquid crystal. The particles of this substance are aligned in a way that the light located backside on the screens, which allow to generate an image or block. Liquid crystal display offers a clear picture as compared to CRT display and emits less radiation. Furthermore, it consumes less power and takes less space than a CRT display.
- ✓ **Gas Plasma Display:** This display uses gas plasma technology, which uses a layer of gas between 2 plates of glass. When voltage is applied, the gas releases ultraviolet light. By this ultraviolet light, the pixels on the screen glow and form an image. These displays are available in different sizes of up to 150 inches. Although it offers effective colors as compared to the LCD monitor, it is more expensive. That's why it is less used.

3. Touch Screen Monitors-These monitors are also known as an input device. It enables users to interact with the computer by using a finger or stylus instead of using a mouse or keyboard. When users touch the screen by their finger, it occurs an event and forward it to the controller for processing. These types of screens include pictures or words that help users to interact with the computer. It takes input from the users by touching menus or icons presented on the screen.

There are different types of touch screen monitors; three common types are given below:

- ✓ **Resistive Touch Screen:** Generally, this screen includes a thin electrically conductive and resistive layer of metal. When the touch is pressed, a change in the electrical current occurs that is sent to the controller.

Nowadays, these screens are widely in use. These monitors are more reliable as they cannot be affected by liquids or dust.

- ✓ **Surface Wave Touch Screens:** These monitors process the input through ultrasonic waves. When a user touches the screen, the wave is processed and absorbed by the computer. It is less reliable as they can be damaged by water or dust.
- ✓ **Capacitive Touch Screen:** This screen includes a cover with an electrically-charged material. This material continuously flows the current over the screen. It is mainly used by the finger rather than a stylus. These monitors contain better clarity and do not damage by dust. Nowadays, capacitive touch screen is mostly used in smartphones.

4. LED Monitors- It is a flat screen computer monitor, which stands for light-emitting diode display. It is lightweight in terms of weight and has a short depth. As the source of light, it uses a panel of LEDs. Nowadays, a wide number of electronic devices, both large and small devices such as laptop screens, mobile phones, TVs, computer monitors, tablets, and more, use LED displays.

It is believed that James P. Mitchell invented the firstdisplay. On 18 March 1978, the first prototype of an LED display was published to the market at the SEF (Science and Engineering Fair) in Iowa. On 8 May 1978, it was shown again in Anaheim California, at the SEF. This prototype received awards and General Motors.

Advantages of LED Monitor:

- It includes a broader dimming range.
- It is a more reliable monitor.
- It is often less expensive.
- It consumes less power (20 watts), and run on a lower temperature.
- It has a more dynamic contrast ratio.

Comparison between LCD and LED monitors:

Resolution 1920 x 1080	LCD Monitors	Led Monitors
Brightness	250 cd / m^2	250 cd / m^2
Energy Star Certified	No	Yes
Weight	2.4 kg	2.4 kg
Contrast Ratio	12,000,000: 1	100,000,000: 1

5. OLED Monitors- It is a new flat light-emitting display technology, which is more efficient, brighter, thinner, and better refresh rates feature and contrast as compared to thedisplay. It is made up of locating a series of organic thin films between two conductors. These displays do not need a backlight as they are emissive displays. Furthermore, it provides better image quality ever and used in tablets and high-end smartphones.

Nowadays, it is widely used in laptops, TVs, mobile phones, digital cameras, tablets, VR headsets. The demand for mobile phone vendors, more than 500 million AMOLED screens were produced in 2018. The Samsung display is the main producer of the AMOLED screen. For example, Apple is using AMOLED OLED panel made by SDC in its 2018 iPhone XS - a 5.8" 1125x2436. Additionally, iPhone X is also using the same AMOLED display.

6. DLP Monitors- DLP stands for **Digital Light Processing,** developed by Texas Instruments. It is a technology, which is used for presentations by projecting images from a monitor onto a big screen. Before developing the DLP, most of the computer projection systems produced faded and blurry images as they were based on LCD technology. DLP technology utilizes a digital micromirror device, which is a tiny mirror housed on a special kind of microchip. Furthermore, it offers better quality pictures that can also be visible in a lit room normally.

7. TFT Monitors- It is a type of LCD flat panel display, which stands for a thin-film transistor. In

TFT monitors, all pixels are controlled with the help of one to four transistors. The high-quality flat-panel LCDs use these transistors. Although the TFT-based monitors provide better resolution of all the flat-panel techniques, these are highly expensive. The LCDs, which use thin-film transistor (TFT) technology, are known as active-matrix displays. The active-matrix displays offer higher quality as compared to older passive-matrix displays.

8. Plasma Screen Monitors-A plasma screen is a thin, flat-panel, and capable of hanging on a wall like LCD and LED televisions. It is a brighter screen as compared to LCD displays and thinner than displays. It can be used to either display modes of digital computer input or analog video signals, and sometimes, it is marketed as 'thin-panel' displays. Plasma displays have wide viewing angles, high contrast ratios, and high refresh rates, which is used to reduce a blur video. Additionally, it provides better quality pictures as it supports high resolutions of up to 1920 x 1080.

The plasma screen also includes some disadvantages such as the **chance of screen burn-in, consumes more power, loss of brightness with time, can be heavier in weight.**

Types of monitor connector

Computer monitors require one of the following kinds of connectors to connect with a computer.

- VGA
- Thunderbolt
- HDMI
- USB-C
- DVI
- DisplayPort

Printer

A printer produces hard copies of the processed data. It enables the user, to print images, text or any other information onto the paper.Based on the printing mechanism, the printers are of two types: Impact Printers and Non-impact Printers.

- ✓ **Impact Printers:** **They are of two types:**

A. **Character Printers**

   i. Dot Matrix printers

   ii. Daisy Wheel printers

B. **Line printers**

   i. Drum printers

   ii. Chain printers

- **Non-impact printers: They are of two types:**

A. Laser printers

B. Inkjet printers

Impact Printer

The impact printer uses a hammer or print head to print the character or images onto the paper. The hammer or print head strikes or presses an ink ribbon against the paper to print characters and images.

Impact printers are further divided into two types.

A. Character Printers

B. Line printers

A) Character Printers

Character printer prints a single character at a time or with a single stroke of the print head or hammer. It does not print one line at a time. Dot Matrix printer and Daisy Wheel printer are character printers. Today, these printers are not in much use due to their low speed and because only the text can be printed. The character printers are of two types, which are as follows:

i) Dot Matrix Printer

Dot Matrix Printer is an impact printer. The characters and images printed by it are the patterns of dots. These patterns are produced by striking the ink soaked ribbon against the paper with a print head. The print head contains pins that produce a pattern of dots on the paper to form the individual characters. The print head of a 24 pin dot matrix contains more pins than a 9 pin dot matrix printer, so it produces more dots which results in better printing of characters. To produce color output, the black ribbon can be changed with color stripes. The speed of Dot Matrix printers is around 200-500 characters per second.

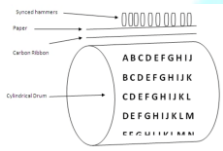
ii) Daisy Wheel Printer

Daisy Wheel Printer was invented by David S. Lee at Diablo Data Systems.It consists of a wheel or disk that has spokes or extensions and looks like a daisy, so it is named Daisy Wheel printer. At the end of extensions, molded metal characters are mounted. To print a character the printer rotates the wheel, and when the desired character is on the print location the hammer hits disk and the extension hits the ink ribbon against the paper to create the impression. It cannot be used to print graphics and is often noisy and slow, i.e., the speed is very low around 25-50 characters per second. Due to these drawbacks,these printers have become obsolete.

B) Line Printers:

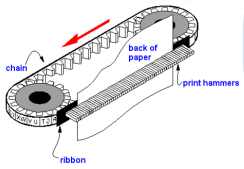
Line printer, which is also as a bar printer, prints one line at a time. It is a high-speed impact printer as it can print 500 to 3000 lines per minute. Drum printer and chain printer are examples of line printers.

i) Drum Printer:



Drum printer is a line printer that is made of a rotating drum to print characters. The drum has circular bands of characters on its surface. It has a separate hammer for each band of characters. When you print, the drum rotates, and when the desired character comes under the hammer, the hammer strikes the ink ribbon against the paper to print characters. The drum rotates at a very high speed and characters are printed by activating the appropriate hammers. Although all the characters are not printed at a time, they are printed at a very high speed. Furthermore, it can print only a predefined style as it has a specific set of characters. These printers are known to be very noisy due to the use of hammering techniques.

ii) Chain Printer:



Chain printer is a line printer that uses a rotating chain to print characters. The characters are embossed on the surface of the chain. The chain rotates horizontally around a set of hammers, for each print location one hammer is provided, i.e., the total number of hammers is equal to the total number of print positions.

The chain rotates at a very high speed and when the desired character comes at the print location, the corresponding hammer strikes the page against the ribbon and character on the chain.They can type 500 to 3000 lines per minute. They are also noisy due to the hammering action

Non-Impact Printer:

Non-impact printers don't print characters or images by striking a print head or hammer on the ink ribbon placed against the paper. They print characters and images without direct physical contact between the paper and the printing machinery. These printers can print a complete page at a time, so they are also known as page printers. The common types of non-impact printers are Laser printer and Inkjet printer:

i) Laser Printer:

A laser printer is a non-impact printer that uses a laser beam to print the characters. The laser beam hits the drum, which is a photoreceptor and draws the image on the drum by altering electrical charges on the drum. The drum then rolls in toner, and the charged image on the drum picks the toner. The toner is then printed on the paper using heat and pressure. Once the document is printed, the drum loses the electric charge,and the remaining toner is collected. The laser printers use powdered toner for printing instead of liquid ink and produce quality print objects with a resolution of 600 dots per inch (dpi) or more.

ii) Inkjet Printer:

The inkjet printer is a non-impact printer that prints images and characters by spraying fine,ionized drops of ink. The print head has tiny nozzles to spray the ink. The printer head moves back and forth and sprays ionized drops of ink on the paper, which is fed through the printer. These drops pass through an electric field that guides the ink onto the paper to print correct images and characters.

An inkjet printer has cartridges that contain ink. Modern inkjet printers are color printers that have four cartridges containing different colors: Cyan, Magenta, Yellow, and Black. It is capable of printing high-quality images with different colors. It can produce print objects with a resolution of at least 300 dots per inch (dpi).

Projector

A projector is an output device that enables the user to project the output onto a large surface such as a big screen or wall. It can be connected to a computer and similar devices to project their output onto a screen. It

uses light and lenses to produce magnified texts, images, and videos. So, it is an ideal output device to give presentations or to teach a large number of people.

Modern projects (digital projectors) come with multiple input sources such as HDMI ports for newer equipment and VGA ports that support older devices. Some projectors are designed to support Wi-Fi and Bluetooth as well. They can be fixed onto the ceiling, placed on a stand, and more and are frequently used for classroom teaching, giving presentations, home cinemas, etc.

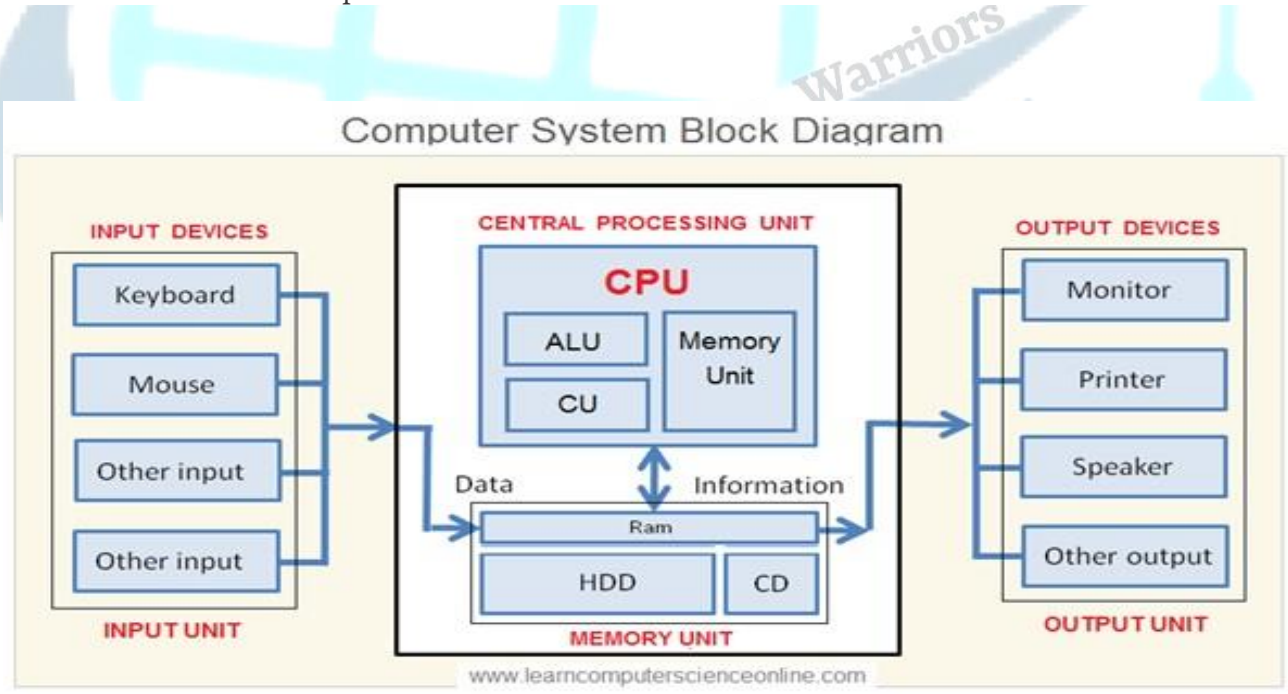
A digital projector can be of two types:

Liquid Crystal Display (LCD) digital projector: This type of digital projectors are very popular as they are lightweight and provide crisp output. An LCD projector uses transmissive technology to produce output. It allows the light source, which is a standard lamp, to pass through the three colored liquid crystal light panels. Some colors pass through the panels and some are blocked by the panels and thus images are on the screen.

Digital Light Processing (DLP) digital projector: It has a set of tiny mirrors, a separate mirror for each pixel of the image and thus provide high-quality images. These projectors are mostly used in theatres as they fulfill the requirement of high-quality video output.

CENTRAL PROCESSING UNIT (CPU)

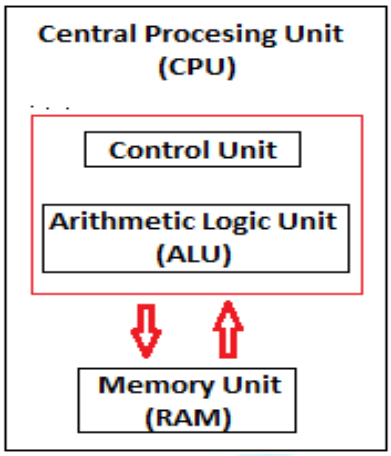
A Central Processing Unit is also called a processor, central processor, or microprocessor. It carries out all the important functions of a computer. It receives instructions from both the hardware and active software and produces output accordingly. It stores all important programs like operating systems and application software. CPU also helps Input and output devices to communicate with each other. Owing to these features of CPU, it is often referred to as the brain of the computer.



CPU is installed or inserted into a CPU socket located on the motherboard. Furthermore, it is provided with a heat sink to absorb and dissipate heat to keep the CPU cool and functioning smoothly.

Generally, a CPU has three components:

- ALU (Arithmetic Logic Unit)
- Control Unit
- Memory or Storage Unit



Control Unit: It is the circuitry in the control unit, which makes use of electrical signals to instruct the computer system for executing already stored instructions. It takes instructions from memory and then decodes and executes these instructions. So, it controls and coordinates the functioning of all parts of the computer. The Control Unit's main task is to maintain and regulate the flow of information across the processor. It does not take part in processing and storing data

ALU: It is the arithmetic logic unit, which performs arithmetic and logical functions. Arithmetic functions include addition, subtraction, multiplication division, and comparisons. Logical functions mainly include selecting, comparing, and merging the data. A CPU may contain more than one ALU. Furthermore, ALUs can be used for maintaining timers that help run the computer.

Memory or Storage Unit/ Registers: It is called Random access memory (RAM). It temporarily stores data, programs, and intermediate and final results of processing. So, it acts as a temporary storage area that holds the data temporarily, which is used to run the computer.

What is CPU Clock Speed?

The clock speed of a CPU or a processor refers to the number of instructions it can process in a second. It is measured in gigahertz. For example, a CPU with a clock speed of 4.0 GHz means it can process 4 billion instructions in a second.

Types of CPU:

CPUs are mostly manufactured by Intel and AMD, each of which manufactures its own types of CPUs. In modern times, there are lots of CPU types in the market. Some of the basic types of CPUs are described below:

Single Core CPU: Single Core is the oldest type of computer CPU, which was used in the 1970s. It has only one core to process different operations. It can start only one operation at a time; the CPU switches back and

forth between different sets of data streams when more than one program runs. So, it is not suitable for multitasking as the performance will be reduced if more than one application runs. The performance of these CPUs is mainly dependent on the clock speed. It is still used in various devices, such as smartphones.

Dual Core CPU: As the name suggests, Dual Core CPU contains two cores in a single Integrated Circuit (IC). Although each core has its own controller and cache, they are linked together to work as a single unit and thus can perform faster than the single-core processors and can handle multitasking more efficiently than Single Core processors.

Quad Core CPU: This type of CPU comes with two dual-core processors in one integrated circuit (IC) or chip. So, a quad-core processor is a chip that contains four independent units called cores. These cores read and execute instructions of CPU. The cores can run multiple instructions simultaneously, thereby increases the overall speed for programs that are compatible with parallel processing.

Quad Core CPU uses a technology that allows four independent processing units (cores) to run in parallel on a single chip. Thus by integrating multiple cores in a single CPU, higher performance can be generated without boosting the clock speed. However, the performance increases only when the computer's software supports multiprocessing. The software which supports multiprocessing divides the processing load between multiple processors instead of using one processor at a time.

History of CPU:

Some of the important events in the development of CPU since its invention till date are as follows:

- In 1823, Baron Jons Jackob Berzelius discovered silicon that is the main component of CPU till date.
- In 1903, Nikola Tesla got gates or switches patented, which are electrical logic circuits.
- In December 1947, John Bardeen, William Shockley, and Walter Brattain invented the first transistor at the Bell Laboratories and got it patented in 1948.
- In 1958, the first working integrated circuit was developed by Robert Noyce and Jack Kilby.
- In 1960, IBM established the first mass-production facility for transistors in New York.
- In 1968, Robert Noyce and Gordon Moore founded Intel Corporation.
- AMD (Advanced Micro Devices) was founded in May 1969.
- In 1971, Intel introduced the first microprocessor, the Intel 4004, with the help of Ted Hoff.
- In 1972, Intel introduced the 8008 processor; in 1976, Intel 8086 was introduced, and in June 1979, Intel 8088 was released.
- In 1979, a 16/32-bit processor, the Motorola 68000, was released. Later, it was used as a processor for the Apple Macintosh and Amiga computers.
- In 1987, Sun introduced the SPARC processor.
- In March 1991, AMD introduced the AM386 microprocessor family.

- In March 1993, Intel released the Pentium processor. In 1995, Cyrix introduced the Cx5x86 processor to give competition to Intel Pentium processors.
- In January 1999, Intel introduced the Celeron 366 MHz and 400 MHz processors.
- In April 2005, AMD introduced its first dual-core processor.
- In 2006, Intel introduced the Core 2 Duo processor.
- In 2007, Intel introduced different types of Core 2 Quad processors.
- In April 2008, Intel introduced the first series of Intel Atom processors, the Z5xx series. They were single-core processors with a 200 MHz GPU.
- In September 2009, Intel released the first Core i5 desktop processor with four cores.
- In January 2010, Intel released many processors such as Core 2 Quad processor Q9500, first Core i3 and i5 mobile processors, first Core i3 and i5 desktop processors. In the same year in July, it released the first Core i7 desktop processor with six cores.
- In June 2017, Intel introduced the first Core i9 desktop processor.
- In April 2018, Intel released the first Core i9 mobile processor.

Q.Which of the following is not one of the three primary functions that on-line direct access system can serve?
[A] inquiry
[B] back-up
[C] update
[D] programming
Answer-D

Q. A direct entry input device?
[A] optical scanner
[B] mouse
[C] light pen
[D] all of these
Answer- D

Q.What device is used for entering x – y co-ordinates?
[A] card reader
[B] joystick
[C] keyboard
[D] all of these
Answer- B

Q. Which one of the following is required when more than one person uses a central computer at the same time?
[A] terminal
[B] light pen
[C] digitizer
[D] mouse
Answer - A

Q. Which of the following typically uses a keyboard for input?
[A] desktop terminal
[B] point of sale terminal
[C] financial transaction terminal
[D] all of these
Answer. D

Q.Which of the following is not true of punched cards as data entry media?
[A] they can be used as turnaround documents.
[B] they are inexpensive.
[C] input is slow compared with other media
[D] they are easily damaged
Answer. B

Q.Linkage between CPU and users is provided by ……
[A] peripheral devices
[B] storage
[C] control unit
[D] software
Answer . A

Q. Which of the following is widely used in academic testing?
[A] MICR
[B] POS
[C] OCR
[D] OMR
Answer . D

Q. Any component of the computer you can see and touch is [IBPS Clerk 2015]
[A] software
[B] peripheral
[C] storage
[D]Hardwar
Answer- D

Q. Which of the following is not a hardware? [SSC FCI 2012]
[A] Processor chip
[B] Printer
[C] Mouse
[D] Java
Answer - D

Q. A (n) …… device is any hardware component that allows you to enter data and instructions into a computer? [SBI Clerk 2014]

[A] interaction
[B] input
[C] communication
[D] output

Answer – B

Q. Computer gets …… with the help of mouse, joystick or keyboard.

[A] insert
[B] delete
[C] input
[D] output

Answer - C

Q. Computer keyboard is an example of

[A] memory device
[B] input device
[C] output device
[D] Both '2' and '3'

Answer - B

Q. The most common method of entering text and numerical data into a computer system is through the use of a [SBI PO 2015]

[A] plotter
[B] scanner
[C] printer
[D] keyboard

Answer - D

Q. Which key is also known as toggle keys?

[A] Caps lock
[B] Num lock
[C] '1' and '2' both
[D] None of these

Answer - C

Q. You can use the Tab key to [SBI Clerk 2013]

[A] move a cursor across the screen
[B] indent a paragraph
[C] move the cursor down the screen
(4) Both '1' and '2'

Answer – B

Q. To move to the beginning of a line of text, press the …… key.

[A] Page up
[B] Shift
[C] Home
[D] Enter

Answer - C

Q. The …… key will launch the Start button.

[A] Esc
[B] Shift
[C] Window
[D] Shortcut

Answer - C

Q. Spacebar is used for

[A] giving space
[B] deleting space
[C] moving next line
[D] All of these

Answer – A

Q. In a keyboard, left-right-up-down set of keys facilitates which among the following functions? [IBPS RRB PO Mains 2017]

[A] Deleting Data or Modification
[B] Page Scrolling to view a Document
[C] Launching Start Menu
[D] Initiating Search and Help

Answer - B

Q. Shift, Ctrl, Alt are examples of which among the following category? [IBPS RRB PO Mains 2017]

[A] Modifier Keys
[B] Primary Keys
[C] Function Keys
[D] Alternate Keys

Answer - A

Q. Pointing device includes the following except
[A] mouse
[B] joystick
[C] trackball
[D] keyboard
Answer - D
Q. What type of device is computer mouse? [IBPS Clerk 2013]
[A] Storage
[B] Output
[C] Input
[D] Input/output
Answer - C
Q. Which of these is a pointing and draw device? [IBPS PO 2012, IBPS Clerk 2013]
[A] Mouse
[B] Scanner
[C] Printer
[D] CD-ROM
Answer - A
Q. First computer mouse was built by [SSC CGL 2013]
[A] Douglas Engelbart
[B] William English
[C]OanielCoogher
[D] Robert Zawacki
Answer - A
Q. Keyboard and …… are the examples of input device. [SBI Clerk 2014]
[A] monitor
[B] modem
[C]printer
[D]mouse
Answer - D
Q. Which is the best position for operating the mouse? [IBPS Clerk 2011]
[A] Tail away from the user
[B] Tail towards the user
[C] Tail facing the right
[D] Tail facing the left
Answer -B
Q. Which button is called as middle button used as third mouse button by pressing on it? [IBPS RRB PO Mains 2017]
[A] right button
[B] scroll wheel
[C] touch bar
[D] light bar
Answer -B
Q. Trackball is an example of a an [IBPS Clerk 2011]
[A] programming device
[B] pointing device
[C] output device
[D] software device
Answer - B
Q. A joystick is primarily used to/for ……. . [IBPS Clerk 2012, SBI PO 2013]
[A] control sound on the screen
[B] computer gaming
[C] enter text
[D] draw pictures
Answer - B
Q. A joystick allows movements in which angle?
[A] 30°
[B] 60°
[C] 90°
[D] 360°
Answer - D
Q. A device, which is used for making drawings, graphics and for menu selection.
[A] Keyboard
[B] Mouse
[C] Touch screen
[D] Light Pen
Answer - D
Q. ……. is generally used in applications like ATM, hospitals, airline reservation etc.
[A] Light pen
[B] Touch screen

[C] Joystick [D] Trackball

Answer - B

Q. The pattern of printed lines on most products are called [SBI Clerk 2009]

[A] prices [B] OCR

[C] scanners [D] barcodes

Answer – D

Q. A barcode reader is an example of

[A] processing device [B] storage device

[C] input device [D] output device

Answer - C

Q. An optical input device that interprets pencil marks on paper media is …… [IBPS RRB PO Mains 2017]

[A] OMR [B] punch card reader

[C] optical scanners [D] magnetic tapes

Answer - A

Q. The OCR is used for the preparation of [IBPS Clerk 2013]

[A] electricity bills [B] insurance premium

[C] telephone bills [D] All of these

Answer - D

Q. The OCR recognises the …… of the characters with the help of light source. [SBI Clerk 2009]

[A] size [B] shape

[C]colour [D] used ink

Answer - B

Q. What does MICR stand for? [IBPS Clerk 2014, RBI Grade B 2014]

[A] Magnetic Ink Character Register [B] Magnetic Ink Code Reader

[C] Magnetic Ink Code Register [D] Magnetic Ink Character Recognition

Answer -D

Q. Large amounts of cheques are processed by using

[A] OCR [B] MICR

[C] OMR [D] All of these

Answer - B

Q. Which of the following is/are the kind of smart card?

[A] Memory card [B]Micro processor card

[C] '1' and '2' both [D] None of these

Answer - C

Q. Which of the following device which recognises physical traits of an individual?

[A] Smart card [B] Biometric sensor

[C] Bard code [D] MICR

Answer - B

Q. A device that makes copies and reproduces text and images is called

[A] CPU [B] memory

[C] printer [D] scanner

Answer - D

Q. A…….. is used to read handwritten or printed text to make a digital image that is stored in memory. [RBI Grade B 2012]

[A] printer [B] laser beam

[C] scanner [D] touchpad

Answer - C

Q. The input device to be used to get a printed diagram into a computer is the [IBPS Clerk 2013, IBPS Clerk 2015]

[A] printer
[B] mouse
[C] keyboard
[D] scanner

Answer - D

Q. A scanner scans [SBI PO 2015]

[A] pictures
[B] text
[C] both pictures and text
[D] Neither pictures nor text

Answer - C

Q. It is a video capturing device [IBPS PO 2012]

[A] webcam
[B] microphone
[C] monitor
[D] mouse

Answer - A

Q. What type of device is a digital camera?

[A] Input
[B] Output
[C] Software
[D] Storage

Answer - A

Q. Which of the following could be digital input devices for computers? [RBI Grade B 2014]

[A] Digital camcorder
[B] Microphone
[C] Scanner
[D] All of these

Answer - D

Q. Which of the following groups consists of only input devices? [SBI Clerk 2011]

[A] Mouse, Keyboard, Monitor
[B] Mouse, Keyboard, Printer
[C] Mouse, Keyboard, Plotter
[D] Mouse, Keyboard, Scanner

Answer - D

Q. Results are obtained from computer through its

[A] input unit
[B] ALU unit
[C] CU unit
[D] output unit

Answer - D

Q.The primary advantage of key to tape data entry system is ……

[A] a large percentage of editing can be performed at the time of data entry
[B] key verification is easily performed
[C] tape is reusable
[D] keying errors can be detected as they occur

Answer- C

Q. Linkage between CPU and users is provided by ……

[A] peripheral devices
[B] storage
[C] control unit
[D] software

Answer- A

Q. Which of the following is widely used in academic testing?

[A] MICR
[B] POS
[C] OCR
[D] OMR

Answer . D

Q. After a picture has been taken with a digital camera and processed appropriately, the actual print of the picture is considered as

[A] data
[B] output
[C] input
[D] the process

Answer - B

Q. Using output device one can …… [IBPS RRB PO Mains 2017]
[A] View or Print Data
[B] Modify Data
[C] Store Data
[D] Replicate Data
Answer - A
Q. Which among the following is the smallest unit in an image in a computer screen? [IBPS RRB PO Mains 2017]
[A] Unit
[B] Pixel
[C] Array
[D] Resolution
Answer- B
Q. What type of device is a computer monitor? [SBI Clerk 2014]
[A] Software
[B] Processing
[C] Storage
[D] Output
Answer - D
Q. Soft copy refers to …… . [IBPS Clerk 2013]
[A] printed output
[B] digitizing
[C] music sounds
[D] screen output
Answer - D
Q. The higher the resolution of a monitor, the
[A] larger the pixels
[B] less clear the screen is
[C] further apart the pixels
[D] closer together the pixels
Answer - D
Q. The most familiar output device for the micro computers is
[A] screen
[B] TV
[C] printer
[D] monitor
Answer - D
Q. The CRT is …… in shape.
[RBI Grade B 2013, SBI PO 2011]
[A] circular
[B] rectangular
[C] eclipse
[D] conical
Answer - B
Q. CRT has a [RBI Grade B 2013]
[A] hollow tube
[B] vacuum tube
[C] long tube
[D] round tube
Answer - B
Q. The rate at which scanning is repeated in a CRT is called [SBI Clerk 2009]
[A] refresh rate
[B] resolution
[C] pitch
[D] bandwidth
Answer - A
Q. …… provides hard copy output on paper. [SBI Clerk 2015]
[A] Mouse
[B] Keyboard
[C] LCD monitor
[D] Printer
Answer - D
Q. Printer is an example of [SBI Clerk 2014]
[A] output device
[B] input device
[C] processing device
[D] storage device
Answer - A
Q. What are the units used to count the speed of a printer? [IBPS Clerk 2013]
[A] CPM
[B] DPI

[C] PPM [D] BIT

Answer - D

Q …… printer cannot print more than one characters at a time. [SSC CHSL 2013]

[A] Line [B] Daisy wheel

[C] Laser [D] Dot matrix

Answer - D

Q. Speed of line printer is limited by the speed of [IBPS PO 2012, Clerk 2013]

[A] paper movements [B] cartridge used

[C] length of paper [D] All of these

Answer - A

Q. An example of peripheral equipment is

[A] printer [B] CPU

[C] spreadsheet [D] microcomputer

Answer - A

Q. Dot matrix is a type of

[A] tape [B] printer

[C] disk [C] bus

Answer - B

Q. Dot matrix printer is

[A] unidirectional [B] bi-directional

[C] sequential [D] random

Answer - B

Q. The impact printers are

[A] dot matrix [B] drum

[C] inkjet [D] Both '1' and '2'

Answer - D

Q. Which printer is a non-impact printer that can produce very high quality, letter-perfect printing?

[A] dot matrix printer [B] daisy wheel printer

[C] electrostatic printer [D] laser printer

Answer - D

Q. The POS data entry system is used must extensively by ……

[A] banking industry [B] grocery industry

[C] railroad industry [D] word-processing industry

Answer - B

Q. A disadvantage of the laser printer is that ……

[A] it is quieter than an impact printer [B] it is very slow

[C] output is of a lower quality [D] none of these

Answer . D

Q.Data entry can be performed with all of the following except?

[A] OCR [B] OMR

[C] COM [D] MICR

Answer- C

Q.Magnetic tape can serve as ……

[A] input media [B] output media

[C] secondary storage media [D] all of these

Answer. D

Q. The advantage of COM are ……

[A] compact size, readability
[B] compact size, speed
[C] readability size, speed
[D] low cost, readability

Answer- B

Q. MICR has made possible to ……

[A] cashless society
[B] checkless society
[C] credit less society
[D] none of these

Answer - A

Q.The parity bit is added for ……

[A] coding
[B] indexing
[C] error detection
[D] updating

Answer - C

Q.The two basic types of record access methods are ……

[A] sequential and random
[B] direct and immediate
[C] sequential and indexed
[D] on line and real time

Answer - A

Q. Which of the following types of terminals is entirely dependent for all its capabilities on the computer system to which it is connected?

[A] smart terminal
[B] dumb terminal
[C] microcomputer
[D] none of these

Answer . B

Q. Which of the following is used only for data entry and storage and never for processing?

[A] mouse
[B] dumb terminal
[C] microcomputer
[D] all of these

Answer - B

Q. Which of the following are often used to ensure data has been accurately input to the computer?

[A] keyboard
[B] light pen
[C] digitizers
[D]Input control

Answer - D

Q. Which of the following is not a direct entry input device?

[A] keyboard
[B] light pen
[C] digitizers
[D] none of these

Answer - D

Q.Which of the following would you most likely use at home as well as in the office connected to a central computer?

[A] dump terminal
[B] point of sale terminal
[C] financial transaction terminal
[D] microcomputer

Answer - D

Q. Which of the following is used to insure the high quality of computer output?

[A] voice output system
[B] output controls
[C] computer output microfilm
[D] liquid crystal display

Answer - B

Q. Which of the following technologies will you likely see in laptop computers?

[A] voice output systems
[B] output controls
[C] computer output microfilm
[D] liquid crystal display

Answer - D

Q.Which of the following is the principal difference between a monochrome monitor and an RGB monitor?

[A] number of electron guns
[B] resolution

[C] size [D] cost

Answer - A

Q. Which of the following can be output by a computer?

[A] graphics [B] voice

[C] text [D] all of these

Answer - D

Q. Output hardware is often categorized according to whether it.

[A] is expensive [B] requires a large amount of electricity to work

[C] produces hardcopy or softcopy [D] can fit on a desktop

Answer – C

Q.Large computer system typically uses.

[A] dot-matrix printers [B] daisy wheel printers

[C] ink jet printers [D] line printers

Answer - D

Q. Which of the following printers, are you sure will not be used if your objective is to print on multi carbon forms?

[A] daisy wheel [B] cot-matrix

[C] laser [D] thimble

Answer- C

Q. Which of the following is not part of CRT?

[A] phosphorous screen

[B] shadow mask

[C] electron gun

[D] gas plasma

Answer - D

Q. Which of the following does not affect the resolution of a video display image?

[A] bandwidth

[B] raster scan rate

[C] vertical and horizontal lines of resolution

[D] screen size

Answer - D

Q. Which of the following is used to produce high quality graphics (hard copy) in color?

[A]RGB monitor [B] plotter

[C] ink jet printer [D] laser printer

Answer- B

Q. The terminal device that functions as a cash register computer terminal, and OCR reader is ……

[A] video display terminal [B] OCR register terminal

[C] data collection terminal [D] POS terminal

Answer - C

Q. The technique designed to support the effective access of microfilmed data is ……

[A] micro fiche retrieval [B] COM

[C] micrographics [D] all of these

Answer- C

Q. An impact printer that uses an interchangeable, rotating printing unit for hard copy output is …….

[A] terminal printer [B] wire-matrix printer

[C] drum printer [D] daisy wheel printer

Answer - D

Q. Which of the following printing devices provide an output composed of a series of dots?

[A] coir-matrix printer
[B] band printer
[C] Wang image printer
[D] either [A] or [C]

Answer- D

Q. Which of the following terminals output most closely resembles the output produced by a plotter?

[A] graphics terminal
[B] POS terminal
[C] hard copy terminals
[D] all of these

Answer- A

CHAPTER 03
SOFTWARE

SOFTWARE

Software is a set of instructions, data or programs used to operate computers and execute specific tasks. It is the opposite of hardware, which describes the physical aspects of a computer. Software is a generic term used to refer to applications, scripts and programs that run on a device. It can be thought of as the variable part of a computer, while hardware is the invariable part.

TYPESOFSOFTWARE-

Systemsoftware	Applicationsoftware	Programmingsoftware
Operatingsoftware	Educationalsoftware	Texteditor
Loader	Spreadsheetsoftware	Compiler
Datadriver	Wordprocessors	Interpreter
Firmware		

Therearetwotypesofsoftware–

- System Software
- Application Software

System Software - The system software is a collection of programs designed tooperate, control, and extend the processing capabilities of the computer itself. Systemsoftware is generally prepared by the computer manufacturers. These software productscomprise of programs written in low-level languages, which interact with the hardware at avery basic level. System software serves as the interface between the hardware and the endusers.Some examples of system software are Operating System, Compilers, Interpreter,Assemblers,etc.

Hereisalistofsome ofthe mostprominentfeatures ofa systemsoftware–

- Closetothesystem
- Fastinspeed
- Difficulttodesign
- Difficulttounderstand
- Lessinteractive
- Smallerinsize
- Difficulttomanipulate
- Generallywritteninlow-levellanguage

Application Software - Application software products are designed to satisfy aparticular need of a particular environment. All software applications prepared in thecomputerlabcancomeunderthecategoryofApplicationsoftware.

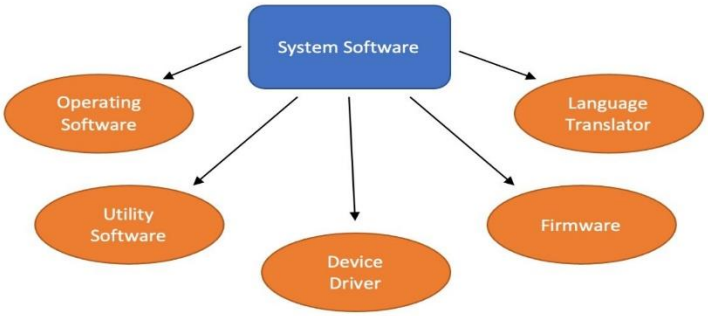
ExamplesofApplicationsoftwarearethefollowing–

- ✓ Payroll Software
- ✓ Student Record Software
- ✓ Inventory Management Software
- ✓ Income Tax Software
- ✓ Railways Reservation Software
- ✓ Microsoft Office Suite Software
- ✓ Microsoft Word
- ✓ Microsoft Excel
- ✓ Microsoft owerPoint

Featuresofapplicationsoftwareareasfollows–

- Close to theuser
- Easy to design
- More interactive
- Slow in speed
- Generally written in high-level language
- Easy to understand

- Easy to manipulateanduse
- Bigger in size and requires large storage space



OperatingSystem

An operating system is the system software that works as an interface to enable the user to communicate with the computer. It manages and coordinates the functioning of hardware and software of the computer.The commonly used operating systems are Microsoft Windows,

Some other examples of systems of ware include:

BIOS: It stands for basic input output system. It is a type of system software, which isstored in Read Only Memory (ROM) located on the motherboard. However, inadvanced computer systems, it is stored in flash memory. BIOS is the first softwarethat gets activated when you turn on your computer system. It loads the drivers of thehard disk into memory as well as assists the operating system to load itself into thememory.

- **Boot Program:** Boot refers to starting up a computer.Whenyouswitchonthecomputer, the commands in the ROM are executed automatically to load the boot programinto memory and execute its instructions.The BIOS program has a basicse to commands that enables the computer to perform the basic input/output instructions to start the computer.
- **Anassembler:** It plays the role of a converterasit receives basic computer instructions and converts them into a pattern of bits. The processor uses these bits toper form basic operations.
- **Adevicedriver:** This system software control shard ware devices connected to acomputer. It enables the computer to use the hardware by providing an appropriateinterface. The kernel of a Computer's CPU communicates with different hardwarethrough this software. Operating systems generally come with most of the devicedrivers. If the operating system does not have a device driver for hardware, you havetoinstall the device driverbeforeusingthat hardwaredevice.

ApplicationSoftware:

Application software is a set of programs designed to perform a specific task. It does not control the working of a computer as it is designed for end-users.Acomputer can run without application software. Application software can be easily installed or uninstalled as required. It can be a single program or a collection of small programs.Microsoft Office Suite,Adobe Photoshop, and any other software like payroll software or income tax software are applicationsoftware. As we know, they are designed to perform specific tasks. Accordingly, they can be of different types such as:

- **Word Processing Software:**This software all owsuserstocreate,edit,format,andmanipulate the text and more. It offers lots of options for writing documents, creatingimages,andmore. Forexample, MS Word,WordPad, Notepad,etc.
- **Spreadsheet Software:** It is designed to perform calculations, store data, create charts,etc. It has rows and columns, and the data is entered in the cell, which is an intersectionofarowandcolumn,e.g., MicrosoftExcel.
- **Multimedia Software:** These software are developed to perform editing of video, audio,and text. It allows you to combine texts, videos, audio, and images. Thus, you canimprove a text document by adding photos, animations, graphics, and charts through multimedia software.For example,VL Cplayer,Window Media Player,etc.
- **Enterprise Software:** These software are developed for business operational functions.It is used in large organizations where the quantum of business is too large. It can beused for accounting, billing, order processing and more. For example, CRM (Customer Relationship Management),BI(Business Intelligence),ERP(Enterprise Resource lanning),SCM(Supply Chain Management),customer support system,and more.

ProgrammingSoftware:

It is a set or collection of tools that help developers in writing other software orprograms.Itassiststhemincreating,debugging,andmaintainingsoftwareorprograms or applications. We can say that these are facilitator software that helps translate programming language such as Some examples of programming software include:

- Eclipse:It is a javalanguageeditor.
- Coda:It is a programming language editor for Mac.
- Note pad++:Itisan open-sourceed it or for windows.
- Sublimetext:Itisacross-platformcodeeditorforLinux,Mac,andWindows.

Historyofsoftware

- The term software was not used until the late1950s.During this time,although different types of programming software were being created, they were typically not commercially available.Consequently,users—mostly scientists and large enterprises- of ten had to write their own software.
- The follow in gisa brief timeline of the history of software:
- June 21, 1948. Tom Kilburn, a computer scientist, writes the world's first piece of software for the Manchester Baby computer at the University of Manchester in England.
- Early 1950s. General Motors creates the first OS, for the IBM 701 Electronic Data Processing Machine.Itiscalled General Motors Operating System,orGMOS.
- 1958. Statistician John Tukey coins the word software in an article about computerprogramming.
- Late1960s.Floppy disk sare introduced and are use in the1980sand1990s to distribute software.
- Nov.3,1971.AT&TreleasesthefirsteditionoftheUnixOS.
- 1977.Apple releases the Apple IIand consumer software take soff.
- 1979. VisiCorp releases VisiCalc for the Apple II, the first spreadsheet software forpersonalcomputers.

- 1981. Microsoft releases MS-DOS, the OS on which many of the early IBM computersran. IBM begins selling software, and commercial software becomes available to the average consumer.
- ROMs become standard and hold much more data than floppy disks.Large software programs can be distributed quickly,easily and relatively inexpensively.
- 1991.The Linuxkernel,the basis for the open source Linux OS,isreleased.
- 1997. DVDs are introduced and able to hold more data than CDs, making it possible to put bundle sofprograms, such as the Microsoft Office Suite, on to one disk.
- 1999. Salesforce.com uses cloud computing to pioneer software delivery over theinternet.
- 2000.The term software as a service(SaaS)comes into vogue.
- 2007.I Phone is launched and mobile applications begin to take hold.
- 1980s.Hard drives become standard on PCs,and manufacture rss tartbundling software in computers.
- 1983. The free software movement is launched with Richard Stallman's GNU (GNU isnot Unix) Linux project to create a Unix-like OS with source code that can be freelycopied,modified and distributed.
- 1984.MacOSis released to run Apple's Macintoshline.
- Mid-1980s.Key software applications,including Auto Desk Auto CAD,Microsoft Wordand Microsoft Excel,arereleased.
- 1985.Microsoft Windows 1.0isreleased.
- 1989.CD2010to the present.DVD sare becoming obsoletes users buy and download software from the internet and the cloud.Vendors move to subscription-based mode lsand SaaShas become common.

Q. Word processing spreadsheet and photo-editing are an example of

[A]application software [B] system software

[C]operating system software [D] platform software

Answer - A

Q.is a set of computer programs used on a computer to help perform tasks.

[A]An instruction [B] Software

[C]Memory [D] A processor

Answer - B

Q. Thesystem software is the set of programs that enables your computer's hardware devices and software to work together.

[A]management [B] processing

[C]utility [D] application

Answer - D

Q. The two broad categories of software are

[A]word processing and spread-sheet [B] transaction and application

[C]Windows and Mac OS [D] system and application

Answer - D

Q. Personnel who design, program, operate and maintain computer equipment refers toConsole-operator

[A]Programmer [B] Peopleware

[C]System Analyst [D] None of these

Answer - B

Q. A computer program that converts an entire program into machine language is called a/an

[A]Interpreter [B] Simulator

[C]Compiler [D] Commander

Answer - C

Q. A computer program that translates one program instructions at a time into machine language is called a/an

[A]Interpreter [B] CPU

[C]Compiler [D] Simulator

Answer - A

Q. Programs designed to perform specific tasks is known as

[A]system software [B] application software

[C]utility programs

[D] operating system

Answer - B

Q. Each model of a computer has a unique

[A]Assembly of a computer

[B]Machine language

[C]High level language

[D]All of the above

Answer - B

Q. On a PC, how much memory is available to application software?

[A]1024 KB

[B] 760 KB

[C]640 KB

[D] 560 KB

Answer - C

Q. The language that the computer can understand and execute is called

[A]Machine language

[B] Application software

[C]System program

[D] All of the above

Answer - A

Q. The steps and tasks needed to process data, such as responses to questions or clicking an icon, are called

[A]instructions

[B] the operating system

[C]application system

[D] the system unit

Answer - A

Q. Which statement is valid about computer program?

[A]It is understood by a computer

[B] It is understood by programmer

[C]It is understood user

[D] All of the above

Answer - D

Q. Software in computer

[A]Enhances the capabilities of the hardware machine

[B]Increase the speed of central processing unit

[C]Both of the above

[D]None of the above

Answer - A

Q. Which of the following is not computer language?

[A]High level language

[B] Medium level language

[C]Low level language

[D] All of the above

Answer - B

Q. Which language is directly understood by the computer without translation program?

[A]Machine language [B] Assembly language

[C]High level language [D] None of the above

Answer - A

Q. Instruction in computer languages consists of

[A]OPCODE [B] OPERAND

[C]Both of the above [D] Either 1 or 2

Answer - C

Q. Machine language is

[A]Machine dependent [B] Difficult to program

[C]Error prone [D] All of the above

Answer - D

Q. The term used to describe the intangible instructions that tell the computer what to do is [IBPS Clerk 2015]

[A] hardware [B] software

[C] storage [D] input/output

Answer - B

Q. Software refers to [IBPS Clerk 2012]

[A]the physical components that a computer is made of

[B]firmware

[C]programs

[D]people ware

Answer - C

Q. Which of the following is software? [IBPS Clerk 2014]

[A]Keyboard [B] Internet Explorer

[C]Scanner [D] Mouse

Answer - B

Q. The primary purpose of software is to turn data into [RBI Grade B 2014]

[A] information [B] programs

[C] objects [D] charts

Answer - A

Q. Computer software is [SBI Clerk 2015]

[A] used only for output [B] a computer peripheral

[C] used for input

[D] a set of instructions

Answer - D

Q. The steps and tasks needed to process data, such as responses to questions or clicking an icon, are called

[A] instructions

[B] the operating system

[C] application software

[D] the system unit

Answer - A

Q. The two broad categories of software are

[A]word processing and spreadsheet

[B]transaction and application

[C]Windows and Mac OS

[D]system and application

Answer – D

Q. System software

[A]allows the user to diagnose and troubleshoot the device

[B]is a programming language

[C]is a part of productivity suite

[D]helps the computer manage internal resources

Answer - D

Q. The programs designed to govern the computer hardware system are called the

[A] system software

[B]application software

[C]utility software

[D] All of these

Answer - A

Q. A collection of various programs that helps control your computer is called [SBI Clerk 2015]

[A]system software

[B] application software

[C]Microsoft Excel

[D] Microsoft Word

Answer - A

Q. This type of software works with end-users, application software and computer hardware to handle the majority of technical details. [RBI Grade B 2014, IBPS PO 2012]

[A]Communications software

[B] Application software

[C]Utility software

[D] System software

Answer - D

Q. It is the set of programs that enables your computers hardware device and application software to work together. [SBI PO 2010]

[A] Management
[B] Processing
[C] Utility
[D] System software

Answer -D

Q. A(n) is a software that helps a computer control to operate efficiently and keep track of data.

[A]application system
[B] hardware system
[C] software system
[D] operating system

Answer - D

Q. A computer cannot 'boot' if it does not have the [Union Bank of India Clerk 2012]

[A] compiler
[B] loader
[C] operating system
[D] assembler

Answer - C

Q. The tells the computer how to use its components. [IBPS Clerk 2011]

[A] utility
[B] application
[C] operating system
[D]Network

Answer - C

Q. Operating system is a

[A] application software
[B] system software
[C]hardware
[D] language

Answer - B

Q. The …… manual tells you how to use a software program. [RBI Grade B 2012]

[A] documentation
[B] programming
[C] user
[D] technical

Answer - C

Q. What does the acronym BIOS stand for? [SBI Clerk 2014, RBI Grade B 2013]

[A]Basic Input/Outer System
[B] Basic Internal Output System
[C]Basic Inner/Output System
[D] Basic Input/Output System

Answer - D

Q. …… includes boot firmware and power management. [SBI Clerk 2015]

[A] CD-ROM
[B] Internal buses
[C] BIOS
[D] Chip Set

Answer - C

Q. In order for a peripheral to operate correctly, its …… must be installed.

[A]device driver [B] user interface

[C]internet connection [D] operating system

Answer - A

Q. Which of the following is a system software?

[A] Database programs [B] Word processors

[C] Spreadsheets [D] Device drivers

Answer - D

Q.helps in converting programming language to machine language.

[A] Operating system [B] Device driver

[C] Language translator [D] Linker

Answer – C

Q. The main purpose ofis to resolve references among files. [SBI PO 2012]

[A] text editor

[B] loader

[C] antivirus

[D] linker

Answer – D

Q. Which of the following system software resides in main memory always? [IBPS Clerk 2011]

[A] Text editor [B] Assembler

[C] Linker [D] Loader

Answer - D

Q. A kind of system software, which is responsible for loading and relocating of the executable program in the main memory

[A] loader [B] linker

[C] translator [D] presentation software

Answer - A

Q. Specialised program that allows user to utilise in specific application is classified as [IBPS RRB PO Mains 2017]

[A]relative program [B] application program

[C]appropriate program [D] replicate program

Answer - B

Q.is a software which is used to do particular task. [IBPS Clerk Mains 2017]

[A] Operating system [B] Program

[C] Data software [D] Application software

Answer - D

Q. Software designed for a specific purpose/ application such as pay calculations, processing of examination result, etc are known as

[A] utility software

[B] system software

[C] application software

[D]customised software

Answer - C

Q. Application software [IBPS Clerk 2011]

[A]is used to control the operating system

[B]is designed to help programmers

[C]performs specific task for computer users

[D]is used for making design only

Answer - C

Q. The software that is used to create text-based documents are referred to as[SBI PO 2013]

[A]DBMS [B]

[B] suites

[C]spreadsheets

[D] Word processors

Answer - D

Q. Which of the following general purpose softwares allow you to do mathematical or financial calculation?

[A]Word processing program

[B] Spreadsheet program

[C]Presentation program

[D] Database program

Answer - B

Q. Spreadsheet software is used

[A]to keep simple company accounts

[B] calculate employee commission payments

[C]as simple stock control system

[D] All of the above

Answer - D

Q. Which software is used to create presentations to show to customers or staff members?

[A]Report Generation

[B]Graph Generator

[C]Presentation software

[D]Picture generator

Answer -

Q. Database software is used to

[A]discard sales records [B] store contacts list

[C]keep customer records [D] generate report

Answer - C

Q. DTP is a tool for graphic designers and non-designers to create visual communications for professional. DTP stands for

[A]Device Transfer Protocol [B] Desktop Publishing

[C]Device Transfer Programs [D] All of the above

Answer - B

Q. Corel Ventura, Illustrator are the examples of

[A] Word Processing [B] Graphic

[C] Multimedia [D] DTP

Answer – D

Q. DirectX is a [RBI Grade B 2013]

[A]computer part [B] a user interface

[C]operating system [D] software that drives graphic software

Answer - D

Q. Which among the following is not an example of a system software?

[A] Operating system [B] Debugger

[C] Software Driver [D] Adobe Photoshop

Answer - D

Q. Which application software is used for a special purpose? [IBPS RRB PO Mains 2018]

[A]General purpose software

[B]Special purpose software

[C]Important software

[D]System software

Answer - B

Q. Which types of software is used in organisations to keep track of products in stocks?

[A]Enterprise Resource Planning (ERP) software

[B]Payroll Software

[C]Human resource planning software

[D]Inventory management software

Answer - D

Q. A software program that adds functionalityto your computer or help your computer perform better is called as [IBPS RRB PO Mains 2017]

[A]utility program [B] function program

[C]specialised program [D] manufacturer program

Answer - A

Q. Which of the following techniques can be used to store a large number of files in a small amount of storage space?

[A] File adjustment [B] File copying

[C] File compatibility [D] File compression

Answer - D

Q. What type of software creates a smaller file that is faster to transfer over the Internet? [IBPS Clerk Mains 2017]

[A] Compression [B] Fragmentation

[C] Unzipped [D] Abstraction

Answer - A

Q. is a Windows utility program that locates and eliminates unnecessaryfragments and rearranges files and unused to disk space to optimise operations. [SBI PO 2013]

[A] Backup

[B] Disk cleanup

[C] Disk defragmenter

[D] Restore

Answer - C

Q. When files are broken up into small parts on a disk they are said to be

[A] fragmented [B] contiguous

[C] sectored [D] disbursed

Answer - A

Q. It can make copies of all information stored on a disk or either restore the entire disk

[A] Restore utility [B] Disk cleaner

[C] Backup software [D] Defragmenter

Answer - C

Q. What is backup? [Union Bank 2011, RBI Grade B 2012]

[A]Connect his network to more component

[B]Copy to save a data from original source to other destination

[C]Filter on old data from new data

[D]Access data from tape

Answer – B

Q. A(n) …… backup contains a copy of every program, data and system file on a computer. [Allahabad Bank Clerk 2011]

[A] restoration
[B] bootstrap
[C] differential
[D] full

Answer - D

Q. Disk cleaner helps to free

[A] data
[B] recycle bin
[C] spaces
[D] information

Answer- C

Q. They can find files that are unnecessary to computer operation, or take up considerable amounts of space.

[A] Antivirus
[B] Sweep
[C] Disk cleaner
[D] Disk Formatting

Answer - C

Q. Which of the following Windows utilities erase unneeded files?

[A]Backup or Restore Wizard
[B] Disk Cleanup
[C]Disk Defragmenter
[D] Antivirus

Answer – B

Q. Text editor is a/an [RBI Grade B 2013]

[A] application software
[B] system software
[C] utility software
[D]all purpose software

Answer - C

Q. Which of the following is not related to a utility software?

[A]Text editor
[B] Antivirus program
[C]Disk compression software
[D] Railway reservation system

Answer - D

Q. Utility programs include

[A]virus scanning software
[B] backup software
[C]disk defragmenter
[D] All of the above

Answer - D

Q. Which of the following is not related to an application software?

[A]Word processor
[B] DBMS
[C]Operating system
[D] Railway reservation system

Answer - C

Q.disk encryption is a technology (hardware or software) where data is encryptedbefore storage. [SCC CGL 2017]

[A] Half

[B] Whole

[C] Double

[D] Triple

Answer - B

Q. …… means that their source code is not available.

[A]Fireware [B] Freeware

[C] Freefall [D] Firmware

Answer - B

Q. In computer terminology, 'CAD' stands for [SBI PO 2014]

[A]Computer Applied Design [B] Computer Algorithm and Design

[C]Computer Application Design [D] Computer Aided Design

Answer – D

Q. All of the following terms are associated with spreadsheet software except.

[A]worksheet [B] cell

[C]formula [D] virus detection

Answer - D

Q.are words that a programming language has set aside for its own use.

[A]Control words [B] Reserved words

[C]Reserved keys [D] Control structures

Answer - B

Q. The primary purpose of the software is to turn data into

[A]Web sites [B] information

[C]programs [D] objects

Answer - B

Q.Is the process of finding errors in software code.

[A]Compiling

[B]Testing

[C]Running

[D]Debugging

Answer -

Q. Acontains specific rules and words that express the logical steps of analgorithm.

[A]syntax [B] programming structure

[C]programming language [D] logic chart

Answer - A

Q. A single application that combines the major features of several types of applications is called

[A]integrated software [B] a suite

[C]a combo package [D] high-end

Answer - A

Q. Application software

[A]is used to control the operating system

[B]is designed to help programmers

[C]performs a specific task for computer users

[D]None of this

Answer – C

Q. How can the user determine what programs are available on a computer?

[A]Checking the hard disk properties

[B]Viewing the installed programs during the booting process

[C]Checking the operating system for a list of installed programs

[D]Checking the existing files saved on the disk

Answer - D

Q. The first computers were programmed using

[A]assembly language

[B]machine language

[C]source code

[D]object code

Answer - B

Q. Instructions that tell the computer what to do. Another name for software

[A]Programs [B] CPU

[C]Options [D] Folder

Answer - A

Q.A printed information, exists in the real sense and is a more permanent form ofoutput than the output existing on a display device.

[A]Soft copy [B] Carbon copy

[C]Hard copy [D] Desk copy

Answer - C

Q. The earliest software was developed using

[A]The Waterfall model

[B]Spiral Model

[C]Spiral model

[D]Incremental model

Answer - A

Q. A(n)is software that helps a computer control itself to operate efficiently andkeep track of data.

[A]application system

[B]hardware system

[C]software system

[D]operating system

Answer - D

Q. A set of computer programs that helps a computer monitor itself and function more efficiently is a/an

[A]Windows [B] System Software

[C]DBMS [D] Application Software

Answer - B

Q. The instructions that tell a computer how to carry out the processing tasks are referred to as computer

[A]programs [B] processors

[C]input devices [D] memory modules

Answer - A

Q. Device drivers are

[A]tiny power cords for external storage devices

[B]experts who know to maximise the performance of devices

[C]small, special-purpose programs

[D]the innermost part of the operating system

Answer - C

Q. Which of the following displays programs that are currently running? A single click on one of the program icons will bring the window up.

[A]Menu bar26 [B] Taskbar

[C]Title bar [D] Status bar

Answer - B

Q. Different applications and documents of windows desktop are represented by

[A]Symbols

[B]Labels

[C]Graph

[D]Icons

Answer - D

Q. Programs designed specifically to address general-purpose applications and special- purpose applications are called …….. .

[A]operating system

[B] system software

[C]application software

[D] management information systems

Answer – C

Q. Application software

[A]is used to control the operating system

[B]is designed to help programmers

[C]performs a specific task for computer users

[D]is used for making design only

Answer - C

Q. A (n)is a program that makes the computer easier to use.

[A]Operating system

[B] Application

[C]Utility

[D] Network

Answer - A

Q. Document reader is

[A]A device that is used to operate games

[B]A device that arrange the documents

[C]A device that is used to edit document

[D]An optical input device used to read documents

Answer - D

Q. Which of the following is a popular DOS-based spreadsheet package?

[A]Word

[B]Smart Cell

[C]Excel

[D]Lotus 1-2-3

Answer - D

Q.is the process of finding errors in software code.

[A]Compiling

[B] Testing

[C]Running

[D] Debugging

Answer - D

Q. A program in execution is called

[A]Procedure [B] Instruction

[C]Function [D] Process

Answer - D

Q. The type of software that controls the internal operations in the computer and controls how the computer and controls how the computer works with all its parts is which of the following?

[A]Shareware [B] operating system software

[C]application software [D] public domain software

Answer – B

Q. The sequence of events that occurs in the computer when it is interpreting and executing an instruction is known as a (n)

[A]execution cycle

[B]instruction cycle

[C]working cycle

[D]machine cycle

Answer - B

Q. The software tools that enable a user to interact with a computer for a specific purpose are known as …… .

[A]Hardware

[B]Networked Software

[C]Shareware

[D]Applications

Answer - D

Q. Processing involves

[A]inputting data into a computer system

[B]transforming input into output

[C]displaying output in a useful manner

[D]providing relevant answers

Answer - B

Q. Which of the following software can't be categorized application software?

[A]DBMS [B] Spreadsheet

[C]MS-DOS [D] Word Processing

Answer - C

Q.are graphical objects used to represent commonly used application.

[A]GUI [B] Drivers

[C]Windows [D] icons

Answer - D

Q. The two major categories of the software include

[A]operating system and utility

[B] personal productivity and system

[C]system and application

[D] system and utility

Answer-C

CHAPTER 04
MEMORY

COMPUTER MEMORY

The computer memory holds the data and instructions needed to process raw data and produce output. The computer memory is divided into large number of small parts known as cells. Each cell has a unique address which varies from 0 to memory size minus one.

Computer memory is of two types:

Volatile (RAM) and Non-volatile (ROM). The secondary memory (hard disk) is referred as storage not memory.

But, if we categorize memory on behalf of space or location, it is of four types:

- Register memory
- Cache memory
- Primary memory
- Secondary memory

Classification of Memory

In computers, memory is the most essential component of the normal functioning of any system. The computer system categorizes the memory for different purposes and uses. In this section, we have discussed the classification of memory in detail. Also, we will discuss types of memory, features of memory, RAM, ROM, SRAM, DRAM, and its advantages and disadvantages.

What is computer memory?

computer memory is any physical device, used to store data, information or instruction temporarily or permanently. It is the collection of storage units that stores binary information in the form of bits. The memory block is split into a small number of components, called cells. Each cell has a unique address to store the data in memory, ranging from zero to memory size minus one. For example, if the size of computer memory is 64k words, the memory units have 64 * 1024 = 65536 locations or cells. The address of the memory's cells varies from 0 to 65535.

Why do we need a computer memory?

In the computer system, we need computer memory to store various types of data like text, images, video, audio, documents, etc. We can retrieve it when the data is required. For example, when we write and execute any computer program, it is initially stored in primary memory. If the processor does not need particular items for a longer time, the program or data is automatically saved into the permanent or secondary memory. Then the data is called from secondary memory to main memory and performs the execution of codes.

Features of Memory

Following are the different features of the memory system that includes:

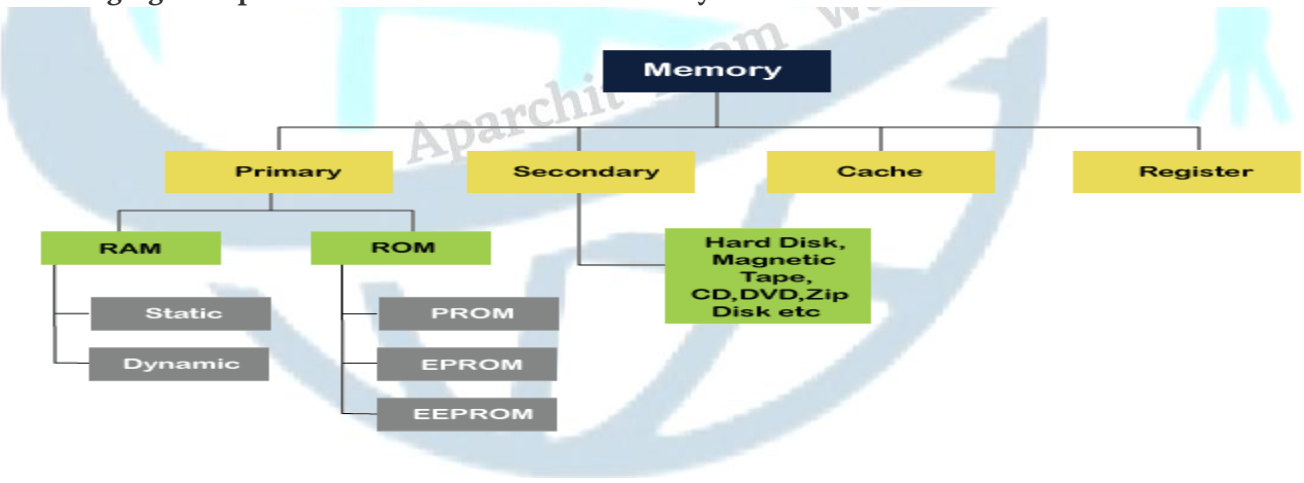
1. **Location:** It represents the internal or external location of the memory in a computer. The internal memory is inbuilt in computer memory. It is also known as primary memory. the example of primary memory are registers, cache and main memory. Whereas, external memory is the separate storage device from the computer, such as disk, tape, USB pen drive.
2. **Capacity:** It is the most important feature of computer memory. Storage capacity can vary in external and internal memory. External devices' storage capacity is measured in terms of bytes, whereas the internal memory is measured with bytes or words. The storage word length can vary in bits, such as 8, 16 or 32 bits.
3. **Access Methods:** Memory can be accessed through four modes of memory.
    1. **DMA:** As the name specifies, Direct Memory Address (DMA) is a method that allows input/output (I/O) devices to access or retrieve data directly or from the main memory.
    2. **Sequential Access Method:** The sequential access method is used in a data storage device to read stored data sequentially from the computer memory. Whereas, the data received from random access memory (RAM) can be in any order.
    3. **Random Access Method:** It is a method used to randomly access data from memory. This method is the opposite of SAM. For example, to go from A to Z in random access, we can directly jump to any specified location. In the Sequential method, we have to follow all intervening from A to Z to reach at the particular memory location.
    4. **Associative Access Method**: It is a special type of memory that optimizes search performance through defined data to directly access the stored information based on a memory address.
4. **Unit of transfer:** As the name suggests, a unit of transfer measures the transfer rate of bits that can be read or write in or out of the memory devices. The transfer rate of data can be different in external and internal memory.
5. **Internal memory:** The transfer rate of bits is mostly equal to the word size.
    - **External memory:** The transfer rate of bit or unit is not equal to the word length. It is always greater than a word or may be referred to as blocks.
6. **Performance:** The performance of memory is majorly divided into three parts.

1. **Access Time:** In random access memory, it represents the total time taken by memory devices to perform a read or write operation that an address is sent to memory.
2. **Memory Cycle Time:** Total time required to access memory block and additional required time before starting second access.
3. **Transfer rate:** It describes the transfer rate of data used to transmit memory to or from an external or internal memory device. Bit transfer can be different for different external and internal devices.

7. **Physical types:** It defines the physical type of memory used in a computer such as magnetic, semiconductor, magneto-optical and optical.
8. **Organization:** It defines the physical structure of the bits used in memory.
9. **Physical characteristics:** It specifies the physical behavior of the memory like volatile, non-volatile or non-erasable memory. Volatile memory is known as RAM, which requires power to retain stored information, and if any power loss has occurred, stored data will be lost. Non-volatile memory is a permanent storage memory that is used to obtain any stored information, even when the power is off. Non-erasable memory is a type of memory that cannot be erased after the manufactured like ROM because at the time of manufactured ROM are programmed.

Classification of Memory

The following figure represents the classification of memory:



❖ Primary or Main Memory

Primary memory is also known as the computer system's main memory that communicates directly within the CPU, Auxiliary memory and the Cache memory. Main memory is used to kept programs or data when the processor is active to use them. When a program or data is activated to execute, the processor first loads instructions or programs from secondary memory into main memory, and then the processor starts execution. Accessing or executing of data from primary memory is faster because it has a cache or register memory that provides faster response, and it is located closer to the CPU. The primary memory is volatile, which means

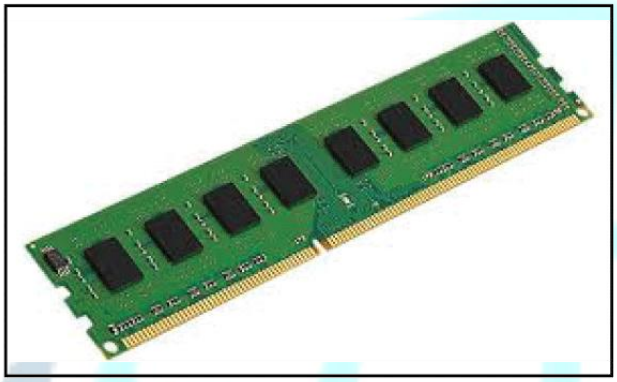
the data in memory can be lost if itis not saved when a power failure occurs. It is costlier than secondary memory, and the main memory capacity is limited as compared to secondary memory.

The primary memory is further divided into two parts:

1. RAM (Random Access Memory)
2. ROM (Read Only Memory)

❖ Random Access Memory (RAM)

Random Access Memory (RAM) is one of the faster types of main memory accessed directly by the CPU. It is the hardware in a computer device to temporarily store data, programs or program results. It is used to read/write data in memory until the machine is working. It is volatile, which means if a power failure occurs or the computer is turned off, the information stored in RAM will be lost. All data stored in computer memory can be read or accessed randomly at any time.



There are two types of RAM:

- ✓ **SRAM**
- ✓ **DRAM**

DRAM: -DRAM (Dynamic Random-Access Memory) is a type of RAM that is used for the dynamic storage of data in RAM. In DRAM, each cell carries one-bit information. The cell is made up of two parts: a capacitor and a transistor. The size of the capacitor and the transistor is so small, requiring millions of them to store on a single chip. Hence, a DRAM chip can hold more data than an SRAM chip of the same size. However, the capacitor needs to be continuously refreshed to retain information because DRAM is volatile. If the power is switched off, the data store in memory is lost.

Characteristics of DRAM

1. It requires continuously refreshed to retain the data.
2. It is slower than SRAM
3. It holds a large amount of data

4. It is the combination of capacitor and transistor
5. It is less expensive as compared to SRAM
6. Less power consumption

SRAM: SRMA (Static Random-Access Memory) is a type of RAM used to store static data in the memory. It means to store data in SRAM remains active as long as the computer system has a power supply. However, data is lost in SRAM when power failures have occurred.

Characteristics of Static Ram

1. It does not require to refresh.
2. It is faster than DRAM
3. It is expensive.
4. High power consumption
5. Longer life
6. Large size
7. Uses as a cache memory

❖ **SRAM Vs. DRAM**

SRAM	DRAM
It is a Static Random-Access Memory.	It is a Dynamic Random Access Memory.
The access time of SRAM is slow.	The access time of DRAM is high.
It uses flip-flops to store each bit of information.	It uses a capacitor to store each bit of information.
It does not require periodic refreshing to preserve the information.	It requires periodically refreshing to preserve the information.
It uses in cache memory.	It is used in the main memory.
The cost of SRAM is expensive.	The cost of DRAM is less expensive.

It has a complex structure.	Its structure is simple.
It requires low power consumption.	It requires more power consumption.

Advantages of RAM

- It is a faster type of memory in a computer.
- It requires less power to operate.
- Program loads much faster
- More RAM increases the performance of a system and can multitask.
- Perform read and write operations.
- The processor can read information faster than a hard disc, floppy, USB, etc.
- Disadvantages of RAM
- Less RAM reduces the speed and performance of a computer.
- Due to volatile, it requires electricity to preserve the data.
- It is expensive than ROM
- It is unreliable as compared to ROM
- The Size of RAM is limited.

❖ Read-Only Memory (ROM)

ROM is a memory device or storage medium that is used to permanently store information inside a chip. It is a read-only memory that can only read stored information, data or programs, but we cannot write or modify anything. A ROM contains some important instructions or program data that are required to start or boot a computer. It is a non-volatile memory; it means that the stored information cannot be lost even when the power is turned off or the system is shut down.

Types of ROM

There are five types of Read Only Memory:

1. **MROM (Masked Read Only Memory):**MROM is the oldest type of read-only memory whose program or data is pre-configured by the integrated circuit manufacture at the time of manufacturing. Therefore, a program or instruction stored within the MROM chip cannot be changed by the user.
2. **PROM (Programmable Read Only Memory):**It is a type of digital read-only memory, in which the user can write any type of information or program only once. It means it is the empty PROM chip in which the user can write the desired content or program only once using the special PROM programmer or PROM burner device; after that, the data or instruction cannot be changed or erased.
3. **EPROM (Erasable and Programmable Read Only Memory):**It is the type of read only memory in which stored data can be erased and re-programmed only once in the EPROM memory. It is a non-volatile memory chip that holds data when there is no power supply and can also store data for a minimum of 10 to 20 years. In EPROM, if we want to erase any stored data and re-programmed it, first, we need to pass the ultraviolet light for 40 minutes to erase the data; after that, the data is re-created in EPROM.
4. **EEPROM (Electrically Erasable and Programmable Read Only Memory):** The EEROM is an electrically erasable and programmable read only memory used to erase stored data using a high voltage electrical charge and re-programmed it. It is also a non-volatile memory whose data cannot be erased or lost; even the power is turned off. In EEPROM, the stored data can be erased and reprogrammed up to 10 thousand times, and the data erase one byte at a time.
5. **Flash ROM:**Flash memory is a non-volatile storage memory chip that can be written or programmed in small units called Block or Sector. Flash Memory is an EEPROM form of computer memory, and the contents or data cannot be lost when the power source is turned off. It is also used to transfer data between the computer and digital devices.

Advantages of ROM

1. It is a non-volatile memory in which stored information can be lost even power is turned off.
2. It is static, so it does not require refreshing the content every time.
3. Data can be stored permanently.
4. It is easy to test and store large data as compared to RAM.
5. These cannot be changed accidently
6. It is cheaper than RAM.
7. It is simple and reliable as compared to RAM.
8. It helps to start the computer and loads the OS.

Disadvantages of ROM

1. Store data cannot be updated or modify except to read the existing data.
2. It is a slower memory than RAM to access the stored data.
3. It takes around 40 minutes to destroy the existing data using the high charge of ultraviolet light.

❖ RAM Vs. ROM

RAM	ROM
It is a Random-Access Memory.	It is a Read Only Memory.
Read and write operations can be performed.	Only Read operation can be performed.
Data can be lost in volatile memory when the power supply is turned off.	Data cannot be lost in non-volatile memory when the power supply is turned off.
It is a faster and expensive memory.	It is a slower and less expensive memory.
Storage data requires to be refreshed in RAM.	Storage data does not need to be refreshed in ROM.
The size of the chip is bigger than the ROM chip to store the data.	The size of the chip is smaller than the RAM chip to store the same amount of data.
Types of RAM: DRAM and SRAM	Types of ROM: MROM, PROM, EPROM, EEPROM

❖ Secondary Memory

Secondary memory is a permanent storage space to hold a large amount of data. Secondary memory is also known as external memory that representing the various storage media (hard drives, USB, CDs, flash drives and DVDs) on which the computer data and program can be saved on a long term basis. However, it is cheaper and slower than the main memory. Unlike primary memory, secondary memory cannot be accessed directly by the CPU. Instead of that, secondary memory data is first loaded into the RAM (Random Access Memory) and then

sent to the processor to read and update the data. Secondary memory devices also include magnetic disks like hard disk and floppy disks, an optical disk such as CDs and CDROMs, and magnetic tapes.

Features of Secondary Memory

- Its speed is slower than the primary/ main memory.
- Store data cannot be lost due to non-volatile nature.
- It can store large collections of different types, such as audio, video, pictures, text, software, etc.
- All the stored data in a secondary memory cannot be lost because it is a permanent storage area; even the power is turned off.
- It has various optical and magnetic memories to store data.

Types of Secondary Memory

The following are the types of secondary memory devices:

Hard Disk - A hard disk is a computer's permanent storage device. It is a non-volatile disk that permanently stores data, programs, and files, and cannot lose store data when the computer's power source is switched off. Typically, it is located internally on computer's motherboard that stores and retrieves data using one or more rigid fast rotating disk platters inside an air-sealed casing. It is a large storage device, found on every computer or laptop for permanently storing installed software, music, text documentation, videos, operating system, and data until the user did not delete.

Floppy Disk

A floppy disk is a secondary storage system that consisting of thin, flexible magnetic coating disks for holding electronic data such as computer files. It is also known as Floppy Diskette that comes in three sizes like 8 inches, 5.5 inches and 3.5 inches. The stored data of a floppy disk can be accessed through the floppy disk drive. Furthermore, it is the only way through a new program installed on a computer or backup of the information. However, it is the oldest type of portable storage device, which can store data up to 1.44 MB. Since most programs were larger, that required multiple floppy diskettes to store large amounts of data. Therefore, it is not used due to very low memory storage.

CD (Compact Disc)

A CD is an optical disk storage device, stands for Compact Disc. It is a storage device used to store various data types like audio, videos, files, OS, Back-Up file, and any other information useful to a computer. The CD has a width of 1.2 mm and 12 cm in height, which can store approximately 783 MB of data size. It uses laser light to read and write data from the CDs.

Types of CDs

1. CD-ROM (Compact Disc Read Only Memory): It is mainly used for bulk size mass like audio CDs, software and computer games at the time of manufacture. Users can only read data, text, music, videos from the disc, but they cannot modify or burnt it.
2. CD-R (Compact Disc Recordable): The type of Compact Disc used to write once by the user; after that, it cannot be modified or erased.
3. CD-RW (Compact Disc Rewritable): It is a rewritable CD disc, often used to write or delete the stored data.DVD Drive/DiscDVD is an optical disc storage device, stands for Digital Video Display or Digital Versatile Disc. It has the same size as a CD but can store a larger amount of data than a compact disc. It was developed in 1995 by Sony, Panasonic, Toshiba and Philips four electronics companies. DVD drives are divided into three types, such as DVD ROM (Read Only Memory), DVD R (Recordable) and DVD RW (Rewritable or Erasable). It can store multiple data formats like audio, videos, images, software, operating system, etc. The storing capacity of data in DVD is 4.7 GB to 17 GB.

Blu Ray Disc (BD)

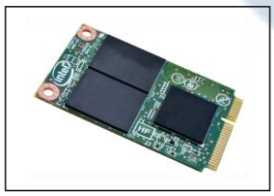
Blu Ray is an Optical disc storage device used to store a large amount of data or high definition of video recording and playing other media files. It uses laser technology to read the stored data of the Blu-ray Disk. It can store more data at a greater density as compared to CD/ DVD. For example, compact discs allow us to store 700 MB of data, and in DVDs, it provides up to 8 GB of storage capacity, while Blu-ray Discs provide 28 GB of space to store data.

Pen Drive

A pen drive is a portable device used to permanently store data and is also known as a USB flash drive. It is commonly used to store and transfer the data connected to a computer using a USB port. It does not have any moveable part to store the data; it uses an integrated circuit chip that stores the data. It allows the users to store and transfer data like audio, videos, images, etc. from one computer to any USB pen drive. The storing capacity of pen drives from 64 MB to 128 GB or more.

Cache Memory

It is a small-sized chip-based computer memory that lies between the CPU and the main memory. It is a faster, high performance and temporary memory to enhance the performance of the CPU. It stores all the data and instructions that are often used by computer CPUs. It also reduces the access time of data from the main memory. It is faster than the main memory, and sometimes, it is also called CPU memory because it is very close to the CPU chip. The following are the levels of cache memory.



1. L1 Cache: The L1 cache is also known as the onboard, internal, or primary cache. It is built with the help of the CPU. Its speed is very high, and the size of the L1 cache varies from 8 KB to 128 KB.

2. L2 Cache: It is also known as external or secondary cache, which requires fast access time to store temporary data. It is built into a separate chip in a motherboard, not built into the CPU like the L1 level. The size of the L2 cache may be 128 KB to 1 MB.
3. L3 Cache: L3 cache levels are generally used with high performance and capacity of the computer. It is built into a motherboard. Its speed is very slow, and the maximum size up to 8 MB.

Advantages of Cache Memory

1. Cache memory is the faster memory as compared to the main memory.
2. It stores all data and instructions that are repeatedly used by the CPU for improving the performance of a computer.
3. The access time of data is less than the main memory.

Disadvantage of Cache Memory

1. It is very costly as compared to the Main memory and the Secondary memory.
2. It has limited storage capacity.

Register Memory

The register memory is a temporary storage area for storing and transferring the data and the instructions to a computer. It is the smallest and fastest memory of a computer. It is a part of computer memory located in the CPU as the form of registers. The register memory is 16, 32 and 64 bits in size. It temporarily stores data instructions and the address of the memory that is repeatedly used to provide faster response to the CPU.

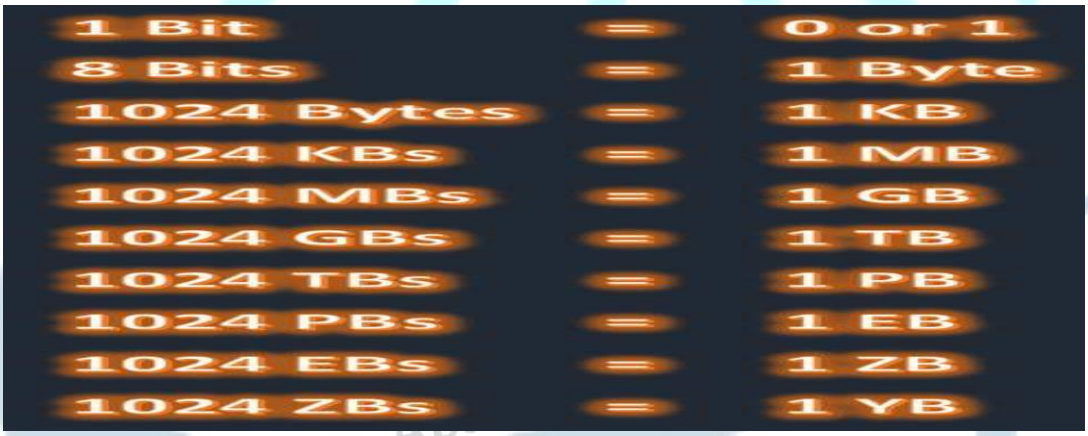
Primary Vs. Secondary Memory

Primary Memory	Secondary Memory
It is also known as temporary memory.	It is also known as a permanent memory.
Data can be access directly by the processor or CPU.	Data cannot be accessed directly by the I/O processor or CPU.
Stored data can be a volatile or non-volatile memory.	The nature of secondary memory is always non-volatile.
It is more costly than secondary memory.	It is less costly than primary memory.

It is a faster memory.	It is a slower memory.
It has limited storage capacity.	It has a large storage capacity.
It required the power to retain the data in primary memory.	It does not require power to retain the data in secondary memory.
Examples of primary memory are RAM, ROM, Registers, EPROM, PROM and cache memory.	Examples of secondary memory are CD, DVD, HDD, magnetic tapes, flash disks, pen drive, etc

Memory units

- Nibble<Bit < Byte < KB < MB < GB < TB < PB <XB< ZB < YB



Question & Answer

Q.The two kinds of main memory are

[A] Primary and secondary

[B] Random and sequential

[C] ROM and RAMCDFR BL

[D] All of the above

Answer - C

Q. Which of the following will happen when data is entered into a memory location?

[A] It will add to the content of the location

[B] It will change the address of the memory location

[C] It will erase the previous content

[D] It will erase the previous content

Answer - A

Q. A storage area used to store data to a compensate for the difference in speed at which the different units can handle data is

[A] Memory

[B] Buffer

[C] Accumulator

[D] Address

Answer - B

Q. To locate a data item for storage is

[A] Field

[B] Feed

[C] Database

[D] Fetch

Answer – D

Q. A 32-bit microprocessor has the word length equal to

[A] 2 byte

[B] 32 byte

[C] 4 byte

[D] 8 byte

Answer - C

Q. A set of information that defines the status of resources allocated to a process is

[A] Process control

[B] ALU

[C] Register Unit

[D] Process description

Answer - D

Q. Any method for controlling access to or use of memory is known

[A] Memory map

[B] Memory protection

[C] Memory management

[D] Memory instruction

Answer - B

Q. A type of core store that has a lower access time than the devices used for working store in the same processor is known as

[A] Core memory

[B] Buffer

[C] Fast core

[D] Address register

Answer - C

Q. Which of the following is a form of semiconductor memory in which it is possible to change the contents of selected memory locations by applying suitable electrical signals?

[A] CAM

[B] ROM

[C] EAROM

[D] Abacus

Answer - C

Q. How many address lines are needed to address each machine location in a 2048 X 4 memory chip?

[A] 10 [B] 11

[C] 8 [D] 12

Answer - B

Q. A memory that is capable of determining whether a given datum is contained in one of its address is

[A] ROM [B] PROM

[C] CAM [D] RAM

Answer - C

Q. A method of implementing a memory management system is

[A] Buddy system [B]Bridgeware

[C] Broadband coaxial system [D] All of the above

Answer - A

Q. A plastic card similar to a credit card but having some memory and a microprocessor embedded within it is

[A] Punched paper tape [B] Chip card

[C] Card punch [D] Magnetic tape

Answer - C

Q. The use of spooler programs and/or …… Hardware allows personal computer operators to do the processing work at the same time a printing operation is in progress.

[A] Registered mails [B] Memory

[C] CPU [D] Buffer

Answer - D

Q. Which chips using special external equipment can reprogram?

[A] ROM [B] PROM

[C] SAM [D] RAM

Answer - B

Q. Interface electronic circuit is used to interconnect I/O devices to a computer's CPU or

[A] ALU [B] Memory

[C] Buffer [D] Register

Answer - B

Q. ……. storage media stores data on magnetically sensitive material.

[A] optical [B] magnetic

[C] floppy disk [D] All of the above

Answer - B

Q. Which is the type of memory for information that does not change on your computer?

[A] RAM

[B] ROM

[C]ERAM

[D]RW/RAM

Answer - B

Q. A typical personal computer used for business purposes would have …… of RAM.

[A] 4 KB

[B] 16 K

[C] 64 K

[D] 256 K

Answer - D

Q. Which computer memory is used for storing programs and data currently being processed by the CPU?

[A] Mass memory

[B] Internal memory

[C] Non-volatile memory

[D] PROM

Answer - B

Q. Which of the following is a secondary memory device?

[A] Keyboard

[B] Disk

[C] ALU

[D] All of the above

Answer - B

Q. The difference between memory and storage is that memory is …… and storage is …….. .

[A] Temporary, permanent

[B] Permanent, temporary

[C] Slow, fast

[D] All of the above

Answer - A

Q. Which of the following registers is used to keep track of the address of the memory location where the next instruction is located?

[A] Memory Address register

[B] Memory data register

[C] Instruction register

[D] Program counter

Answer - D

Q. How many address lines are needed to address each memory location in a 2008 × 4 memory chip?

[A] 10

[B] 11

[C] 8

[D] 12

Answer - B

Q. The memory which is programmed at the time it is manufactured

[A] ROM

[B] RAM

[C] PROM [D] EPROM

Answer – A

Q. The two basic types of record access methods are

[A] Sequential and random [B] Sequential and indexed

[C] Direct and immediate [D] Online and real time

Answer - A

Q. Which of the following memories needs refresh?

[A] SRAM [B] DRAM

[C] ROM [D] All of the above

Answer - B

Q. Access time is

[A] seek time + latency time [B] seek time

[C] seek time – latency time [D] latency time

Answer - A

Q. Seek time is

[A] time to position the head over proper track

[B] time to position the head over proper sector

[C] time to position the head over proper cylinder

[D] All of the above

Answer - A

Q. A name or number used to identify a storage location devices?

[A] A byte [B] A record

[C] An address [D] All of the above

Answer - C

Q.Which of the following registers is loaded with the contents of the memory location pointed by the PC?

[A] Memory address registers [B] Memory data registers

[C] Instruction register [D] Program counter

Answer - C

Q. Storage that retains its data after the power is turned off is referred to as

[A] volatile storage [B] non-volatile storage

[C] sequential storage [D] direct storage

Answer - B

Q. The person contributing the idea of the stored program was

[A] John Neumann [B] Charles Babbage

[C] Howard Aiken [D] Daniel Thomas

Answer - A

Q. Which of the following refers to the memory in your computer?

[A] RAM [B] DSL

[C] USB [D] LAN

Answer - A

Q. …… Is a form of permanent memory that holds all the instructions the computer needs to start up does not get erased when the power is turned off.

[A] The Network Interface Card (NIC) [B] The CPU

[C] RAM [D] ROM

Answer - D

Q. What characteristic of read-only memory (ROM) makes it useful?

[A] ROM information can be easily updated

[B] Data in ROM is nonvolatile, that is, it remains there even without electrical power

[C] ROM provides very large amounts of inexpensive data storage

[D] ROM chips are easily swapped between different brands of computers

Answer - B

Q. What is the permanent memory built into your computer called?

[A] RAM [B] ROM

[C] CPU [D] CD-ROM

Answer - B

Q. RAM can be thought of as the …… for the computer's processor.

[A] factory [B] operating room

[C] waiting room [D] planning room

Answer - C

Q. An area of a computer that temporarily holds data waiting to be processed is

[A] CPU [B] Memory

[C] Storage [D] File

Answer - B

Q. Which type of memory is closely related to the processor?

[A] Main Memory [B] Secondary Memory

[C] Disk Memory [D] Tape Memory

Answer - A

Q. Where are programs and data kept while the processor is using them?

[A] Main memory [B] Secondary memory

[C] Disk memory [D] Program memory

Answer - A

Q. When you are working on a document on PC, where is the document on PC, where is the document temporarily stored?

[A] RAM [B] ROM

[C] The CPU [D] Flash memory

Answer - A

Q. When SHADOWING is enabled in a computer BIOS

[A] Instructions stored in various ROM chips are copied into

[B] Values are stored twice in the memory for redundancy

[C] The conventional memory is re-mapped to the top of the

[D] Data stored in RAM chips on adapter cards are shadowed

Answer - A

Q. Which of the following memories must be refreshed many times per second?

[A] EPROM [B] ROM

[C] Static RAM [D] Dynamic RAM

Answer - D

Q. What is a backup?

[A] Adding more components to your network

[B] Protecting data by copying it from the original source to a different destination

[C] Filtering old data from the new data

[D] Accessing data on tape

Answer – B

Q. When cutting and pasting, the item cut is temporarily stored in

[A] ROM [B] Hard drive

[C] Diskette [D] Clipboard

Answer - D

Q. If a user needs information instantly available to the CPU, it should be stored

[A] In the CPU

[B] In RAM

[C] In secondary storage

[D] On a CD

Answer - B

Q. The contents of ……. are lost when the computer turns off.

[A] storage

[B] input

[C] output

[D] memory

Answer - D

Q. A place in the computer system where data and programs are temporarily stored

[A] Paste

[B] Open

[C] Memory

[D] Pocket

Answer - C

Q. ……. Is a form of permanent memory that holds all the instructions the computer needs to start up does not get erased when the power is turned off.

[A] The Network Interface Card (NIC)

[B] The CPU

[C] RAM

[D] ROM

Answer - D

Q. Memory, also called random access memory, or RAM,

[A] contains the electronic circuits that cause processing to occur

[B] makes the information resulting from processing available for use

[C] allows data, programs, commands, and user responses to be entered into a computer

[D] consists of electronic components that store data

Answer - D

Q. Permanent instructions that the computer uses when it is turned on and that cannot be changed by other instructions are contained in

[A] ROM

[B] RAM

[C] ALU

[D] REM

Answer - A

Q. Which type of memory holds only the program and data that the CPU is presently processing?

[A] CMOS

[B] ROM

[C] RAM

[D] ASCII

Answer - C

Q. What characteristic of read-only memory (ROM) makes it useful?

[A] ROM information can be easily updated

[B] Data in ROM is nonvolatile, that is, it remains there even without electrical power

[C] ROM provides very large amounts of inexpensive data storage

[D] ROM chips are easily swapped between different brands of computers

Answer - B

Q. A disk's content that is recorded at the time of manufacture and that cannot be changed or erased by the user is

[A] memory-only

[B] write-only

[C] read-only

[D] run-only

Answer - C

Q. Where are programs and data kept while the processor is using them?

[A] Main memory

[B] Secondary memory

[C] Disk memory

[D] Program memory

Answer - A

Q. What is the permanent memory built into your computer called?

[A] RAM

[B] ROM

[C] CPU

[D] CD-ROM

Answer - B

Q. What is the difference between a CD-ROMand a CD-RW?

[A] They are the same just two different terms used by different terms used by different manufactures

[B] A CD-ROM can be written to and a CD-RW cannot

[C] A CD-RW can be written to, but a CD-ROM can only be read from

[D] A CD-ROM holds more information than a CD-RW

Answer - C

Q. Which of the following is not true about RAM?

[A] RAM is a temporary storage area

[B] RAM is the same as hard disk storage

[C] RAM is volatile

[D] Information stored in RAM is gone when you turn the computer off

Answer - B

Q. When you make graph and picture in document, then your computer holds the data in

[A] Restore file

[B] Backup drive

[C] Clipboard

[D] Memory

Answer - D

Q. What contains the computer BIOS and maintains its data with the use of a battery for periods when the system is powered down?

[A] CMOS

[B] RAM

[C] DRAM

[D] CPU

Answer - A

Q. Virtual memory is

[A] Memory on the hard disk that the CPU uses as an extended RAM

[B] in RAM

[C] Only necessary if you do not have any RAM in your computer

[D] A back up device for floppy disks

Answer – A

Q. To avoid the wastage of memory, the instruction lengths should be

[A] Multiple of character size only

[B] Of word size only

[C] Of file size only

[D] Of word size which is multiple of character size

Answer - D

Q. The instruction of a program which is currently being executed are stored in

[A] Secondary memory

[B] Main memory

[C] Read only memory

[D] WORM

Answer - B

Q. EPROM is

[A] Permanent storage device

[B] Temporary storage device

[C] Not a storage device

[D] Volatile

Answer - B

Q. Which of the following statements is true about RAM?

[A] RAM stands for Random Access Memory

[B] RAM does not store any information permanently

[C] RAM is also known as main memory of a computer

[D] All of the above

Answer - D

Q. Memory allocation at the run time is known as

[A] Static memory allocation

[B] Dynamic memory allocation

[C] Paging

[D] Demanding

Answer - B

Q. The term gigabyte refers to

[A] 1024 bytes

[B] 1024 kilobytes

[C] 1024 megabytes

[D] None of these

Answer – C

Q. Where do you save the data that, your datawill remain intact even when the computeris turned OFF?

[A] RAM

[B] Motherboard

[C] Secondary storage device

[D] Primary storage device

Answer - C

Q. The term …… refers to data storage systems that make it possible for a computeror electronic device to store and retrieve data. [SBI PO 2010]

[A] retrieval technology

[B] input technology

[C] output technology

[D] storage technology

Answer - D

Q. The storage device used to compensate forthe difference in rates of flow of data fromone device to another is termed as[SBI PO 2011]

[A] chip

[B] channel

[C] floppy

[D] buffer

Answer - D

Q. Which of the following is the magneticstorage device?

[A] Hard disk

[B] Compact disc

[C] Audio tapes

[D] All of these

Answer - A

Q. The concentric circles on the floppy disk are further divided into

[A] tracks [B] sectors

[C] cylinders [D] circles

Answer - B

Q. A track location that cuts across all plattersis called a

[A] cylinder [B] spindle

[C] diskette [D] platters

Answer - A

Q. The primary device that a computer uses tostore information is[Punjab & Sind Bank Clerk 2010]

[A] TV [B] storehouse

[C] desk [D] hard drive

Answer - D

Q. Hard disk devices are considered …… storage. [SBI Clerk 2014]

[A] flash [B] temporary

[C] worthless [D] non-volatile

Answer - D

Q. The thick, rigid metal plotters that are capable of retrieving information at a high rate of speed are known as [SBI Clerk 2014]

[A] hard disks [B] SAN

[C] soft disks [D] flash memory

Answer - A

Q. Hard drive is used to store[IBPS Clerk Mains 2017]

[A] volatile data [B] non-volatile data

[C] permanent data [D] temporary data

Answer - C

Q. The hard drive is normally located

[A] next to the printer [SBI PO 2014] [B] plugged into the back of the computer

[C] underneath the monitor [D] inside the system base unit

Answer - D

Q. Data on a floppy disk is recorded in ringscalled

[A] sectors [B] ringers

[C] rounders [D] tracks

Answer - D

Q. Which of the following is/are example(s) of magnetic storage media?

[A] Zip disk

[B] CD-ROM

[C] Floppy disk

[D] Both '1' and '3'

Answer - D

Q. Floppy disks are organised as [IBPS PO 2012]

[A] files

[B] heads and folders

[C] tracks and sectors

[D] All of these

Answer - C

Q. The capacity of 3.5 inch floppy disk is [SBI Clerk 2012]

[A] 1.40 MB

[B] 1.44 GB

[C] 1.40 GB

[D] 1.44 MB

Answer - D

Q. The most common storage device for the personal computer is the [SBI Clerk 2014]

[A] floppy disk

[B] USB personal computer

[C] mainframe

[D] a laptop

Answer - A

Q. Which of the following has the smallest storage capacity? [IBPS Clerk 2015]

[A] Zip disk

[B] Hard disk

[C] Floppy disk

[D] Data cartridge

Answer - C

Q. 'FDD' stands for [IBPS Clerk 2015]

[A] Floppy Drive Detector

[B] Floppy Drive Demodulator

[C] Floppy Disk Drive

[D] Floppy Demodulator Disc

Answer - C

Q. ..... is the process of dividing the disc intotracks and sectors.[SBI PO 2015, IBPS Clerk Mains 2017]

[A] Tracking

[B] Formatting

[C] Crashing

[C]Allottinga

Answer - B

Q. Tape drive provides …… access to data.

[A] timely [B] sporadic

[C] random [D] sequential

Answer – D

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[C] Secondary storage device [D] Primary storage device

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[A] timely

[B] sporadic

[C] random

[D] sequential

Answer – D

Q. Which of the following storage media provides sequential access only?

[A] Floppy disk

[B] Magnetic disk

[C] Magnetic tape

[D] Optical disc

Answer - D

Q. Which of the following can hold maximum data?

[A] Optical disc

[B] Floppy disk

[C] Magnetic disk

[D] Magnetic tape

Answer - D

Q. Which storage device is mounted on 'reels'?

[A] Floppy disk [B] Hard disk

[C] Magnetic tapes [D] CD-ROM

Answer - C

Q. Which of the following storage devices canbe used for storing large backup data?

[A] Floppy disk [B] Hard disk

[C] Magnetic tape [D] All of these

Answer - A

Q. On a CD-RW, you can

[A] read and write information

[B] only read information

[C] only write information

[D] read, write and rewrite information

Answer - D

Q. Which of the following are advantages of CD-ROM as a storage media?[RBI Grade B 2014]

[A] CD-ROM is an inexpensive way to store largeamount of data and information

[B] CD-ROM discs retrieve data and informationmore quickly than magnetic disks

[C] CD-ROMsmake less errors thanmagneticmediaComputer Memory 41

[D] All of the above

Answer - A

Q. Whichmedia has the ability to have data/information stored (written) on thembyusersmore than once? [RBI Grade B 2014]

[A] CD-R discs [B] CD-RW discs

[C] Zip discs [D] Optical discs

Q. What is the difference between a CD-ROMand CD-RW? [IBPS PO 2015]

[A] They are the same—just two different termsused by different manufactures.

[B] A CD-ROM can be written to and a CD-RWcannot.

[C] Other than those given as options

[D] A CD-RWcan be written to but a CD-ROMcan only be read from.

Answer - D

Q. Compact disc that can store approximately650-800 MB of data or 74-80 min of musicare [SBI Clerk 2015]

[A] zip discs

[B] CD-ROM

[C] video cards

[D] pressing machines

Answer - B

Q. A flat metallic disk that contains a largeamount of permanently stored informationread optically, is called a

[A] monitor

[B] ALU

[C] CD-ROM

[D] RAM

Answer - C

Q. CD-ROM is an example of[RBI Grade B 2014]

[A] input device

[B] output device

[C] Both input & output

[D] Memory device

Answer - D

Q. Which of the following has the largest storage capacity for removable media?

[A] Floppy disk

[B] CD-ROM

[C] DVD

[D] Partitioned space

Answer - C

Q. Which of the following is an example of optical disc? [Allahabad Bank PO 2011]

[A] Digital versatile discs

[B] Magnetic disks

[C] Memory disks

[D] Data bus disks

Answer - A

Q. DVD refers to [SSC MTS 2013]

[A] Digital Video Developer

[B] Digital Video Device

[C] Digital Video Disc

[D] None of the above

Answer - C

Q. ADVDisanexampleof a (n) [SBI Clerk 2014]

[A] optical device

[B] output device

[C] hard disk

[D] solid state storage device

Answer - A

Q. Which of the following discs can be read only? [IBPS Clerk 2015]

[A] DVD-R

[B] DVD-ROM

[C] DVR-RW

[D] CD-R

Answer - B

Q. These memories are used in many electronic devices, including digital camera, mobile phones etc.

[A] Memory card

[B] Pen drives

[C] Blu-ray

[D] Magnetic tape

Answer - A

Q. Which is not a storage device? [SBI PO 2013, 14, IBPS Clerk 2014]

[A] Floppy Disk

[B] Printer

[C] DVD

[D] Hard Disk

Answer - B

Q. Which of the following is not an example of secondary storage device?

[A] CD

[B] Floppy

[C] Hard disc

[D] RAM

Answer - D

Q. The size of any word/number in a computer is measured in

[A] bits

[B] bytes

[C] meter

[D]litre

Answer - A

Q. The term bit is short for [SBI Clerk 2009]

[A] megabyte

[B] binary language

[C] binary digit

[D] binary number

Answer – C

Q. Which among the following is another name for a group of 4 bits?

[A] Nibble [IBPS Clerk 2015, IBPS PO 2016]

[B] Byte

[3]KiloByte

[C]MegaByte

[D]PetaByte

Answer - A

Q. How many bits make a half byte?

[A] 2

[B] 4

[C] 6

[D] 8

Answer - B

Q. Which of the following is the smallest measure of storage? [SBI Clerk 2012]

[A] Tera byte

[B] Gigabyte

[C] Kilobyte

[D]Byte

Answer - D

Q. A byte can represent any number between 0 and [IBPS Clerk 2012]

[A] 2 [B] 255

[C] 256 [D] 1024

Answer - B

Q. A byte is a collection of [IBPS Clerk 2012]

[A] four bits [B] six bits

[C] eight bits [D] ten bits

Answer - C

Q. A collection of 8 binary digits 0's or 1's in a string format is known as

[A] bit [B] byte

[C] kilobyte [D] kilobit

Answer - B

Q. …… are used to measure both computer memory (RAM) and storage capacity ofFloppy disks, CD-ROM drives and Hard drives. [SBI Clerk 2015]

[A] Bytes [B] Bits

[C] Octal numbers [D] Hexadecimal numbers

Answer - A

Q. How many bits are equal to one byte ?[SSC CGL 2016]

[A] 8 [B] 6

[C] 7 [D] 2

Answer - B

Q. Instructions and memory address are represented by [IBPS Clerk 2015]

[A] character code [B] binary codes

[C] binary word [D] parity bit

Answer - B

Q. The computer abbreviation KB usuallymeans [IBPS PO 2011]

[A]keyblock [B]kernelboot

[C]keybyte [D] kilobyte

Answer - D

Q.Kilobyte equals to how many bytes?[SBI Clerk 2012]

[A] 1000 [B] 1035

[C] 100 [D] 1024

Answer - D

Q.One thousand bytes represent a

[A] megabyte [B] gigabyte

[C] kilobyte [D] terabyte

Answer - C

Q.Which of the following statements is valid?

[A] 1 KB = 1024 bits

[B] 1 MB = 2048 bits

[C] 1 MB = 1000 kilobits

[D] 1 MB = 1024 kilobytes

Answer - D

Q.A …… is approximately a million bytes.[SBI PO 2014]

[A] gigabyte [B] kilobyte

[C] megabyte [D] terabyte

Answer - C

Q.What does the computer abbreviation 'MB'used for? [SBI Clerk 2012, IBPS Clerk 2014]

[A] Megabit [B]Millionbytes

[C] Megabytes [D]Millionbit

Answer - C

Q.The amount of memory (RAM or ROM) ismeasured in [SBI PO 2014]

[A] bytes [B] bits

[C] megabytes [D] megabits

Answer - C

Q.How many kilobytes make a megabyte?[IBPS Clerk 2015]

[A] 128 [B] 1024

[C] 256 [D] 512

Answer - B

Q.A … is approximately one billion bytes.[IBPS Clerk 2014, SBI PO 2015]

[A] kilobyte [B] bit

[C] gigabyte [D] megabyte

Answer - C

Q.The term 'gigabyte' refers to [IBPS PO 2012]

[A] 1024 byte

[B] 1024 kilobyte

[C] 1024 megabyte

[D] 1024 gigabyte

Answer - C

Q.Which of the following is the largest unit of storage? [SBI PO 2015]

[A] GB [B] KB

[C] MB [D] TB

Answer - D

Q.Which of the following is correct sequenceof smallest to largest unit of storage size?[SBI PO 2014]

[A]Petabyte,Kilobyte,Megabyte,Gigabyte, Terabyte

[B] Kilobyte, Megabyte, Terabyte, Petabyte,Gigabyte

[C] Megabyte, Terabyte,Gigabyte,Kilobyte, Petabyte

[D]Kilobyte,Megabyte,Gigabyte, Terabyte, Petabyte

Answer – D

Q. Which of the following computer's memory is characterised by low cost per bit stored?

[A] primary [B] secondary

[C] hard disk [D] All of these

Answer - B

Q. Secondary storage

[A] does not require constant power

[B] does not magnetic media

[C] consists of four main types of devices

[D] does not store information for later retrieval

Answer - A

Q. Which of the following is not used as secondary storage?

[A] Semi-conductor memory [B] Magnetic disks

[C] Magnetic drums [D] Magnetic tapes

Answer - A

Q. The secondary storage devices can only store data but they cannot perform

[A] arithmetic operations [B] logic operations

[C] fetch operations [D] All of the above

Answer – D

Q. Storage that retains its data after the poweris turned OFF is referred to as[SBI Clerk 2009]

[A] volatile storage [B] non-volatile storage

[C] sequential storage [D] direct storage

Answer - B

Q. Dynamic RAM consumes …… power and…… than static RAM.

[A] more, faster [B] more, slower

[C] less, slower [D] less, faster

Answer - C

Q. Which of the following memory chip isfaster? [SBI Clerk 2012]

[A] There is no certainty [B] DRAM

[C] SRAM [D] RAM

Answer - C

Q. The advantage of DRAM is

[A] it is cheaper than SRAM

[B] it can store more than that of SRAM

[C] it is faster than SRAM

[D] data can be erased easily in it as comparedto SRAM

Answer - A

Q. What is called the permanent memory builtinto your computer?

[A] RAM [B] ROM

[C] CPU [D] CD-ROM

Answer -

Q. Permanent instructions that the computeruse when it is turned ON and that cannot bechanged by other instructions arecontained in

[A] ROM [B] RAM

[C] ALU [D] SRAM

Answer - A

Q. Which of the following is not a ROM?

[A] PROM [B] EPROM

[C] EEPROM [D]EDPROM

Answer - D

Q. When you first turn on a computer, the CPU is preset to execute instructions stored inthe [IBPS PO 2015]

[A] RAM

[B] flash memory

[C] ROM

[D] CD-ROM

Answer - C

Q. A disc's content that is recorded at the time of manufacture and that cannot be changedor erased by the user is [IBPS Clerk 2013]

[A] memory only

[B] write only

[C] once only

[D] read only

Answer - D

Q. An area of computer that temporarily holds data waiting to be processed is

[A] CPU

[B] memory

[C] storage

[D] file

Answer - B

Q. The difference between memory and storage is that memory is …… and storage is …… . [IBPS Clerk 2015]

[A] temporary; permanent

[B] permanent; temporary

[C] slow; fast

[D] non-volatile; volatile

Answer - A

Q. Cache memory acts between

[A] CPU and RAM

[B] RAM and ROM

[C] CPU and hard disk

[D] All of these

Answer - A

Q. The most frequently used instructions of a computer program are likely to be fetched from

[A] the hard disk

[B] cache memory

[C] RAM

[D] registers

Answer - B

Q. Which of the following is the high speed memory which compensates the gap in speeds of processor and main memory?[IBPS Clerk 2015]

[A] Cache

[B] PROM

[C] EPROM

[D] SRAM

Answer - A

Q. ..... acts as temporary high speed holding area between the memory and the CPU there by improving processing capabilities. [IBPS Clerk 2012]

[A] ROM

[B] RAM

[C] Temporary memory

[D] Cache memory

Answer - D

Q. Which of the following statements is/are true? [RBI Grade B 2012]

[A] Cache memories are bigger than RAM

[B] Cache memories are smaller than RAM

[C] ROM are faster than RAM

[D] Information in ROM can be written by users

Answer - B

Q. ..... is having more memory addresses than are physically available. [SBI PO 2014]

[A] Virtual memory

[B] System software

[C] Application software

[D] RAM

Answer - A

Q. Virtual memory is [SBI Clerk 2011]

[A] an extremely large main memory

[B] an extremely large secondary memory

[C] an illusion of extremely largemainmemory

[D] a type ofmemory used in super computers

Answer - C

Q. ……is the ability of a device to 'jump' directly to the requested data. [IBPS Clerk 2012]

[A] Sequential access

[B] Random access

[C] Quick access

[D] All of the above

Answer - B

Q. The …… is the amount of data that a storage device can move from the storage to the computer per second. [IBPS Clerk 2012]

[A] data migration rate

[B] data digitising rate

[C] data transfer rate

[D] data access rate

Answer - B

Q. The main directory of a disk is called the…… directory. [IBPS PO 2015]

[A] Network

[B] Folder

[C] Root [D] Other than those given as options

Answer - C

Q. The …… indicates how much data a particular storage medium can hold. [IBPS Clerk 2013]

[A] storage [B] access

[C] capacity [D] memory

Answer - C

Q. What is the main folder on a storage device?[RBI Grade B 2012]

[A] Root directory [B] Interface

[C] Device driver [D] Platform

Answer - A

CHAPTER 05

Microsoft Office (MS Word, Excel, PowerPoint)

MICROSOFT OFFICE

MS Microsoft Office or Microsoft Office System is a collection of computer programs made by Microsoft. The programs are created for all users. There are different versions of the software for home users and business users. It was first announced by Bill Gates of Microsoft on August 1, 1988, at COMDEX in Las Vegas.

There are five packages of MS-Office

- MS-Word (Word Processing Software)
- MS-Excel (Spreadsheet Software)
- MS-PowerPoint (Presentation
- Software)
- MS-Access (Database Management
- Software)
- MS-Outlook (E-mail Client)

Microsoft Word

Microsoft Word is word processing software. It is developed by Microsoft and is part of Microsoft Office Suite. It enables you to create, edit and save professional documents like letters and reports

Brief History

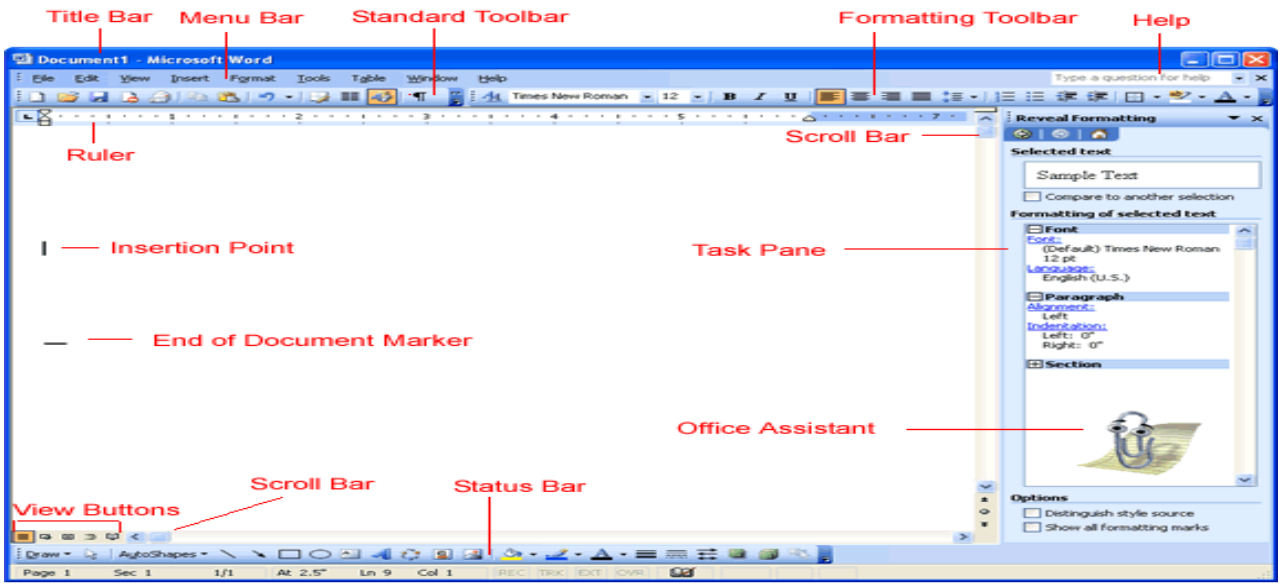
Microsoft word was released in 1983 as Multi-Tool Word. Its first version was based on the framework of Bravo which was world's first graphical writing program.

Microsoft renamed Multi Tool Word to Microsoft Word, and then in October 1983, Microsoft released its first version for the IBM PC.

In 1985, Microsoft ported it to the Macintosh which was different from its DOS-based counterpart, i.e. Macintosh offered various major interface changes.

In 1989, Microsoft released a new version of Word for its Windows operating systems. It was the Microsoft Word who introduced the concept of WYSIWYG (What You See Is What You Get), i.e. it allowed to create and display bold and italics text.In 2014, Microsoft developed the source code for Microsoft Word for Windows 1.1a

Components of Microsoft Word



Some Important Tools in Microsoft Word

- Header and Footer- option is used to display information such as title and page number of the document.
- Title Bar -The bar at the top of the window that bears the name of the window.
- Menu Bar - A screen element of MS Word that is usually located below the title bar that provides categorised options.
- Thesaurus - is used for finding a synonym for a word in the document.
- Style - Changes the style of the selected text
- Font - Changes the font for the selected text
- Font Size - Changes the point size of the selected text
- Bold - Makes the selected text bold
- Italic - Makes the selected text italic
- Underline - Underlines the selected text
- Align Left,AlignRight,Center - Aligns the selected text/paragraph
- Justify - Justifies the selected text/paragraph
- New - Creates a new, blank document
- Cut, Copy, Paste - Cuts the selected text and places it on the clipboard then Copies Select text and Pastes the contents of the clipboard to a new location
- Undo - Undoes the last document change
- Redo - Redoes the last action that was undone
- Insert Hyperlink - Creates a hyperlink from the selected text.

Features of Microsoft Word

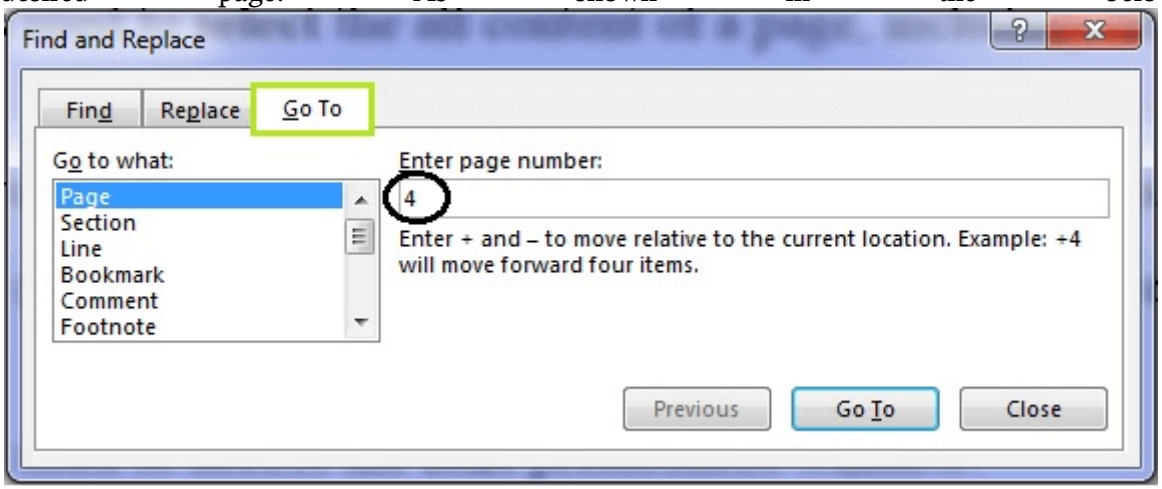
- Text Editing It provides editing, adding and deleting text, modification of text content i.e. cut, copy and paste. When, we cut any text in our document, it will save in hard drive temporarily, till we paste it on any other place.
- Format Text It offers to modify the text in any of the available hundreds of text designs. It formats text in various styles such as bold, italic, underline, etc.
- Indentation It denotes the distance text boundaries and page margins. It offers three types of indentation– positive, hanging and negative indent.
- Page Orientation It facilitates selection of typed text printed or visible in horizontal view or vertical view on a specified size of the page. Word offers Portrait–vertically oriented and Landscape–horizontally oriented.

- Find and Replace This feature allows flexibility and comfort to the user to replace a text with a substituted text at all places.
- Spell Check This facilitates automatic and manual checking of spelling mistakes and also suggests a few possible alternate options for incorrect spelt words.
- Thesaurus It contains a comprehensive dictionary and thesaurus feature offers *synonym* options for a word.
- Bullets and Numbering A list of bullets and numbering features used for tables, lists, pages and tables of content. Bullets are arranged in unordered lists and numbering are arranged in ordered lists.
- Graphics It provides the facility of incorporating drawings in the documentswhich enhances their usefulness.
- Object Linking and Embedding (OLE) It is a program integration technology that is used to share information between programs through objects. Objects save entities like charts, equations, video clips, audio clips, pictures, etc.
- Horizontal and Vertical Scroll Bars They enable one to move up and down or left and right across the window. The horizontal scroll bar is located above the status bar. The vertical scroll bar is located along the right side of the screen to move up and down the document.
- Save a Document When we create a new document, it will be saved into the hard drive. To save a document, user has three common ways
- To click on Save option fromFilemenu.
- Select Save button fromStandard toolbar.
- Pressing Ctrl + S key.

A simple list of Microsoft Word shortcut keys is given below with explanation.

- Ctrl+A: It is used to select all content of a page, including images and other objects.
- Ctrl+B: It provides users with the option to bold the selected item of a page.
- Ctrl+C: Its use is to copy the selected text, including other objects of a file or page.
- Ctrl+D: It is used to access the font preferences window, which offers several options such as font size, font style, font color, etc.
- Ctrl+E: It is used to align the selected item to the center of the screen.
- Ctrl+F: It helps users to find or search data in the current document or window.
- Ctrl+G: It is used to Go To or jump to any page. When you press Ctrl+G, a dialog box appears, which offers you various options such as find, replace, and Go to. For example, you have 15 pages in your file, and you want to visit page number 4, then enter number 4 in the given box and press the Go To It will take you to the

desired page. As shown in the below figure:



- Ctrl+H: It is used to replace the words or sentences in a file. For example, if by mistake you have written spple instead of apple at many places in your file, you can replace it with the apple in one go.
- Ctrl+I: It offers an option to *italicize* and un-italicize the highlighted text.
- Ctrl+J: It is used to Justify (distribute your text evenly between the margins) the selected text.
- Ctrl+K: It allows you to insert the hyperlink.
- Ctrl+L: It is used to adjust (align) the selected content to the left of the screen.
- Ctrl+M: It provides users with the option to indent the As shown in the below picture:

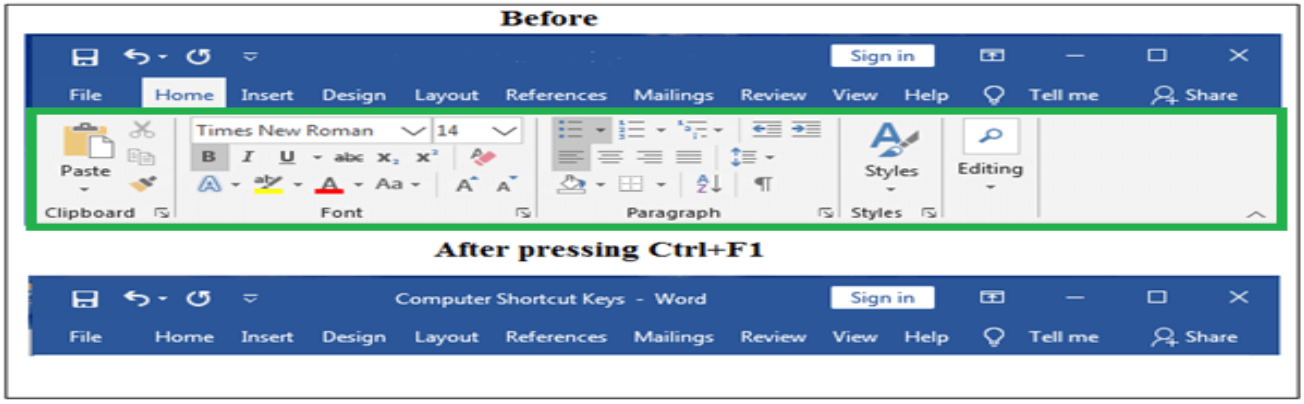
Ctrl+M: It is **before indenting** the paragraph.

Ctrl+M: It is **after indenting** the paragraph.

- Ctrl+N: It is used to open a new or blank document in Microsoft applications and some other software.
- Ctrl+O: It is used to open the dialog box where you can choose a file that you want to open.
- Ctrl+P: It is used to open the print preview window of a document or a file. It can also be done by pressing Ctrl+F2 and Ctrl+Shift+F12.
- Ctrl+Q: Its use is to align the selected paragraph to the
- Ctrl+R: It offers users the option to align the line or selected content to the right of the screen.
- Ctrl+S: Its use is to save the document or a file.
- Ctrl+T: It gives users the benefit of creating a hanging indent for a paragraph. For better understanding, see the below image
- Ctrl+U: It is used to underline the selected text.
- Ctrl+V: It is used to paste the copied data. It allows you to copy data once, and then you can paste it any number of times. You can also paste the data by using Shift+Insert.

- Ctrl+W: Its use is to close the currently open document or a file quickly.
- Ctrl+X: If you want to cut some text, you can use this key to cut the selected content. You can also paste it by using Ctrl+V.
- Ctrl+Y: It allows the users to redo the last action performed in a file. For example, you have written a word mango; you can repeat this word multiple times by pressing Ctrl+Y.
- Ctrl+Z: It is used to get back the deleted item. For example, if you have deleted the data by mistake, you can press Ctrl+Z to retrieve (Undo) the deleted data. It can also be done by pressing Alt+Backspace.
- Alt+F, A: It allows users to use the Save As option, which means to save a file with a different name. For that, you need to press Alt+F, which displays a dialog box or a page, then press A for Save As option. It can also be done simply by pressing
- Ctrl+Shift+L: This key is used to create a bullet point in the file quickly.
- Ctrl+Shift+>: It increases the font size by +1pts up to 12pt thereafter increases by +2pts.
- Ctrl+Shift+<: It is used to decrease the font If the font size is 12pt or lower; it decreases the font by -1pts, and if the font size is above 12, it decreases the font by +2pts.
- Ctrl+]: Its use is to increases the font size by +1pts.
- Ctrl+[: It is used to decreases the font size by -1pts.
- Ctrl+/+C: It offers users the option to insert a cent sign (¢).
- Ctrl + (Left arrow ←):I t allows users the benefit to move one word to the left in the line or a paragraph.
- Ctrl + (Right arrow →): It is used to move one word to the
- Ctrl+Shift+*: It is used to show or hide non-printing characters.
- Ctrl + (Up arrow ↑): This key is used to move the typing cursor to the beginning of the line or paragraph.
- Ctrl + (Down arrow ↓): It enables you to move the typing cursor to the end of the paragraph.
- Ctrl+Delete: It allows users to delete a word to the right of the cursor.
- Ctrl+Backspace: It allows users to delete a word to the left of the cursor.
- Ctrl+End: Its use is to move the cursor to the last of the document.
- Ctrl+1: It is used to give a single line space. For example, to make the 1.0 space between the lines of a paragraph.
- Ctrl+2: It is used to give the double line space. For example, to make the 2.0 space between the lines of a paragraph.
- Ctrl+5: It is used to make the 5 space between the lines of a paragraph.
- Ctrl+Spacebar: It enables you to reset the selected text to the default font.
- Ctrl+Home: It allows you to move the cursor to the beginning of the document.
- Ctrl+Alt+1: It changes text format to heading 1.

- Ctrl+Alt+2: It changes text format to heading 2.
- Ctrl+Alt+3: It changes text format to heading 3.
- Alt+Ctrl+F2: It is used to open the new file or a document.
- Ctrl+F1:Its use is to open the task pane in some Microsoft office versions, in word 2016, it is used to hide and show the ribbon as shown in the below image:



- Ctrl+Shift+F6: It allows the users to switch between open documents in Microsoft Word.
- F1: The function key F1 is used to open the help and support
- F4: It enables you to repeat the last action performed. For example, when you want to retype the last typed word multiple times, you can use this key.
- F5: It is used to access the find and replace dialog box, including Go to
- F7: It provides users the advantage to check spelling and grammar of selected text or document.
- Shift+F3: It is used to use the change case option where you can change the text from uppercase to lowercase or a capital letter at the beginning of every word.
- Shift+F7: It offers users the option to check the thesaurus of the selected word. You need to select the word and press this key. As shown in the below picture:
- Shift+Alt+D: It is used to insert the current date.
- Shift+Alt+T: Its use is to insert the current time.

MS Excel

An electronic spreadsheet is used for analysing, sharing and managing information for accounting purpose performing mathematical calculations, budgeting, billing etc. A spreadsheet is a matrix of rows and columns similar

to an accounting ledger. The spreadsheet program also provides tools for creating graphs, inserting pictures and chart, analysing the data etc. e.g. Corel Quattro Pro, Snowball, Lotus-1-2-3, Apple Numbers etc.

Some Important Terms used in Excel :

Cell – A cell is the intersection of a row and a column. A cell can contain a label, a numeric value, or a formula.

Cell address - A cell address is the location of a cell on a worksheet and is defined by the column letter and the row number.

Active Cell - Cell in which we are currently working.

Formula bar - The formula bar is located under the toolbars at the top of the working screen. It contains the edit line for working with formulas and provides information regarding cell addresses.

Functions - A function is a preset formula. Functions consist of the function name and its arguments. The function name tells Excel what calculation you want to perform.

PivotTable Wizard - The PivotTable Wizard is a series of dialog boxes that guides you step-by-step through the process of creating a PivotTable.

Print Preview Controls - Print Preview mode offers a set of control buttons to make the feature more useful. Click Close to exit Print Preview mode.

Spreadsheet - Spreadsheet is the generic term for applications, such as Excel, that you can use to enter, analyze, and calculate data. It performs mathematical calculations and projections based on data entered. The common spreadsheet uses include analysis, charting, and budgeting.

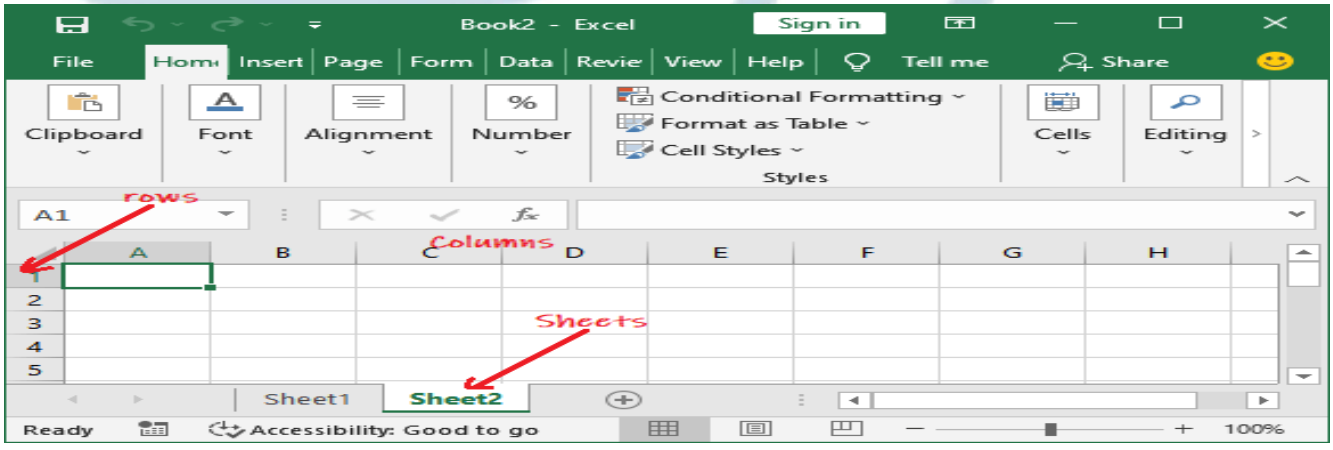
Syntax - The syntax of the function refers to the order of the function's arguments. In some functions, the order of the arguments determines how Excel solves the function.

Worksheet - A worksheet is an electronic spreadsheet that lets you enter, analyze, and calculate data. Within a workbook, worksheets can share information, and calculations pertaining to several worksheets can be performed at one time. The default number of worksheets in a new workbook is three.

What is Microsoft Excel?

Microsoft Excel is an office use application designed by Microsoft. It comes with Office Suite with several other Microsoft applications, such as Word, Powerpoint, Access, Outlook, and OneNote, etc. It is supported in Windows as well as Mac operating system too.

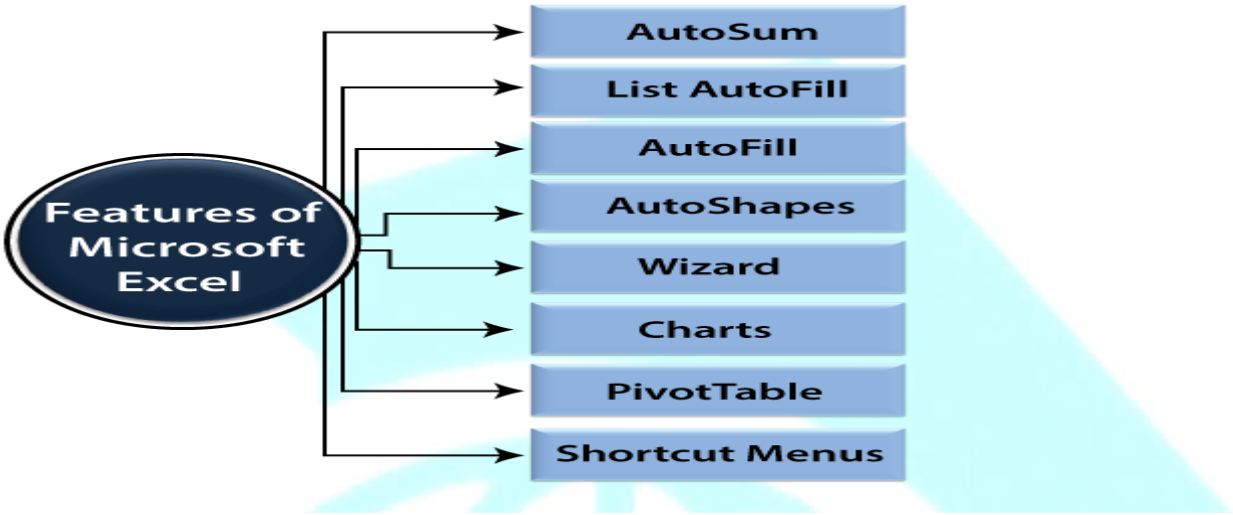
Microsoft Excel is one of the most suitable spreadsheet programs that help us to store and represent the data in tabular form, manage and manipulate data, create optically logical charts, and more. Excel provides you the worksheet to create a new document in it. You can save the Excel file with .xls extension.



A single Excel workbook can consist of several sheets, named Sheet1, Sheet2, Sheet3… SheetN. You can add one or more sheets to your Excel document.

Microsoft Excel Features

There are several features that are available in Excel to make our task more manageable. Some of the main features are:



1. AutoFormat: It allows the Excel users to use predefined table formatting options.
2. AutoSum: AutoSum feature helps us to calculate the sum of a row or column automatically by inserting an addition formula for a range of cells.
3. List AutoFill: It automatically develops cell formatting when a new component is added to the end of a list.
4. AutoFill: This feature allows us to quickly fill cells with a repetitive or sequential record such as chronological dates or numbers and repeated documents. AutoFill can also be used to copy functions. We can also alter text and numbers with this feature.
5. AutoShapes: AutoShapes toolbar will allow us to draw some geometrical shapes, arrows, flowchart items, stars, and more. With these shapes, we can draw our graphs.
6. Wizard: It guides us to work effectively while we work by displaying several helpful tips and techniques based on what we are doing. Drag and Drop feature will help us to reposition the record and text by simply dragging the data with the help of the mouse.
7. Charts: This feature will help you to present the data in graphical form by using Pie, Bar, Line charts, and more.
8. PivotTable: It flips and sums data in seconds and allows us to execute data analysis and generating documents like periodic financial statements, statistical documents, etc. We can also analyze complex data relationships graphically.

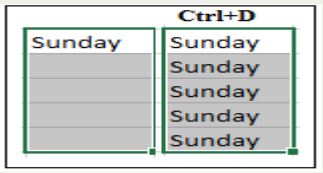
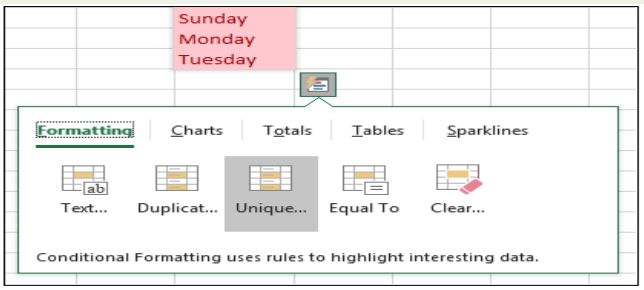
9. Shortcut Menus: The shortcut menu helps users to make the work done through shortcut commands that need a lengthy process.

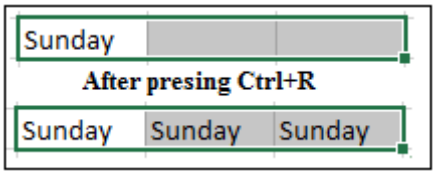
Microsoft Excel shortcut keys

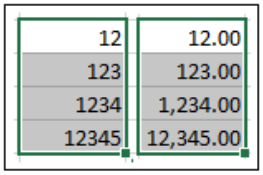
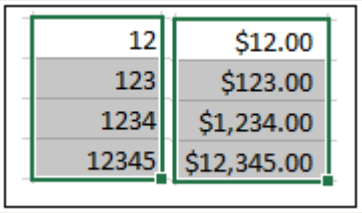
If you work on Microsoft Excel, you can use the number of keyboard shortcut keys to speed up your work and make it more convenient. We have tried to provide a simple list of shortcut keys.

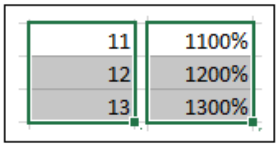
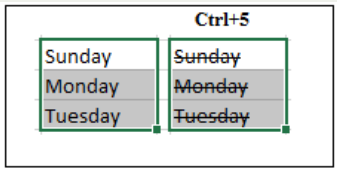
The following table contains the commonly used shortcut keys for Microsoft Excel with description.

Shortcut Keys	Description
Ctrl+Shift+ ;	It is used to insert the current time.
Ctrl+;	It is used to enter the current date.
Shift + F3	Its use is to open the Excel formula's window.'
Shift + F5	It provides users the option to display the find and replace dialog box.
Ctrl + A	Its use is to select or highlight all contents of a worksheet.
Ctrl + B	It allows you to bold all selected items of an Excel sheet. It can also be done by pressing Ctrl+2.
Ctrl + C	It is used to copy the selected content of a worksheet.
Ctrl + D	It enables you to fill down the cells with the content of the selected cell. As shown in the below picture:

	
Ctrl + F	It offers the option to open find and replace dialog box quickly. You can also use Shift + F5 for it.
Ctrl + G	It is used to open the go-to option dialog box where you can go to the specific cell. It can also be done by using F5.
Ctrl + H	It allows you to find and replace the word or sentences in a file. For example, if by mistake you have written a somputer instead of the computer at many places in your sheet, you can replace it with the computer in one go.
Ctrl + I	It is used to put *italics* on all cells in the selected section. It can also be done by pressing Ctrl+3.
Ctrl + K	It provides the option to insert a hyperlink in a file.
Ctrl + L	It enables you to access the create table dialog box.
Ctrl + N	Its use is to open the new document or a workbook.
Ctrl + O	It offers users the option to open the dialog box where you can choose a file that you want to open. You can also use Ctrl+F12 to open a file.
Ctrl + P	It allows you to print a current sheet or a document quickly.
Ctrl + Q	It is used to display the quick analysis options for the selected cells with data. As shown in the below image: 

Ctrl + R	It allows you to fill the cells to the right with the content of the selected cell. As shown in the below screenshot: 
Ctrl + S	Its use is to save the document. It can also be done by using Alt+Shift+F2.
Ctrl + T	It offers users the option to display the create table dialog box.
Ctrl + U	It is used to underline all selected cells. You can also use the shortcut key Ctrl+4 to underline the cells in the Excel sheet.
Ctrl + V	It provides users the option to paste the copied data onto the Excel sheet. You are required to copy the data once, and then you can paste it any number of times.
Ctrl + W	It is used to close the currently open document or a file quickly. It can also be done by pressing Ctrl+F4 shortcut keys.
Ctrl + X	It allows users the option to cut the entire data of the selected cells in an Excel sheet.
Ctrl + Y	It provides users the option to redo any undo contents.
Ctrl + Z	It is used to undo (get back) the deleted item. For example, if you have deleted the data by mistake, you can press Ctrl+Z to retrieve the deleted data. It can also be done by pressing Alt+Backspace.
Ctrl + Page up & Page Down	It allows you to move from one worksheet to another worksheet in the same Excel file.
Ctrl + F6	It enables the users to move from one document to another document in Microsoft Excel. It can also be done by pressing Ctrl+Tab.
Ctrl + F9	It enables users the option to minimize the current window.
Ctrl + F10	It uses to maximize the currently selected window.

F1	It is used to open the help screen window.
F2	It allows you to edit the selected cell in the Excel sheet.
F4	It provides users the option to repeat the last action. For example, if you change the red color of the text in a cell, by pressing F4, you can apply the same text color in another cell.
F7	It is used to check the spelling of the selected text.
F10	The function key F10 is used to activate the menu bar. For example, if you want to open the file menu, you need to press F10, then F.
F11	Its use is to create a chart in Excel.
F12	It enables you to use the Save As option, which allows you to save a file with a different name. It can also be done by using Alt+F2.
Alt + =	It allows you to use the formula to add the data of all the above cells.
Ctrl+Shift+"	It allows you to copy the content of a cell and to paste it into a cell, which is just below it. It can also be done by using Ctrl+" key. For example, if you have written "Excel" in cell B1 and its below cell is B2, by pressing Ctrl+Shift+" or Ctrl+' the word "Excel" will be copied in cell B2.
Ctrl + Shift + !	It is used to apply comma format in numbers. For example, as shown in the below image: 
Ctrl + Shift + $	Its use is to apply currency format to numbers. As shown in the below screenshot: 

Ctrl + Shift +%	It provides users the option to apply percentage sign to numbers. For example, see the below picture: 
Ctrl + Space	It enables you to select the entire active columns.
Shift + Space	It enables you to select the entire active rows.
Ctrl + (Right arrow →)	It allows the users to move the cursor to the next cell, which contains the text.
Ctrl + 1	It is used to open the format cells dialog box where you can change the text format like text color, font size, font style, text alignment, etc. It can also be done by pressing Ctrl+Shift+F or Ctrl+Shift+P.
Ctrl + 5	Its use is to put the strikethrough to all selected cells. As shown in the below picture: 
Ctrl + 9	Its use is to hide the selected rows in the worksheet.
Ctrl + Shift + (	Its use is to show (unhide) the hidden rows.
Ctrl + 0	It is used to hide the selected columns.
Ctrl + - (Minus)	It will open a delete dialog box where you can delete a selected row or column.
Ctrl + Shift + =	It will open the insert dialog box where you can insert the new row or a column.
Ctrl + Shift + ^	It is used to make an exponential form of any number. For example, you have written a number 12345 in the worksheet, and if you press Ctrl+shift+^, the number will be changed 1.23E+05 in exponential form.

Ctrl + Shift + &	It offers users the option to make a border around the selected cells.
Ctrl + Shift+ _	It offers users the option to remove a border around the selected cells in a worksheet.
Ctrl+Shift+Spacebar	It is used to select the entire worksheet.
Ctrl + Home	It allows the users to move the cursor to the beginning (cell A1) of the worksheet.
Ctrl + End	It is used to move the cursor to the last cell with text on the worksheet.
Shift + Page Up	It allows you to select all the cells located above the selected cell.
Shift + Home	It enables you to select all cells to the left of the current active cell.
Shift + (Up Arrow ↑)	It enables you to extend the selected area up by one cell.
Shift + (Down Arrow ↑)	It enables you to extend the selected area down by one cell.
Alt + Enter	It allows the users to write in multiple lines in one cell. For example, if you are typing in a cell, it enables you to move on the next line in one cell by pressing Alt+Enter.
Alt + '	It is used to access the style dialog box.
Ctrl + F3	It is used to open the name manager in Microsoft excel.
Ctrl + F5	Its use is to restore the Window size.
Ctrl + F11	It is used to insert a macro sheet in Microsoft excel.
Alt + F8	It is used to display the macro dialog box.
Alt + F11	It provides users the option to open the Visual Basic editor.

Alt + Shift + F1	It enables you to create a new worksheet in Microsoft Excel.

Microsoft PowerPoint

The application software that can create professional looking visual aids is called presentation graphics software. The presentation software is used for creation of the slides and to display the information in the form of presentation of slides. A presentation software provides tools like editor that allows insertion and formatting of text and methods for ninserting and manipulating graphics images along with sound and visual effects.

Features of PowerPoint

Microsoft PowerPoint is a professional presentation program that allows the user to create a "presentation slide" that can be displayed on the computer screen through a projector that is plugged into the computer. There are three main features of the Microsoft PowerPoint window that you need to focus upon while learning PowerPoint. These features are Microsoft Office Button, Quick Access Toolbar and Ribbon. Some of the other important features of PowerPoint are:

- **Ribbon:** PowerPoint has a new, intuitive user interface called the Ribbon that helps you create better presentations much more quickly than you could in earlier versions of PowerPoint.
- **Live Preview:** PowerPoint takes advantage of the live preview feature to review your formatting choices before you apply them.
- **Create Dynamic Presentations:** PowerPoint quickly creates dynamic and great looking presentations using the redesigned user interface and new graphics capabilities.
- **Video Capabilities:** One of the attractive features of Microsoft PowerPoint is that it allows you to use video in your presentations. With this software, you can embed a video clip into one of your slides and use it during the slideshow. When you embed the video, you can also perform a number of editing functions which will allow you to alter the video to your needs for the presentation.
- **Apply a consistent look and feel in one click:** PowerPoint themes help you change the look and feel of your entire presentation with just one click. PowerPoint comes with new themes, layouts and Quick Styles that offer you a wide range of options when you are formatting your presentations. Changing the theme of your presentation not only changes the background colour but the colour of a diagram, table etc and even the style of any bullet points within a presentation.
- **Sharing:** Another feature of Microsoft PowerPoint is the ability to share presentations with other individuals in different locations.Dynamically modify shapes, text, and graphics with new tools and effects: You can now

manipulate and work with your text, tables, charts and other presentation elements in much richer ways than ever before.

- **Special Effects:** When creating a presentation, one of your jobs as a presenter is to keep the attention of your audience. If you create a plain presentation without any flair, your subjects may not pay attention for long. With Microsoft PowerPoint, you can use a number of special effects to enhance the quality of your presentations.Reduce your document sizes and improve file recovery at the same time: The new compressed Microsoft PowerPoint XML Format offers a dramatic reduction in file size, while offering an improvement in data recovery for damaged files.
- **Support other file formats**: PowerPoint enables support for other file formats, such as PDF and XPS.

Microsoft PowerPoint shortcut keys

Shortcut keys	Explanation
(Slide number) + Enter	It is used to jump to the desired slide during a slide show. For example, during the slide show, if the 5th number slide is being viewed, and you want to jump to the 8th numbe slide, press the 8-number key and then the Enter key.
Shift+Alt+T or D	It allows you to open the date and time window to insert the current date and time.
Ctrl+A	It provides users the option to select all items like the text in a text box and objects in a slide. In slide sorter view, it is used to select all slides. Furthermore, in slide show, its use is to display the various options as shown in the below mage 
Ctrl+B	It enables you to add or remove bold to the selected content.
Ctrl+C	Its use is to copy the selected text, including other objects in the slide. It can also be done

	by pressing Ctrl+Insert.
Ctrl+D	It is used to create a copy of the selected slide. For example, if you want to add a copy o any slide, you need to select it, and press the Ctrl+D shortcut keys.
Ctrl+E	It enables you to align the line or selected text to the center of the slide.
Ctrl+F	It provides users the option to find or search content in the file.
Ctrl+H	It is mostly used to replace a word or sentences in the file, and in slide show, it is also used to hide the cursor or any activated tools, like the pen or a highlighter tool.
Ctrl+I	It allows you to add or remove *italicize* to the selected text. Furthermore, in slide show view, it is also used to change the cursor to the highlighter tool. You need to hold the mouse button to use the highlighter on the screen.
Ctrl+J	It enables you to Justify (align your text evenly across the slide) the selected text.
Ctrl+K	It offers an option to insert a hyperlink.
Ctrl+L	Its use is to align the content or selected line to the left side of the slide.
Ctrl+M	It is used to insert the new or blank slide just below the selected slide.
Ctrl+N	It enables you to create a new or blank file in another PowerPoint window.
Ctrl+O	It is used to open the dialog box or page, where you can select a file that you want to open. You can also use Alt+Ctrl+F2 to open a file.
Ctrl+P	It provides users with the option to open the Print Preview page to print the file. It can also be done by using Ctrl+Shift+F12 or Ctrl+F2 shortcut keys. Additionally, in slide show view, it is also used to change the cursor to the pen tool.
Ctrl+R	It moves the text or selected paragraph to the right side of the slide.
Ctrl+S	It allows you to save the open file. You can also use the Shift+F12 to save a file.
Ctrl+T	It is used to open the font window, where you can adjust the font size, style, type, etc. It can also be done by pressing Ctrl+Shift+F shortcut keys.
Ctrl+U	It enables the users to add or remove an underline from the selected content.
Ctrl+V	It is used to paste the copied text, slides, and other objects in the file. You need to copy the data once, and then you can paste it multiple times. You can also paste the data by using Shift+Insert.
Ctrl+W	It enables you to close the currently open document.
Ctrl+X	It allows you to cut the selected item.

Ctrl+Y	Its use is to repeat the last performed action. It can also be done by pressing the functio key F4.
Ctrl+Z	It is used to undo (get back) the deleted text, slide, and other objects. Suppose, by mistake you have deleted any slide, you can get back it by using this shortcut key.
Shift+F3	It allows the users to change the selected text into uppercase or lowercase and can be use to change the first letter of a word into a capital letter. If the text is not selected, only th first word after the cursor will be changed.
Shift+F5	It helps to start the slide show from the selected slide. For example, if you have 20 slide in your file and you want to start a slide show from the 5th slide, you need to select the 5t slide, and press Shift+F5.
Shift+F7	It is used to check the thesaurus of the selected word. As shown in the below image
Shift+F9	Its use is to show or hide the grid on the slide in Microsoft PowerPoint.
B	It is used to change the display to black during slide show, and again press B to get back t the slide show.
F1	It is used to open the help menu, and in slide show view, its use is to display the slid show help window that provides a list of shortcuts for use in a slide show.
F5	It allows the users to view the slide show of all the slides.
F7	It provides users the benefit of checking grammar and spelling to the selected word.
F12	It allows you to use the Save As option, in which you can save a file with a new name.
Ctrl+F1	It is used to show or hide the Ribbon.
Ctrl+Shift+>	It is used to increase the font size of the selected text. It can also be done b pressing Ctrl+].
Ctrl+Shift+<	It is used to decrease the font size of the selected text. It can also be done b pressing Ctrl+[.
Ctrl + Shift + = (Equal sign)	It helps users to change the selected text into a subscript. For example, plain text subscript text X2 → X^2
Ctrl+Spacebar	It allows you to change the selected text to the default font size and type.
Ctrl+Home	Its use is to move the cursor to the first slide. For example, if you have 50 slides in you file, and the cursor is on 45th slide, by pressing Ctrl+Home, you can move the cursor t the first slide.
Ctrl+End	It is used to move the cursor to the last slide. For example, your PowerPoint file has 10 slides, and you want to move the cursor to the last slide, you can press Ctrl+End.

Ctrl+Backspace	It will delete the word to the left of the cursor.
Ctrl+Delete	It will delete the word to the right of the cursor
Alt+N, P	It enables you to insert a picture in your file. You need to press Alt and N keys togethe then press P.

IMPORTANT COMPUTER SHORTCUT KEY

- Ctrl + A - Select All
- Ctrl + B - Bold
- Ctrl + C - Copy
- Ctrl + D - Fill
- Ctrl + F - Find
- Ctrl + G - Find next instance of text
- Ctrl + H - Replace
- Ctrl + I - Italic
- Ctrl + K - Insert a hyperlink
- Ctrl + N - New workbook
- Ctrl + O - Open
- Ctrl + P - Print
- Ctrl + R - Nothing right
- Ctrl + Shift + F6 - Previous Window
- Ctrl + Shift + F12 - Printing
- Alt + Shift + F1 - New spreadsheet
- Alt + Shift + F2 - Save
- Alt + = - AutoSum
- Ctrl + - Toggle value / display of the formula
- Ctrl + Shift + A - Insert the argument names in the formula
- Alt + down arrow - automatic view list
- Alt + '- Format Style Dialog
- Ctrl + Shift + - General Format
- Shift + F12 - Save
- Ctrl + F3 - Set name
- Ctrl + F4 - Close
- Ctrl + F5 - XL, size of the restore window
- Ctrl + F6 - Next Workbook Window
- Shift + Ctrl + F6 - Previous Workbook Window
- Ctrl + F7 - Move window
- Ctrl + F8 - Resize Window
- Ctrl + F9 - Minimize the workbook
- Ctrl + F10 - Maximize or Restore Window
- Ctrl + F11 - Inset 4.0 Macro sheet

- Ctrl + F1 - Open File
- Alt + F1 - Insert a graph
- Alt + F2 - Save As
- Alt + F4 - Output
- Alt + F8 - Macro dialog
- Alt + F11 - Visual Basic Editor

QUESTION ANSWER

MS-Word

Q. The quickest and easiest way in Word, to locate a particular word or phrase in a document is to use the …… command.

[A] Replace [B] Find

[C] Lookup [D] Search

Answer - B

Q. Editing a document consists of reading through the document you've created, then

[A] Correcting your errors [B] Printing it

[C] Saving it [D] Deleting it

Answer – D

Q. A word processor would most likely be used to do which of the following?

[A] keep an account to money spent [B] maintain an inventory

[C] type a biography [D] do a computer search in the media center

Answer - C

Q. If you type a word that is not in Word's dictionary, a wavy …… underline appears below the word.

[A] red [B] green

[C] blue [D] black

Answer - A

Q. The …… button on the Quick Access Toolbar allows you to cancel your recent commands or actions.

[A] Search [B] Cut

[C] Document [D] Undo

Answer - D

Q. A saved document is referred to as a ……..

[A] file [B] word

[C] folder [D] project

Answer - A

Q. To print a document, press ……, then press ENTER.

[A] SHIFT + P

[B] CTRL + P

[C] ALT + P

[D] ESC + P

Answer - B

Q. Which of the following are valid Min. & Max. zoom sizes in MSOffice

[A] 10,100

[B] 20,250

[C] 10,500

[D] 10,1000

Answer - C

Q. Word processing, spreadsheet, and photo-editing are examples of …… .

[A] application software

[B] system software

[C] operating system software

[D] platform software

Answer – A

Q. The word processing task associated with changing the appearance of documents is

[A] Writing

[B] Formatting

[C] Editing

[D] Storing

Answer - B

Q. In order to save an existing document with a different name you need to

[A] retype the document and give it a different name

[B] use the Save as …… command

[C] copy and paste the original document to a new document and then save

[D] use Windows Explorer to copy the document to a different location and then rename it

Answer - B

Q. Microsoft Office is

[A] Shareware

[B] Public-domain software

[C] Open-source software

[D] An application suit

Answer - D

Q. A program which helps to create written document and lets you go back and make corrections as necessary

[A] Home row keys

[B] Toolbar

[C] Folder

[D] Word processor

Answer - D

Q. Graphics for a word processor

[A] Peripheral [B] Clip art

[C] Highlight [D] Execute

Answer - B

Q.What type of software is used for creating letters, papers and other documents?

[A] Database [B] Word Processor

[C] Spreadsheet [D] Operating Program

Answer – B

Q. What is the term for how words will appear on a page?

[A] Text formatting [B] Character formatting

[C] Point size [D] Typeface

Answer - A

Q. A command that saves what you are working on into the hard drive, on onto a disk …….

[A] View [B] Hold

[C] Save [D] Go

Answer - C

Q. You organize files by storing them in …… .

[A] archives [B] folders

[C] indexes [D] lists

Answer - B

Q. A command that takes what has been typed into the computer and can be seen on the screen and sends it to the printer for output on paper …… .

[A] print [B] return

[C] jump [D] attention

Answer - A

Q. If you do not want to select any option after opening a menu then click menu title again or press key ……. to close the menu.

[A] Shift [B] Tab

[C] Escape [D] F1

Answer - C

Q. ……. view shows how the contents on printed page will appear with margin, header and footer.

[A] Draft [B] Full-Screen Reading

[C] Outline [D] Page Layout

Answer - D

Q. What happens when you press Ctrl + V key?

[A] A capital V letter is typed into your document at the cursor point

[B] The selected item is pasted from the clipboard

[C] The selected item is pasted to the clipboard

[D] The selected drawing objects are distributed vertically on the page

Answer – B

Q. Which of the following commands is used to select the whole document?

[A] Ctrl + A

[B] Alt + F5

[C] Shift + S

[D] Can't be done

Answer - A

Q. Which of the following displays to the right of the space where the text will be inserted when you type?

[A] Screen tip

[B] Insertion point

[C] Rulers

[D] Office Assistant

Answer - A

Q. Which key should be pressed to start a new page in MS-Word?

[A] Down Cursor Key

[B] Enter Key

[C] Shift + Enter

[D] Ctrl + N

Answer - D

Q. The ……. key will launch the start buttons.

[A] esc

[B] shift

[C] windows

[D] shortcut

Answer - C

Q. The ……. key and the ……. Key can be used in the combination with other keys to perform shortcuts and special tasks.

[A] Control, Alt

[B] Function, toggle

[C] Delete, insert

[D] Gaps, Lock, Num Lock

Answer - A

Q. What menu is selected to cut,copy, and paste?

[A] File

[B] Tools

[C] Special

[D] Edit

Answer - D

Q. Which of the following is not true about computer files?

[A] They are collections of data saved to a storage medium

[B] Every file has a filename

[C] A file extension is established by the user to indicate the file's contents

[D] All files contain data

Answer – C

Q. In word processing, an efficient way to move the 3rd paragraph to place it after the 5th paragraph is …… .

[A] copy and paste

[B] copy, cut and paste

[C] cut, copy and paste

[D] cut and paste

Answer - D

Q. How will words appear on the page? We call it as

[A] Text formatting

[B] Character formatting

[C] Point size

[D] Type face

Answer - A

Q. What happens when you press Ctrl + V key?

[A] A Capital V letter is typed into your document at the cursor point

[B] The selected item is pasted from the clipboard

[C] The selected item is pasted to the clipboard

[D] The selected drawing objects are distributed vertically on the page

Answer - B

Q. It is easier to change the name of file using ……. process.

[A] Transforming

[B] Christening

[C] Renaming

[D] Retagging

Answer - C

Q. We can enter and edit the text efficiently using

[A] Spreadsheet

[B] Typewriter

[C] Word Processing Program

[D] Desktop Publishing Program

Answer - C

Q. You can use the tab key to

[A] move a cursor across the screen

[B] indent a paragraph

[C] move the cursor down the screen

[D] Only [A] and [B]

Answer - D

Q. The …… of software contains lists of commands and options.

[A] title bar
[B] menu bar
[C] formula bar
[D] tool bar

Answer - B

Q. To centre a paragraph using shortcut keys, press …… .

[A] CTRL + C
[B] CTRL + E
[C] CTRL + L
[D] CTRL + R

Answer - B

Q. To print a document, press ……, then press ENTER

[A] SHIFT + P
[B] CTRL + P
[C] ALT + P
[D] ESC + P

Answer - B

Q. Underlined text, such as text and folder names is referred to as a

[A] icon
[B] hyperlink
[C] menu
[D] source drive

Answer - B

Q. A(n) …… is text that you want to be printed at the bottom of the pages.

[A] header
[B] endnote
[C] footnote
[D] footer

Answer - D

Q. To delete an incorrect character in a document, …… To erase to the right of the insertion point.

[A] Press the left mouse key
[B] double-click the right mouse key
[C] Press the BACKSPACE key
[D] Press DELETE key

Answer - D

Q. Whenever we have to give space between the two words while typing on a PC we have to press a key known as

[A] Backspace
[B] Shift
[C] Control
[D] Space Bar

Answer - D

Q. To find a saved document in the computer's memory and bring it up on the screen to view …… .

[A] Reverse
[B] Rerun
[C] Retrieve
[D] Return

Answer - C

Q. A button that makes character either upper or lower case and numbers to symbols.

[A] Monitor
[B] Shift key
[C] Icon
[D] mouse

Answer - B

Q. A ……. is a named set of characters that have the same characteristics.

[A] Type case
[B] Type style
[C] Font
[D] Pico

Answer - B

Q. Which of the following is not a special program is MS Office?

[A] Office Art
[B] Clip Art
[C] Word Art
[D] Paint Art

Answer - D

Q. Which of the following companies developed MS Office?

[A] Microsoft
[B] Novell
[C] Corel
[D] Lotus

Answer - A

Q. Which of the following is the Word Processor in MS Office?

[A] Word Star
[B] Word Pad
[C] Word
[D] Word Perfect

Answer - C

Q. Which of the following is not a part of a standard office suite?

[A] Word Processor
[B] Database
[C] Image Editor
[D] File Manager

Answer – D

Q. MicrosoftWord is a word processor developed by Microsoft. In MS-Word, Spelling Check is a feature available in which tab?

[A] File
[B] Home
[C] Insert
[D] Review

Answer - D

Q. MS-Word is a text or document editing application program that comes in thepackage of MS-Office Suite. Which among the given options is not related with MS-Word [IBPS PO 2016]

[A] Page Layout
[B] Antivirus

[C] Mailings [D] Format Painter

Answer - B

Q. In order to choose the font for a sentence in a Word document [IBPS Clerk 2011]

[A] select Font in the Format menu [B] select Font in the Edit menu

[C] select Font in the Tools menu [D] select Font in the View menu

Answer - A

Q. When computer users …… a document, they change its appearance.

[A] Edit [B] Create

[C] Save [D] Format

Answer - A

Q. In Word, the Replace option is available on

[A] File menu [B] Edit menu

[C] Insert menu [D] View menu

Answer - B

Q. Which of the following is not an option of Edit menu?

[A] Cut [B] Copy

[C] Paste [D] Page Setup

Answer- D

Q. Which bar is usually located below title barthat provides categorised options?

[A] Menu bar [B] Status bar

[C] Tool bar [D] Scroll bar

Answer - A

Q. The process of making changes to an existing document is referred to as … it.[SBI Clerk 2014]

[A] editing [B] changing

[C] modifying [D] creating

Answer - A

Q. Most of the editing tools are available under which menu?

[A] File [B] Format

[C] Edit [D] All of these

Answer - C

Q. To move to the beginning of a line of text, press the … key.

[A] Page up [B] Shift

[C] Home [D] Enter

Answer - C

Q. In which menu, we will find the command document? [RBI Grade B 2013]

[A] File [B] Insert

[C] Tools [D] Data

Answer - D

Q. Which of the following is not a font style?

[A] Bold [B] Italic

[C] Regular [D] Superscript

Answer - D

Q. Portrait and landscape are

[A] page orientation [B] paper size

[C] page layout [D] page margin

Answer - A

Q. Which of the following should be used to move a paragraph from one place toanother in a Word document?

[A] Copy and paste [B] Cut and paste

[C] Delete and retype [D] Find and replace

Answer - B

Q. To move the text from its original position to another position without deleting it is called

[A] scrolling [B] searching

[C] moving [D] copying

Answer - D

Q. Which of the following displays the buttons for changing text style, alignment and size?

[A] Standard toolbar [B] Status bar

[C] Drawing toolbar [D] Formatting toolbar

Answer - D

Q. For printing a document, you have to put on

[A] Printer [B] Monitor

[C] Scanner [D] All of these

Answer– A

Q. How many ways you can save a document? [SBI PO 2012]

[A] 3 [B] 4

[C] 5 [D] 6

Answer - A

Q. Word has a list of predefined typing, spelling, capitalisation and grammar errors that ..... can defect and correct.

[A]autoentry [B] autocorrect

[C]autoadd [D]autospell

Answer- B

Q. Where header appears?

[A] Top [B] Bottom

[C] Centre [D] All of these

Answer - A

Q. Keyboard shortcut for Cut command is [SBI Clerk 2015]

[A] Ctrl + W [B] Ctrl + Y

[C] Ctrl + Z [D] Ctrl + X

Answer - D

Q. To increase the line spacing, use the .....shortcut keys.

[A] Ctrl + L [B] Ctrl + E

[C] Ctrl + I [D] Ctrl + 5

Answer - D

Q. Shortcut for displaying the full page as they are printed.

[A] Ctrl + F1 [B] Ctrl + F2

[C] Shift + F1 [D] Shift + F2

Answer - B

Q. The shortcut key to print documents is[IBPS PO 2012]

[A] Ctrl + D [B] Ctrl + A

[C] Ctrl + B [D] Ctrl + P

Answer - D

Q. Which is the shortcut key to display Open dialog box?

[A] F12 [B] Shift + F12

[C] Alt + F12 [D] None of this

Answer - D

Q. To move to the bottom of a document while working on MS-Word, which command isused? [IBPS Clerk 2014]

[A] Home key

[B] End key

[C] Ctrl + Page Down Key

[D] Insert key

Answer - C

Q. To undo the last work, we have to use which of the following Windows shortcut key? [SBI PO 2014]

[A] Ctrl + P

[B] Ctrl + U

[C] Ctrl + A

[D] Ctrl + Z

Answer - D

Q. Shortcut key to go to last line in the document [SBI PO 2014]

[A] Ctrl + Last

[B] Ctrl + L

[C] Ctrl + End

[D] Alt + End

Answer - C

Q. Which of the following can be used to select the entire document?[IBPS Clerk 2013, IBPS PO 2011]

[A] Ctrl + A

[B] Alt + F5

[C] Shift + A

[D] Ctrl + K

Answer - A

Q. What is the shortcut key for centering the text selected by the user in Word? [IBPS Clerk 2011]

[A] Ctrl + A

[B] Ctrl + B

[C] Ctrl + C

[D] Ctrl + E

Answer - D

Q. To open a new file in MS-Word, the shortcut key is

[A] Ctrl + X

[B] Ctrl + N

[C] Ctrl + Y

[D] Ctrl + B

Answer - B

MS-Excel

Q. The file responsible for starting MS-Excel is [RBI Grade B 2013]

[A]MS.Excel

[B] MS.exe

[C] Excel.exe

[D] Excel.com

Answer - C

Q. Anything that is typed in a worksheet appears [RBI Grade B 2013]

[A] in the formula bar only

[B] in the active cell only

[C] in both active cell and formula bar [D] All of the above

Answer - C

Q. Which one is the example of spreadsheet package? [IBPS Clerk 2011]

[A] VisiCalc [B] Unity

[C] Ada [D] Snowball

Answer - D

Q. Which option will we use to give heading in the form ?

[A] Label [B] Text box

[C] Option group [D] Insert

Answer - A

Q. The extension of saved file in MS-Excel is

[A] .xis [B] .xas

[C] .xlsx [D] .xll

Answer - C

Q. Alignment buttons are available on which toolbar?

[A] Status [B] Standard

[C] Formatting [D] All of these

Answer - C

Q. In Excel, the intersection of a column and a row is called [RBI Grade B 2014]

[A] cell [B] grid

[C] table [D] box

Answer - A

Q. What does an electronic spreadsheet consist of? [IBPS Clerk 2011]

[A] Rows [B] Columns

[C] Cells [D] All of these

Answer - D

Q. A collection of worksheets is called [RBI Grade B 2014]

[A] Excel book [B] Worksheets

[C] Excel sheets [D] Workbook

Answer - D

Q. All of the following terms are related to spreadsheet software except [SBI Clerk 2011]

[A] worksheet [B] cell

[C] formula [D] virus detection

Answer - D

Q. Which of the following is an active cell in Excel? [IBPS Clerk 2011]

[A] Current cell [B] Formula

[C] Range [D] Cell address

Answer - A

Q. How are the data organised in a spreadsheet? [SBI Clerk 2008]

[A] Lines and spaces [B] Layers and planes

[C] Height and width [D] Rows and columns

Answer - D

Q. The basic unit of a worksheet into which you enter data in Excel is called a [IBPS Clerk 2008]

[A] tab [B] cell

[C] box [D] range

Answer - B

Q. The advantage of using a spreadsheet is

[A] calculations can be done automatically

[B] changing data automatically updates calculations

[C] more flexibility

[D] All of the above

Answer - D

Q. A ..... is rectangular grid of rows and columns used to enter data.

[A] cell [B] spreadsheet

[C] worksheet [D] Both B, and C

Answer - D

Q. The default view in Excel is …… view.

[A] Work [B] Auto

[C] Normal [D] Roman

Answer - C

Q. It is a software tool that lets one enter, calculate, manipulate set of numbers.

[A]speedsheet

[B] spreadsheet

[C] slide sheet

[D] All of these

Answer - B

Q. Borders can be applied to

[A] cells

[B] paragraph

[C] text

[D] All of these

Answer - D

Q. The cell having bold boundary is called

[A] relative

[B] active

[C] absolute

[D] mixed

Answer - B

Q. You can create hyperlinks from the Excel workbook to

[A] a Web page on company Internet

[B] a Web page on the Internet

[C] other Office 97 application documents

[D] All of the above

Answer - D

Q. To select a column the easiest method is to

[A] double click any cell in the column

[B] drag from the top cell in the column to the lastcell in the column

[C] click the column heading

[D] click the row heading

Answer - B

Q. Which among the following is not such an operation which can be carried out on objects in graphic program?

[A] Spell check

[B] Change size

[C] Move

[D] None of this

Answer - D

Q. Which of the following will you use as an option for saving a file?

[A] Save button on Standard toolbar

[B] Save option from File menu

[C] Pressing Ctrl + S

[D] All of the above

Answer - D

Q. What function displays row data in a column or column data in a row?

[A] Hyperlink

[B] Index

[C] Transpose

[D] Rows

Answer - C

Q. In Excel, ... allows users to bring together copies of workbooks that other users gave worked on independently. [SBI Clerk 2011]

[A] copying

[B] merging

[C] pasting

[D] compiling

Answer - B

Q. Insert date, format page number and insert auto text are buttons on the ..... toolbar.

[A] formatting

[B] header and footer

[C] standard

[D] edit

Answer – A

Q. The worksheet contains ……. Rows

[A] 65536

[B] 256

[C] 400

[D] 17

Answer - A

Q. Using the F11 shortcut key to create a chart on chart sheet creates

[A] A default chart

[B] A 2-dimesional column chart

[C] A 2-dimensional bar chart

[D] A 3-dimensional line chart

Answer - B

Q. You can print

[A] A default chart

[B] A 2-dimensional column chart

[C] A 2-dimensional bar chart

[D] A 3-dimensional line chart

Answer - D

Q. You can create only a horizontal page break by first selecting

[A] A row below the row where you want the page break to occure

[B] A cell in row 1

[C] A cell in column A

[D][A] and [C]

Answer - A

Q. You can create hyperlinks from the Excel workbook to

[A] A webpage on company internet

[B] A web page on the internet

[C] Other Office 97 application documents

[D] All

Answer - D

Q. The cell reference from a range of cells that starts in cell B1 and goes over to column G and down to row 10 is …….

[A] B1-G10

[B] B1-G10

[C] B1;G10

[D] B1:G10

Answer - D

Q. The advantages of using a spreadsheet is

[A] calculations can be done automatically

[B] changing data automatically updates calculations

[C] more flexibility

[D] all of the above

Answer – D

Q. Microsoft Excel is a versatile …… program.

[A] File transfer

[B] Application

[C] Spreadsheet

[D] Both [B] and [C]

Answer - D

Q. A …… is a group of cells that form a rectangle on the screen.

[A] Calculation

[B] Formula

[C] Range

[D] Range address

Answer - C

Q. You can print

[A] A range of cells by range name

[B] An entire worksheet

[C] A single worksheet

[D] All of the above

Answer - D

Q. Getting data from a cell located on a different sheet is called ……. .

[A] Accessing

[B] Referencing

[C] Updating

[D] Functioning

Answer - B

Q. How many characters can be typed in a single cell in Excel?

[A] 256 [B] 1024

[C] 32,767 [D] 65,535

Answer – C

Q. What is the intersection of a column and a row on a worksheet called?

[A] Column [B] Value

[C] Address [D] Cell

Answer - D

Q. All of the following terms are associated with spreadsheet software except.

[A] worksheet [B] cell

[C] formula [D] virus detection

Answer - D

Q. The horizontal and vertical lines on a worksheet are called …… .

[A] cells [B] sheets

[C]blocklines [D] gridlines

Answer - D

Q. What kind of software would you most likely use to keep track of a billing account?

[A] Word processing [B] Electronic publishing

[C] Spreadsheet [D] Web authoring

Answer - C

Q. What type of chart is useful for comparing values over categories ?

[A] Pie Chart [B] Dot Graph

[C] Column Chart [D] Line Chart

Answer - C

Q. In the case of MS-access, the rows of a table correspond to

[A] Field [B] Records

[C] Reports [D] Files

Answer - B

Q. MS-Excel is also known as

[A] Calculator [B] Worksheet

[C] Spreadsheet [D] Either [B] or [C]

Answer – D

Q. In a spreadsheet program the ……. Contains related worksheets and documents.

[A] workbook

[B] column

[C] cell

[D] formula

Answer - A

Q. In a spreadsheet, a cell is defined as the ……

[A] intersection of a table and a tuplet

[B] intersection of a file and a database

[C] intersection of a row and column

[D] intersection of a filed and a record

Answer - C

Q. An example of non-numeric data is

[A] Bank balance

[B] Examination marks

[C] Real Numbers

[D] Employee Address

Answer - D

Q. Which function in Excel tells how many numeric entries are there?

[A] NUM

[B] SUM

[C]CHKNUM

[D] COUNT

Answer - D

Q. Which type of software is similar to an accountant's worksheet?

[A] Word processing

[B] Database

[C] Spreadsheet

[D] Graphics

Answer - C

Q. Each cell in a Microsoft Office Excel document is referred to by its cell address, which is the …….. .

[A] cell's column label

[B] cell's column label and worksheet tab name

[C] cell's row label

[D] cell's row and column labels

Answer - D

Q. =SUM (B1: B (2) is an example of a …… .

[A] Function

[B] Formula

[C] Cell address

[D] Value

Answer – B

POWERPOINT

Q. Use the ……. to choose a slide layout.

[A] Quick Styles gallery
[B] Format Gallery
[C] Layout Gallery
[D] Layout collection

Answer - C

Q. Ellipse Motion is predefined …… .

[A] Design template
[B]Colour scheme
[C] Animation scheme
[D] All of the above

Answer - C

Q. Block arrows, starts and banners, and callouts are all examples of

[A] Different types of children's building blocks
[B] Auto Shape categories
[C] Clip art categories located in the Microsoft Clip Gallery
[D] More technical terms that I don't understand

Answer - B

Q. We can replace a font on all slides with another font using the ……. Option.

[A] Edit, Fonts
[B] Tools, Fonts
[C] Tools, Replace Fonts
[D] Format, Replace Fonts

Answer - D

Q. Special effects used to introduce slides in a presentation are called

[A] Effects
[B] Custom animations
[C] Transitions
[D] Preset animation

Answer - C

Q. Power-Point can display data from which of the following add-in software of MS-Office

[A] Equation editor
[B] Organization chart
[C] Photo album
[D] All of these

Answer - B

Q. Which key on the keyboard can be used to view slide show

[A] F1
[B] F2
[C] F5
[D] F10

Answer - C

Q. Which of the following fill effects can you use for the slide background?

[A] Gradient

[B] Texture

[C] Picture

[D] All of above

Answer -D

Q. Which of the following statements is not true?

[A] Holding down the Shift key while you draw an object creates perfect squares, circles and straight lines

[B] The text in a text box can't be formatted

[C] The drawing toolbar contains tools for drawing shapes, lines, arrows and more

[D] Ctrl + S save the document

Answer - B

Q. A chart can be put as a part of the presentation using

[A] Insert -> Chart

[B] Insert -> Pictures -> Chart

[C] Edit -> Chart

[D] View -> Chart

Answer - A

Q. The arrangement of elements such as Title and Subtitle text, pictures, tables is called

[A] Layout

[B] Presentation

[C] Design

[D] Scheme

Answer - A

Q. Which of the following are types of sound files?

[A] LOG files

[B] DAT files

[C] WAV files

[D]DRV files

Answer - C

Q. Which of the following can you use to add times to the slides in a presentation?

[A] Microsoft graph

[B] Microsoft Table

[C] Microsoft Excel

[D] Microsoft Word

Answer - A

Q. Which view in PowerPoint can be used to enter speaker comments?

[A] Normal

[B] Slide show

[C] Slide sorter

[D] Notes page view

Answer - D

Q. The best way to insert a new slide in a presentation is to use the

[A] Normal view [B] Special view

[C] Slide show view [D] Slide sorter view

Answer - D

Q. Which is the best view for getting your thoughts for a presentation out on the computer?

[A] Outline view [B] Notes page view

[C] Slide sorter view [D] Slide view

Answer - A

Q. The boxes that are displayed to indicate that the text, pictures or objects are placed in it is called ……. .

[A] Placeholder [B] Auto text

[C] Text box [D] Word art

Answer - A

Q. Which of the following is not a feature of PowerPoint?

[A] Printing transparencies

[B] Printing the speaker's notes along with slide images

[C] Linking a slide transition with a laser pointer

[D] Drawing with a pen

Answer - C

Q. Which option can be used to create a new slide show with the current slides but presented in a different order

[A] Rehearsal [B]Cusotm slider show

[C] Slide show setup [D] Slide show view

Answer - B

Q. Which of the following are action you can assign to an action button or slide object?

[A] Run a macro [B] Play a sound

[C] Hyperlink [D] All of above

Answer - D

Q. Which option in PowerPoint allows to carry slides from one computer to another?

[A] Save As [B] Save and Go

[C] Pack and Go [D] Web and Go

Answer - C

Q. Which of the following views is present in powerpoint?

[A] Document view [B]Slidesorter view

[C]Slidechanger view [D]Playside view

Answer - B

Q. A file that contains definitions of the paragraph and character styles for your document and all things you customized like toolbars and menus is called a ……. .

[A] guide

[B] pattern

[C] base document

[D] template

Answer - D

Q. Click ……. check box of transition in a slide group of an animation tab if you want to move a slide automatically after stipulated time.

[A] Transition timer

[B] Automatically after

[C] Transition after

[D] Automatic timer

Answer - B

Q. How do you save a presentation under a new file name?

[A] Select the file menu and choose Save As

[B] When you close PowerPoint the file will automatically be saved

[C] Select the File menu and choose Save

[D] The file will automatically be saved under the new name if you change the title

Answer - A

Q. A ……. is a professionally designed "empty" document that can be adapted to the user's needs

[A] file

[B] guide

[C] template

[D] user guide file

Answer - C

Q. A ……. pre-designed document that already has coordinating fonts, a layout, and a background.

[A] Guide

[B] Model

[C] Ruler

[D] Template

Answer - D

Q. Which of the following fill effects can you use for the slide background?

[A] Gradient

[B] Texture

[C] Picture

[D] All of the above

Answer - D

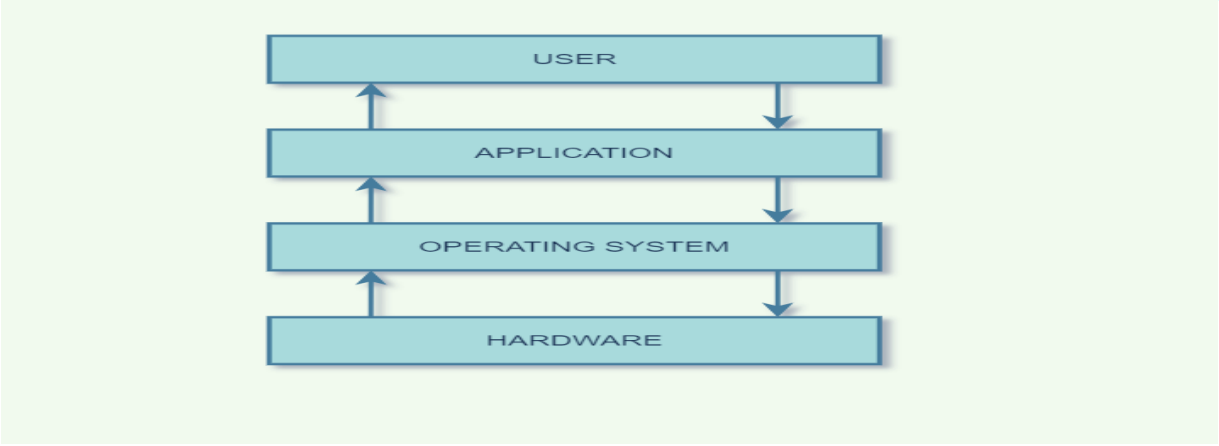
CHAPTER 6
OPERATING SYSTEM

OPERATING SYSTEM

An Operating System (OS) is an interface between a computer user and computer hardware. An operating system is a software which performs all the basic tasks like file management, memory management, process management, handling input and output, and controlling peripheral devices such as disk drives and printers. Some popular Operating Systems include Linux Operating System, Windows Operating System, VMS, OS/400, AIX, z/OS, etc.

Definition

An operating system (OS) is the software which helps in operating both hardware and software of the computer and it also manages all other application programs in a computer.



History of Operating Systems

- The first computer, Z1, was made in 1936 – 1938. Unfortunately, this computer ran without an operating system.
- Twenty years later, the first-ever operating system was made in 1956.
- In the 1960s, bell labs started working on building UNIX, the first multitasking operating system.
- In 1977 the apple series came into existence. Apple Dos 3.3 was the first disk operating system.
- In 1981, Microsoft built the first operating system called DOS by purchasing 86 – DOS software from a Seattle company.
- The most famous Microsoft windows came into existence in 1985 when MS-DOS was paired with GUI, a graphics environment.

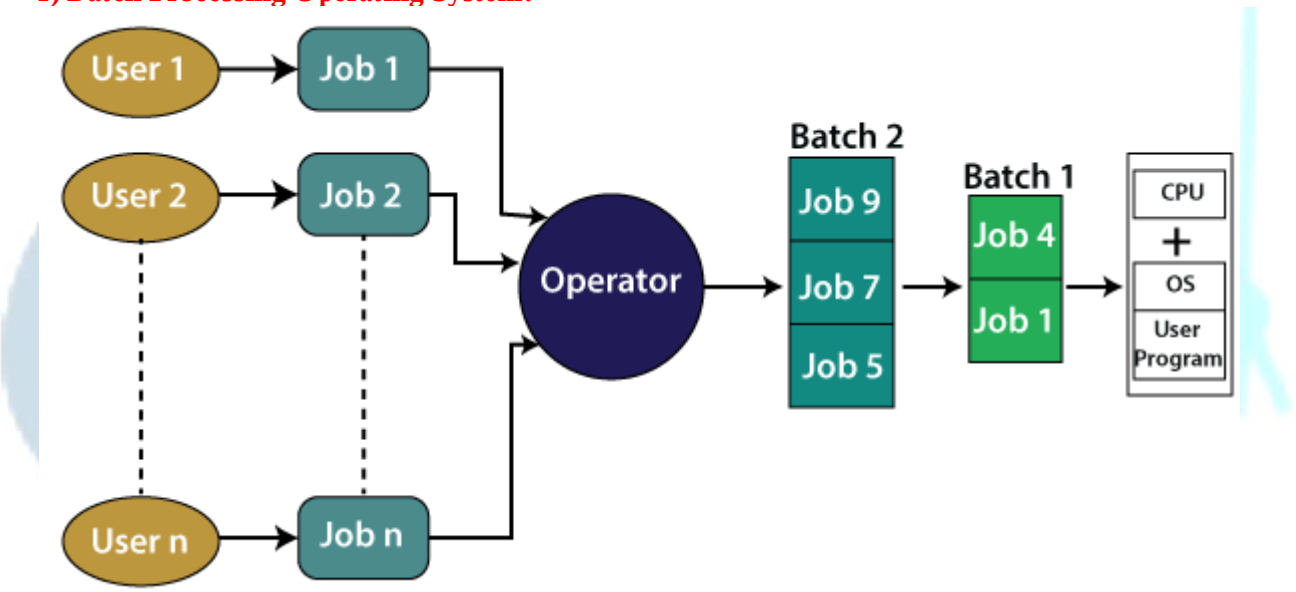
Major Functions of Operating System:

- **Memory management**: It manages both the primary and secondary memory such as RAM, ROM, hard disk, pen drive, etc. It checks and decides the allocations and deallocation of memory space to different processes. When a user interacts with a system, the CPU is supposed to read or write operations, in this case, OS decides the amount of memory to be allocated for loading the program instructions and data into RAM. After this program is terminated, the memory area is again free and is ready to be allocated to other programs by the OS.
- **Processor Management**: It facilitates processor management, where it decides the order for the processes to access the processor as well as decides the processing time to be allocated for each process. Besides this, it monitors the status of processes, frees the processor when a process is executed then allocates it to a new process.
- **Device/ hardware management**: The operating system also contains drivers to manage devices. A driver is a type of translation software that allows the operating system to communicate with devices, and there are different drivers for different devices as each device speaks a different language.
- **Run software applications**: It offers the environment to run or use software applications developed to perform specific tasks, for example, Ms Word, Ms Excel, Photoshop, etc.
- **Data management**: It helps in data management by offering and displaying directories for data management. You can view and manipulate files, folders, e.g., you can move, copy, name, or rename, delete a file or a folder.
- **Evaluates the system's health**: It gives us an idea about the performance of the hardware of the system. For example, you can see how busy the CPU is, how fast the data is retrieved from the hard disk, etc.
- **Provides user interface**: It acts as an interface between the user and the hardware. It can be a GUI where you can see and click elements on the screen to perform various tasks. It enables you to communicate with the computer even without knowing the computer's language.
- **I/O management**: It manages the input output devices and makes the I/O process smooth and effective. For example, it receives the input provided by the user through an input device and stores it in the main memory. Then it directs the CPU to process this input and accordingly provides the output through an output device such as a monitor.
- **Security**: It has a security module to protect the data or information stored in the memories of the computer against malware and unauthorized access. Thus, it not only manages your data but also helps to protect it.

- **Time Management**: It helps CPU in time management. The Kernel OS keeps checking the frequency of processes that requests CPU time. When two or more processes that are equally important compete for the CPU time, then the CPU time is sliced into segments and allocated to these processes in a round-robin fashion to prevent a single process from monopolizing the CPU.
- **Deadlock Prevention**: Sometimes a resource that is supposed to be shared by two or more processes is held by one process due to which the resource cannot continue. This situation is known as deadlock. The OS does not let this situation arise by carefully distributing the resources among the different processes.
- **Interrupt Handling**: OS also responds to interrupts, which are signals generated by a program or a device to seek the attention of the CPU. The OS checks the priority of the interrupt, and if it is more important than the currently running process, it stops the execution of the current process and preserves this state of CPU then executes the requested process. Thereafter the CPU returns to the same state where it was stopped.

Types of Operating System:

1) Batch Processing Operating System:



The interaction between a user and the computer does not occur in this system. The user is required to prepare jobs on punch cards in the form of batches and submit them to the computer operator. The computer operator sorts the jobs or programs and keeps similar programs or jobs in the same batch and run as a group to speed up processing. It is designed to execute one job at a time. Jobs are processed on a first-come, first-serve basis, i.e., in the order of their submission without any human interview For example, the credit card bill generated by banks is an example of batch processing. A separate bill is not generated for each credit card purchase, rather a single bill that includes all purchases in a month is generated through batch processing. The bill details are collected and held as a batch, and then it is processed to generate the bill at the end of the billing cycle. Similarly, in a payroll system, the salaries of employees of the company are calculated and generated through the batch processing system at the end of each month.

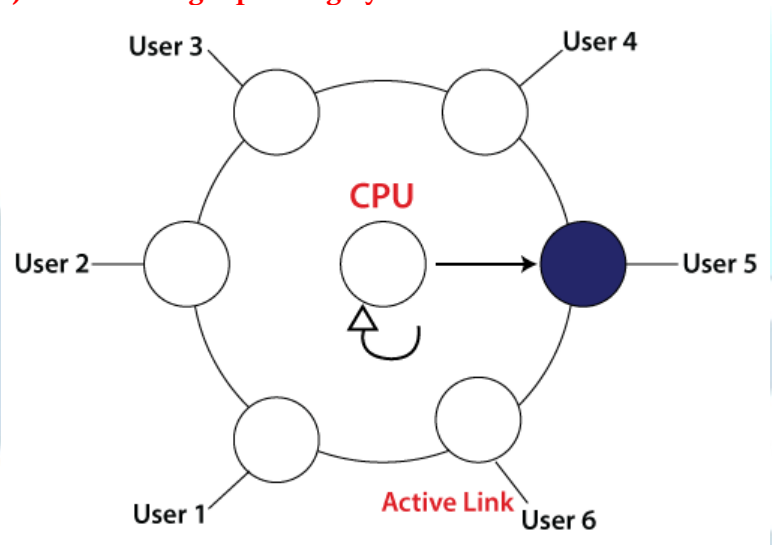
Advantages of Batch processing operating system:

- Repeated jobs can be completed easily without any human intervention
- Hardware or system support is not required to input data in batch systems
- It can work offline, so it causes less stress on the processor as it knows which task to process next and how long the task will last.
- It can be shared among multiple users.
- You can set the timing of batch jobs so that when the computer is not busy, it can start processing the batch jobs such as at night or any other free time.

Disadvantages of batch processing operating systems:

- You need to train the computer operators for using the batch system.
- It is not easy to debug this system.
- If any error occurs in one job, the other jobs may have to wait for an uncertain time.

2) Time Sharing Operating System:



As the name suggests, it enables multiple users located at different terminals to use a computer system and to share the processor's time simultaneously. In other words, each task gets time to get executed, and thus all tasks are executed smoothly.

Each user gets the processor's time as they get while using a single system. The duration of time allocated to a task is called quantum or time slice; when this duration is over, OS starts the next task.

Advantages of time sharing operating system:

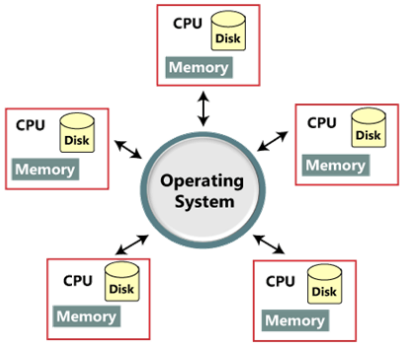
- ❖ It reduces CPU idle time and thus makes it more productive.
- ❖ Each process gets the chance to use the CPU.

- It allowed different applications run simultaneously.

Disadvantages of time sharing operating system:

- It requires a special operating system as it consumes more resources.
- Switching between tasks may hang up the system as it serves lots of users and runs lots of applications at the same time, so it requires hardware with high specifications.
- It is less reliable.

3) Distributed Operating System:



It uses or runs on multiple independent processors (CPUs) to serve multiple users and multiple real-time applications. The communication between processors is established through many communication lines such as telephone lines and high-speed buses. The processors may differ from each other in terms of size and function.The availability of powerful microprocessor

and advanced communication technology have made it possible to design, develop, and use the distributed operating system. Besides this, it is an extension of a network operating system that supports a high level of communication and integration of machines on the network.

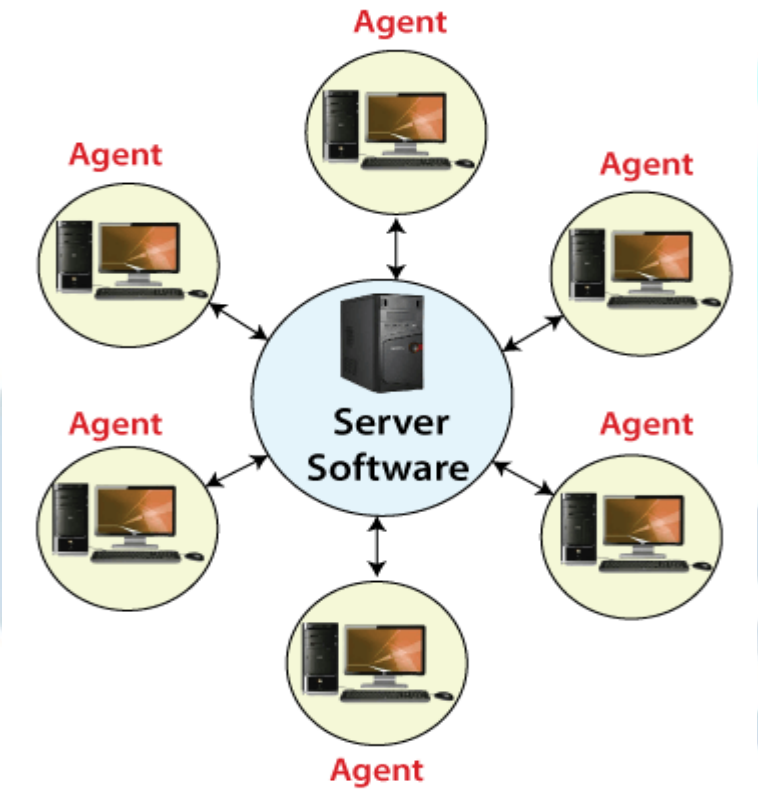
Advantages of distributed operating system:

- Its performance is higher than a single system as resources are being shared.
- If one system stops working, malfunctions, or breaks down, other nodes are not affected.
- Additional resources can be added easily.
- Shared access to resources like printer can be established.
- Delay in processing is reduced to a greater extent.
- Data sharing or exchange speed is high, owing to the use of electronic mail.

Disadvantages of distributed operating system:

- Security issue may arise due to sharing of resources
- Few messages may be lost in the system
- Higher bandwidth is required in case of handling a large amount of data
- Overloading issue may arise
- The performance may be low
- The languages which are used to set up a distributed system are not well defined yet
- They are very costly, so they are not easily available.

4)Network Operating System:



As the name suggests, this OS

connects computers and devices to a local area network and manages network resources. The software in a NOS enables the devices of the network to share resources and communicate with each other. It runs on a server and allows shared access to printers, files, applications, files, and other networking resources and functions over a LAN. Besides this, all users in the network are aware of each other's underlying configuration and individual connections. Examples: Ms Windows Server 2003 and 2008, Linux UNIX, Novell NetWare, Mac OS X, etc.

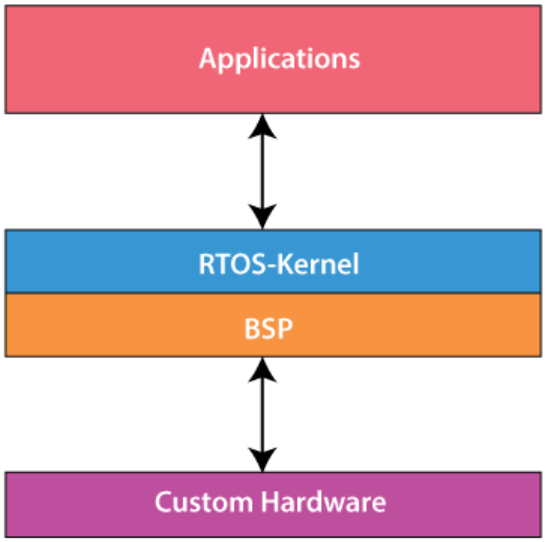
Advantages of network operating system:

- The servers are centralized that can be accessed remotely from distant locations and different systems.
- It is easy to integrate advanced and recent technologies and hardware in this system.

Disadvantages of network operating system:

- The servers used in the system may be expensive.
- The system depends on the central location and requires regular monitoring and maintenance.

5) Real-Time Operating System:



It is developed for real-time applications where data should be processed in a fixed, small duration of time. It is used in an environment where multiple processes are supposed to be accepted and processed in a short time. RTOS requires quick input and immediate response, e.g., in a petroleum refinery, if the temperate gets too high and crosses the threshold value, there should be an immediate response to this situation to avoid the explosion. Similarly, this system is used to control scientific instruments, missile launch systems, traffic lights control systems, air traffic control systems, etc.

This system is further divided into two types based on the time constraints:

Hard Real-Time Systems:

These are used for the applications where timing is critical or response time is a major factor; even a delay of a fraction of the second can result in a disaster. For example, airbags and automatic parachutes that open instantly in case of an accident. Besides this, these systems lack virtual memory.

Soft Real-Time Systems:

These are used for application where timing or response time is less critical. Here, the failure to meet the deadline may result in a degraded performance instead of a disaster. For example, video surveillance (cctv), video player, virtual reality, etc. Here, the deadlines are not critical for every task every time.

Advantages of real-time operating system:

- The output is more and quick owing to the maximum utilization of devices and system
- Task shifting is very quick, e.g., 3 microseconds, due to which it seems that several tasks are executed simultaneously
- Gives more importance to the currently running applications than the queued application
- It can be used in embedded systems like in transport and others.
- It is free of errors.
- Memory is allocated appropriately.

Disadvantages of real-time operating system:

- A fewer number of tasks can run simultaneously to avoid errors.
- It is not easy for a designer to write complex and difficult algorithms or proficient programs required to get the desired output.
- Specific drivers and interrupt signals are required to respond to interrupts quickly.
- It may be very expensive due to the involvement of the resources required to work.

Generations of Operating System:

The first generation (1945 to 1955):

It was the time before the Second World War when the digital computer was not developed, and there were calculating engines with mechanical relays at this point in time. Later mechanical relays were replaced by vacuum tubes as they were very slow. But, the performance issue was not resolved even with vacuum tubes, besides these machines were too bulky and large as there were made of tens of thousands of vacuum tubes.

Furthermore, each of the machines was designed, programmed, and maintained by a single group of people. The programming languages and operating systems were not known, and absolute machine language was being used for programming.

These systems were designed for numerical calculations. The programmer was required to sign up for a block of time and then insert his plug board into the computer. In the 1950s, punch cards were introduced, which improved the computer performance. It allowed programmers to write programs on punch cards and read them into the system; the rest of the procedure was the same.

The second generation (1955 to 1965):

This generation started with the introduction of transistors in the mid-1950s. The use of transistors made the computers more reliable, and they began to be sold to customers. These machines were called mainframes. Only the big organization and government corporations could afford it. In this machine, the programmer was required to write the program on a paper then punch it on cards. The card would be taken to the input room and handed over to an operator to get the output. The printer provides the output which was taken to the output room. These steps made it a time-consuming task. So, the batch system was adopted to address this issue.

In a batch system, the tasks were collected in a tray in the form of batches in the input room and read onto a magnetic tape, which was taken to the machine room, where it was mounted on a tape drive. Then using a special program, the operator was to read the first task or job from the tape and run it, and the output was generated onto a second tape. OS automatically read the next job from the tape, and Jobs were completed one by one. After the completion of the batch, the input and output tapes were taken off, and the next batch was started. The printouts were taken from the output tape. It was mainly used for engineering and scientific calculations. The first OS was used in this generation in computers was called FMS (Fortran Monitor System), and IBMSYS, and FORTRAN were used as a high-level language.

The third generation (1965 to 1979):

This generation began with the introduction of 360 family of computers of IBM

in 1964. In this generation, transistors were replaced by silicon chips, and the operating system was developed for multiprogramming, some of them even supported batch processing, time sharing, real-time processing, at the same time.

The fourth generation operating system (1979 to Present):

This generation of OS started with the introduction of personal computers and workstations. Chips that contain thousands of transistors were introduced in this generation that made possible the development of personal computers that supported the growth of networks and thus the development of network operating systems and distributed operating systems. DOS, Linux, and window operation systems were are few examples of OS of this generation.

Some Important Operating Systems-

Some popular operating systems are as follows

1. **UNIX** The first version of Unix was developed in 1969 by Ken Thompson and Dennis Ritchie. It is primarily used to a server rather than a workstation and should not be used by anyone who does not understand the system.
2. **AppleMacintosh**(Mac OS) It was introduced in January, 1984 by Steve Jobs and was initially named as system software, which was later renamed asMac OS.
3. **LINUX**The first Linux Kernel was released in September, 1991 by Linus Torvalds. It is an open source software. Linux is similar to Unix in operations. It is difficult to understand by anyone.
4. **Microsoft Windows** It is an operating system, based on GUI, developed by Microsoft. Microsoft first introduced an operating environment named Windows in November 1985 in response to the growing interest in GUIs.

Mobile Operating System

This OS operates on Smartphones, Tablets and Digital Mobile devices. It controls mobile devices and its design supports wireless communication and different types of mobile applications. It has built-in support for mobile multimedia formats.

Some popular mobile operating systems are as follows

1. **Android** It is a mobile OS developed by Google, which is based on Linux (Main part of operating system). It is basically designed for touch screen mobile devices like Tablets, Smartphones etc. Now-a-days, it is most common used in mobile phones. The latest version of Android is Pie which was released on 6th August, 2018.
2. **Symbian** It is the OS developed and sold by Symbian Ltd. It is an open source mobile OS designed for Smartphones. It has been used by many major handset manufacturers including Motorola, Nokia, Samsung, Sony etc. The latest version of Symbian is Nokia Belle which was released in October 2012.
3. **iOS** It is the popular mobile operating system developed by Apple Incorporation. This operating system is commonly used in Apple iPhone, iPod Touch, iPad etc. The

latest version of iOS is iOS 11.4.1 which was released on 9th July, 2018.
4. **BlackBerry** It is the most secure operating system used in leading Smartphones developed by BlackBerry company. It also supports WAP 1.2. The latest version of BlackBerry is BlackBerry OS 10.3.3 which was released in 2016.

MS-DOS (Microsoft-Disk Operating System)

The DOS OS was developed by Microsoft in 1980 for micro computers. MS-DOS was the first operating system that run on PC developed by IBM corporation in 1981. DOS is a single user operating system. It is only operating system which can be loaded in the main memory of the computer using a single disk.

Structure of DOS

There are four essential programs associated with the control of computer and the way it interacts with them.
1. **The Boot Record** It includes loading the operating system into main memory. It is the main program of MS-DOS.
2. **The Basic Input/Output System** (BIOS. sys) It provides an interface between the hardware and programs.
3. **The MSDOS. sys Program** It is a collection of program routines and data tables that provides high level programs such as application programs.
4. **The Command.com Program** It provides a standard set of commands that gives users access to file management, configuration and miscellaneous functions.

Types of MS-DOS Commands

There are two kinds of MS-DOS command, Internal and External.
1. **Internal Commands** These commands are automatically loaded into main memory when the booting process gets completed.e.g. DATE, TIME, VER, VOL, DIR,COPY, CLS, etc.
2. **External Commands** These commands require external filesto be loaded in the computer to run. e.g. Checking disk, comparing disk, formatting, etc.

QUESTION ANSWER

Q. …… provides process and memory management services that allow two or more tasks, jobs or programs to run simultaneously.

[A] Multitasking

[B] Multithreading

[C] Multiprocessing

[D]Multicomputing

Answer - A

Q. Which of the following terms explains the execution of more than one file at the sameon a single processor?

[A] Single tasking

[B]Multi-tasking

[C] Scheduling

[D] Multiprocessing

Answer - B

Q. …… is a feature for scheduling and multi-programming to provide an economical interactive system of two or more users. [IBPS Clerk 2012]

[A] Time sharing

[B]Multisharing

[C] Time tracing

[D] Multiprocessing

Answer - A

Q. The simultaneously processing of two or more programs by multiple processors, is [IBPS Clerk 2011]

[A] Multiprogramming

[B] Multitasking

[C] Time sharing

[D] Multiprocessing

Answer - D

Q. Real time systems must have

[A] pre-emptive kernels

[B] non-pre-emptive kernels

[C] Both '1' and '2'

[D] Either '1' or '2'

Answer - A

Q. RTOS stands for

[A] Real-Time Operating System

[B] Reliable Time Operating System

[C] Reboot Time Operating System

[D] None of the above

Answer - A

Q. System running more than one process concurrently are called[SSC CGL 2016]

[A] Multiprocessing

[B] Multiprogramming

[C] Real time

[D] Batch processing

Answer - B

Q. Which of the following refers to the means by which an OS or any other program interacts with the user? [SBI Clerk 2014]

[A] Program front-end

[B] Programming interface

[C] User login

[D] User interface

Answer - D

Q. The first graphical user interface was designed by

[A] Apple Inc.

[B] Microsoft

[C] Xerox Corporation

[D] None of these

Answer - C

Q. ..... only uses text types one after another just as commands used in MS-DOS

[A] CUI

[B] CLI

[C] Both '1' and '2'

[D] GUI

Answer - C

Q. Which process checks to ensure the components of the computer are operating and connected properly? [SBI PO 2012]

[A] Booting

[B] Processing

[C] Saving

[D] Editing

Answer - A

Q. What happens when you boot up a PC? [RBI Grade B 2012]

[A] Portions of the operating system are copied from disk into memory

[B] Portions of the operating system are copied from memory onto disk

[C] Portions of the operating system are complied

[D] Portions of the operating system are emulated

Answer - A

Q. What do you understand by the term 'booting'? [RBI Grade B 2012]

[A] The process of starting the computer from the power-off position

[B] Connecting computer of the electric switch

[C] Increasing the memory of the computer

[D] The process of shut down the computer

Answer - A

Q. Restart of computer is called …… when computer is already ON.

[A] cold booting

[B] warm booting

[C] shut down

[D] logging off

Answer - B

Q. The first version of Unix was developed by

[A] Ken Thompson

[B] Presper Eckert

[C] J W Mauchly

[D] Herman Hollerith

Answer - A

Q. The PC (Personal Computer) and the AppleMacintosh are examples of two different

[A] platforms

[B] applications

[C] programs

[D] storage devices

Answer - A

Q. Which of the following is an operating system? [SBI Clerk 2014]

[A] Linux

[B] Debugger

[C] Mozilla

[D] Google Chrome

Answer - A

Q. Linux is a type of …… software. [IBPS Clerk 2011]

[A] shareware

[B] commercial

[C] proprietary

[D] open source

Answer - D

Q. Which of these is not a part of the UNIX operating system?

[A] Kernel

[B] Shell

[C] Programs

[D] Linux

Answer - D

Q. Windows software was developed by a company called

[A] Microsoft Corporation

[B] IBM

[C] Wipro

[D] Apple

Answer - A

Q. Which of the following is the latest version of MSWindows?

[A] Windows 7

[B] Windows 8

[C] Windows 14

[D] Windows 8.2

Answer - B

Q. WINDOWS, UNIX and LINUX are called..... .

[A] Application

[B] Operating system

[C] Hardware

[D] System

Answer - B

Q. Which among the following is not a mobile operating system? [IBPS PO 2016]

[A] Android

[B] Safari

[C] Symbian

[D] iOS

Answer - B

Q. Which of the following operating systems was first developed by Microsoft?

[A] Windows ME

[B] Windows NT

[C] Windows 97

[D] Ms Dos

Answer - D

Q. Which one of the following file names is invalid in DOS? [RBI Grade B 2013]

[A] RIT. bat

[B]LISTEN.bin

[C]RLUA.btt

[D]TALK.bas

Answer - C

Q. Which one of the following DIR commands lists a group of files? [RBI Grade B 2013]

[A] DIR INVOICE.bas

[B] DIR RESCUE.bas

[C] DIR PAYROLL.bas

[D] DIR TOOL

Answer - D

Q. 'DOS' floppy disk/operating system doesnot have [SBI PO 2014]

[A] a boot record

[B] a file allocation table

[C] a root directory

[D]All of the above

Answer - D

Q. Which file in MS-DOS contains internal commands that are loaded during bootingprocess?

[A] CONFIG.sys

[B] MSDOS.sys

[C] BIOS.sys

[D] COMMAND.com

Answer - C

Q. What is the name of the batch file that is automatically run when MS-DOS is booted?

[A] Config.sys

[B] Config. bat

[C] Autoexe.bat [D] Run.bat

Answer - C

Q. MS-DOS is usually supplied on a

[A] hard disk [B] cartridge tape

[C] CD ROM [D] floppy disk

Answer - A

Q. Which of the following is the main program of MS-DOS?

[A] Boot Record [B] ID.sys

[C] MSDOS.sys [D] Command.com

Answer - A

Q. Which of the following operating systems is also known as single user operating system?

[A] Windows [B] Linux

[C] Unix [D] DOS

Answer - B

Q. The main difference between Windows and DOS is the ability to

[A] multitasking [B] speed up

[C] run a program [D] run without power

Answer - A

Q. '>' symbol in DOS commands is used to [SBI Clerk 2007]

[A] compare two values [B] redirect input

[C] redirect output [D] filter dos

Answer - C

Q. Usually, in MS-DOS, the primary hard disk drives has the drive letter ..... .[RBI Grade B 2012]

[A] A [B] B

[C] C [D] D

Answer - C

Q. Which of the following is not usual file extension in DOS? [RBI Grade B 2012]

[A] .exe [B] .bat

[C] .0 [D] .com

Answer - C

Q. Which commands are automatically loaded into main memory?

[A] Internal [B] External

[C] Viral [D] Situational

Answer - A

Q. Which type of commands in MS-DOS needs external files to perform their action?

[A] Internal commands [B] External commands

[C] Batch commands [D]Redirectories

Answer - B

Q. Which one of the following DOS commands sends contents of the screen to an outputdevice? [RBI Grade B 2013]

[A] BREAK [B] DISK COPY

[C] MORE [D] None of these

Answer - D

Q. Which of the following is not an external command of DOS?

[A] LABEL [B] FORMAT

[C]CHKDSK [D] CLS

Answer - D

Q. CHKDSK can be used to find

[A] disk's bad portion [B] occupied space

[C] free space [D] All of these

Answer - D

Q. While working with MS-DOS, which command transfers a specific file from one disk to another?

[A] Copy [B] Disk copy

[C] Time [D] Rename

Answer - A

Q. DEL command is used to

[A] delete files

[B] delete directory

[C] delete lables

[D] Both A&B

Answer - D

Q. This command is used to display a list of files and sub-directories that are in thedirectory you specify.

[A] DER

[B] DIS

[C] DIR

[D] DAR

Answer - C

Q. The purpose of DISKCOPY command is to [RBI Grade B 2014]

[A] format the disk if it is not formatted before awrite operation is initiated on it

[B] overwrite the existing contents of the destinationdisk as it copies the new information to it

[C] make an exact copy of a floppy disk

[D] All of the above

Answer - D

Q. Which command is used to delete file from a directory in DOS? [SBI Clerk 2007]

[A] REN [B] DEL

[C] CD [D] MD

Answer - B

Q. In MS-DOS, which of the following commands is used to delete directory with all sub-directories and files?

[A] Delete [B] Del

[C]Deltree [D] Move

Answer - C

Q. Which one of the following DOS commands sends contents of the screen to an output device?

[A] BREAK [B] DISK COPY

[C] MORE [D] ASSIGN

Answer - B

Q. The DOS command, which cannot be executed with versions 1 and 2 is[RBI Grade B 2014, RBI Grade B 2013]

[A] GRAPHICS [B] FIND

[C] LABEL [D] MODE

Answer - C

Q. Which of the following is not an internal command of DOS?

[A] VER [B] COPY

[C] FORMAT [D] VOL

Answer - C

Q. Which one of the following is an MS-DOS external command? [SSC CHSL 2012]

[A] DIR [B] COPY

[C] FORMAT [D] PROMPT

Answer - C

Q. A command, in DOS, used to set a name to a disk, is

[A] VOL [B] REN

[C] LABEL [D] CLS

Answer - C

CHAPTER 7
NETWORK_AND_INTERNET

COMPUTER NETWORK

A network set up by connecting two or more computers and other supporting hardware devices through communication channels is called a computer network. It enables computers to communicate with each other and to share commands, data, etc., including the hardware and software resources.

Benefits of Network

1.**File Sharing** Networking of computer helps the users to share data files.
2.**Hardware Sharing** Users can share devices such as printers, scanners, CD-ROM drives,hard drives, etc, in a computer network.
3.**Application Sharing** Applications can be shared over the network and this allows implementation of client/server applications.
User Communication This allows users to communicate using E-mail, newsgroups, video conferencing within the network.

Uses of Computer Network:

- It allows you to share resources such as printers, scanners, etc.
- You can share expensive software and database among network users.
- It facilitates communications from one computer to another computer.
- It allows the exchange of data and information among users through a network.

Computer Network Types

Below are the most common computer network types that are frequently used these days:

- ✓ LAN [Local Area Network}
- ✓ WLAN [Wireless local area network]
- ✓ CAN [Campus Area Network]
- ✓ MAN [Metropolitan Area Network]
- ✓ PAN [Personal Area Network]
- ✓ SAN [Storage Area Network]
- ✓ VPN [Virtual Private Network]

✓ WAN [Wide Area Network]

1. LAN

Local Area Network (LAN):

As the name suggests, the local area network is a computer network that operates in a small area, i.e., it connects computers in a small geographical area like within an office, company, school, or any other organization. So, it exists within a specific area, e.g. home network, office network, school network, etc.

A local area network may be a wired or wireless network or a combination of both. The devices in a LAN are generally connected using an Ethernet cable, which offers an interface to connect multiple devices like router, switches, and computers. For example, using a single router, few Ethernet cables, and computers, you can create a LAN at your home, office, etc. In this network, one computer may act as a server and other computers, which are part of the network, may serve as clients.

Benefits of LAN:

- It offers a higher operating speed than WAN and MAN.
- It is less expensive and easy to install and maintain.
- It perfectly fulfills the requirement of a specific organization, such as an office, school, etc.
- It can be wired or wireless or a combination of both.
- It is more secure than other networks as it is a small set up that can be easily taken care of.

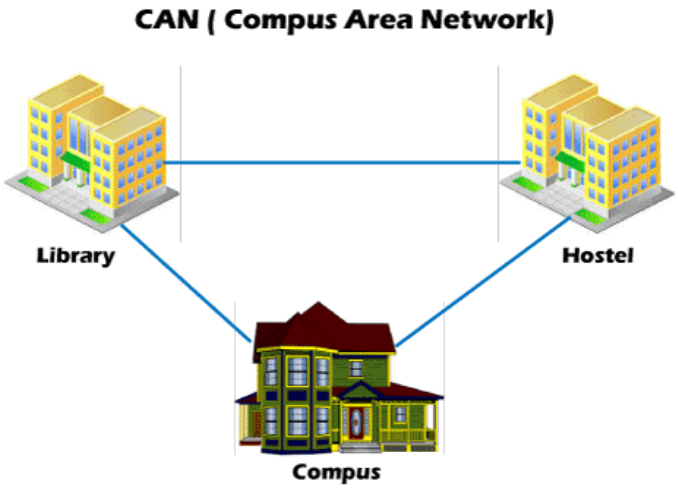
Primary Functions of LAN:

- **Sharing of files:** It allows you to share or transfer files from one computer to another computer within the LAN. For example, in a bank, it can be used to send a file with the details of transactions of a customer from the server to clients.
- **Sharing of printers:** It also allows shared access to a printer, file servers, etc. For example, ten computers that are connected through LAN can use a single printer, file server, fax machine, etc.
- **Sharing of Computational capabilities:** It allows the clients to access to the computational power of a server, e.g., an application server as some applications which run on clients in a LAN may require higher computational capabilities.
- **Mail and message related services:** It allows sending and receiving mails between computers of a LAN. You are required to have a mail server for this.
- **Database services:** It also allows storing and retrieving data with the help of a database server.

2. WLAN

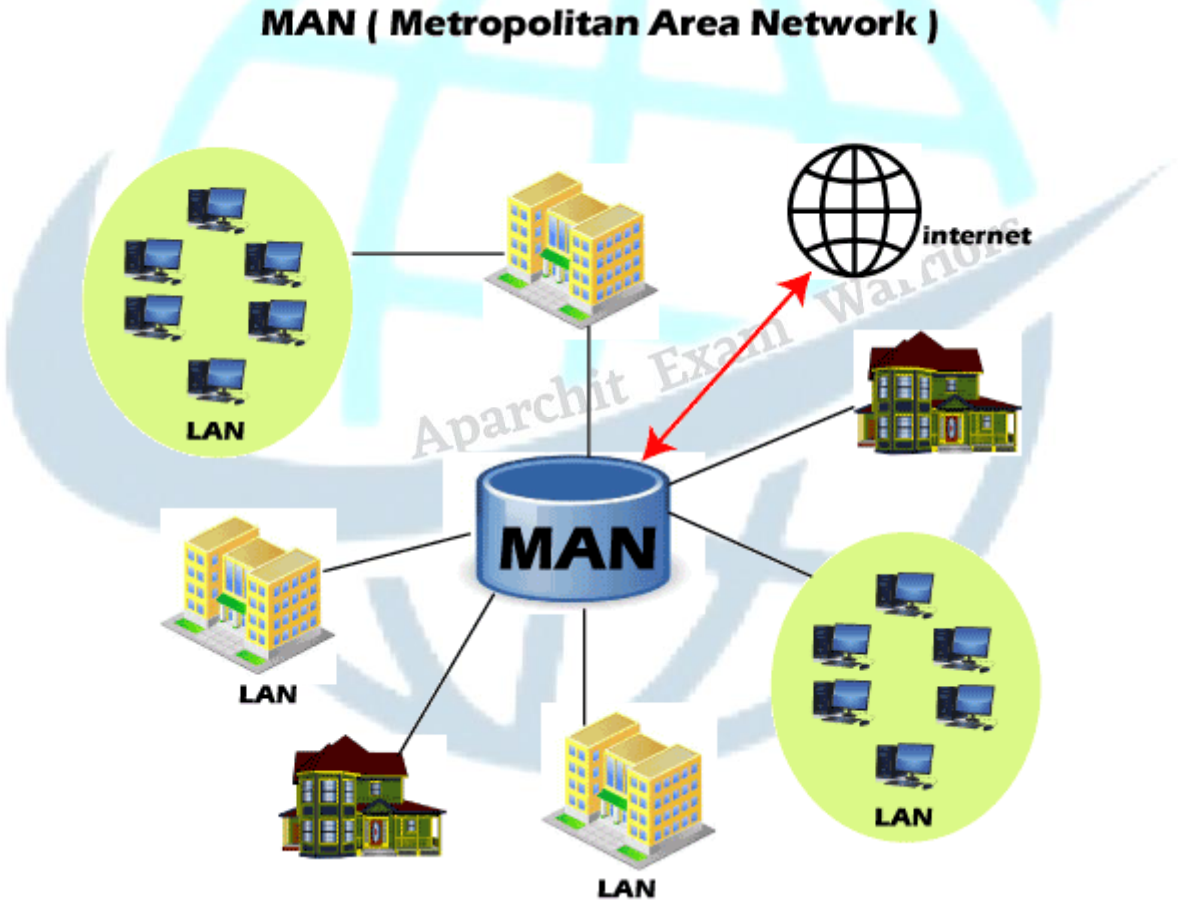
WLAN or Wireless local area network is similar to LAN with the difference that it uses wireless communication between devices instead of wired connections. WLAN typically involves a **Wi-Fi router or wireless access point for devices,** unlike **smartphones, laptops, desktops,** etc.

3. CAN

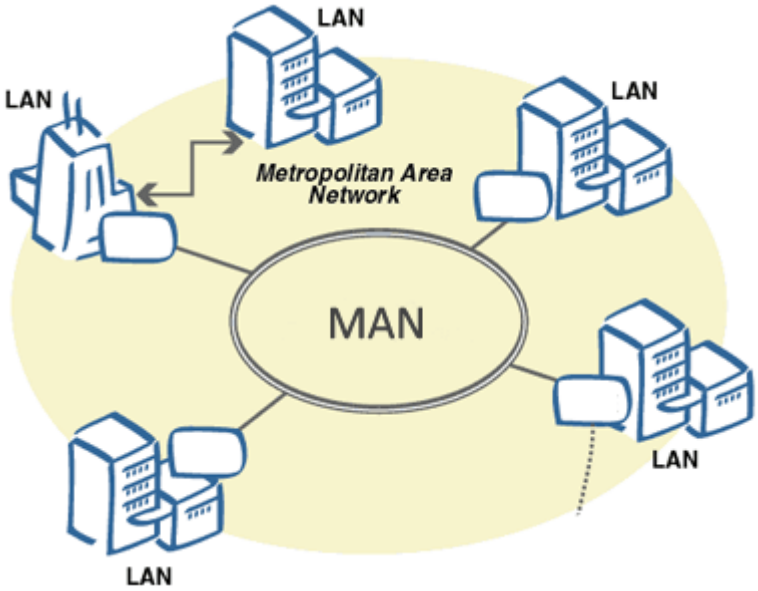


CAN or Campus Area Network is a closed corporate communication network. A CAN is a mobile network that may contain a private or public part. CANs are widely used **colleges, academies, and corporate sites.**

4. MAN



Metropolitan Area Network (MAN):



MAN is a high-speed network that spreads over a large geographical area such as a metro city or town. It is set up by connecting the local area networks using routers and local telephone exchange lines. It can be operated by a private company, or it may be a service provided by a company such as a local telephone company.

MAN is ideal for the people of a relatively large area who want to share data or information. It provides fast communication via high-speed carriers or transmission media such as copper, fiber optics, and microwaves. The commonly used protocols for MAN are X.25, Frame Relay, Asynchronous Transfer Mode (ATM), xDSL (Digital Subscriber Line), ISDN (Integrated Services Digital Network), ADSL (Asymmetrical Digital Subscriber Line), and more.

The area covered by MAN is larger than the LAN but smaller than a WAN. Its network ranges from 5 to 50 km. Furthermore, it also provides uplinks for connecting LANs to WANs and the internet. An organization can use a MAN to connect all of its LANs located at its different offices across the city.

Examples of MAN:

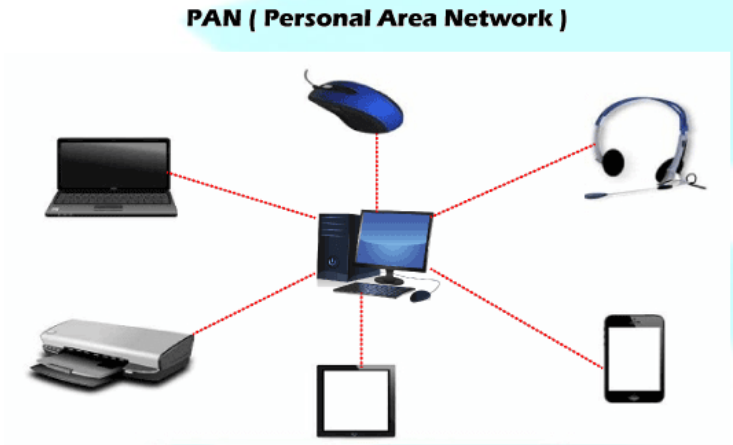
- ✓ Cable TV Network
- ✓ Telephone service provides that provide high-speed DSL lines
- ✓ IEEE 802.16 or WiMAX
- ✓ Connected fire stations in a city
- ✓ Connected branches of a school in a city

Advantages of MAN:

- **Less Expensive:** It is less expensive to set up a MAN and to connect it to a WAN.
- **High Speed:** The speed of data transfer is more than WAN.
- **Local Emails:** It can send local emails fast.

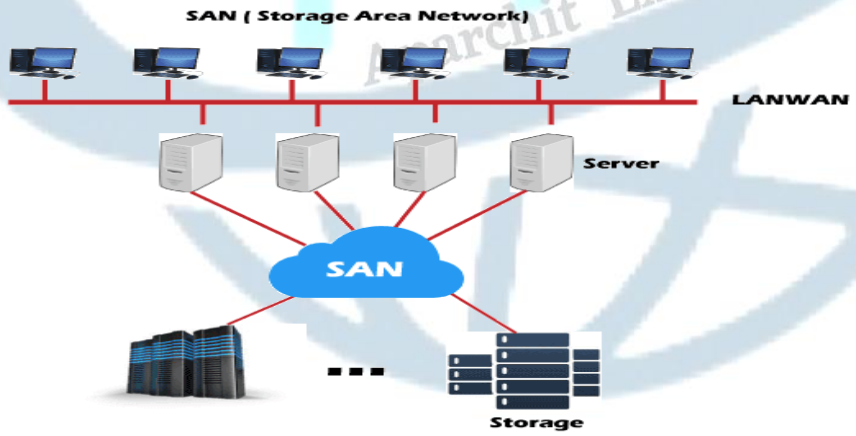
- **Access to the Internet:** It allows you to share your internet connection, and thus multiple users can have access to high-speed internet.
- **Easy to set up:** You can easily set up a MAN by connecting multiple LANs.
- **High Security:** It is more secure than WAN.

5. PAN



PAN or Personal Area Network is a type of network used personally and usually serves one person. This network usually connects devices unlike your smartphones, laptop, or desktop to sync content and share small files, unlike songs, photos, videos, calendars, etc. These devices connect via **wireless networks such as Wi-Fi, Bluetooth, Infrared, etc.**

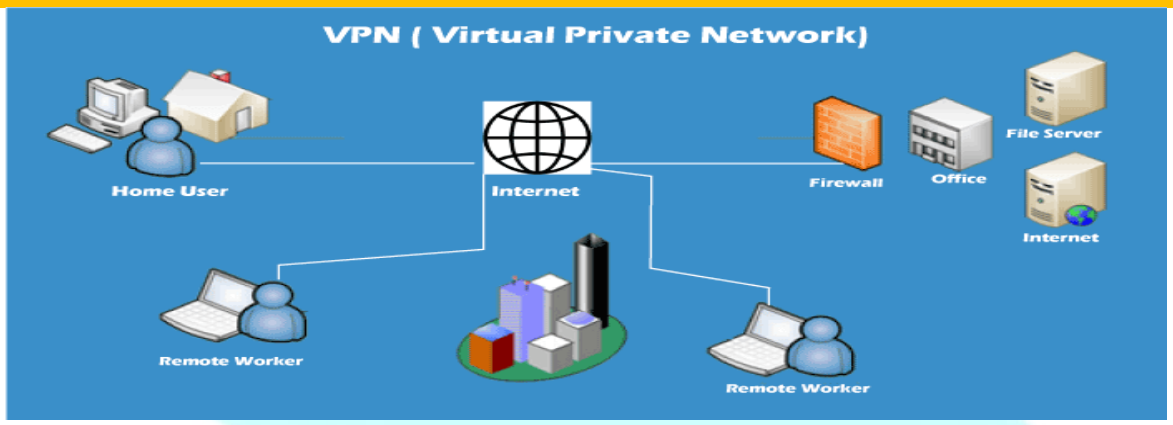
6. SAN



SAN or Storage Area Network is a specialized high-speed network that stores and provides access to block-level storage. It is a dedicated shared network that is used for cloud data storage that appears and works like a storage drive.

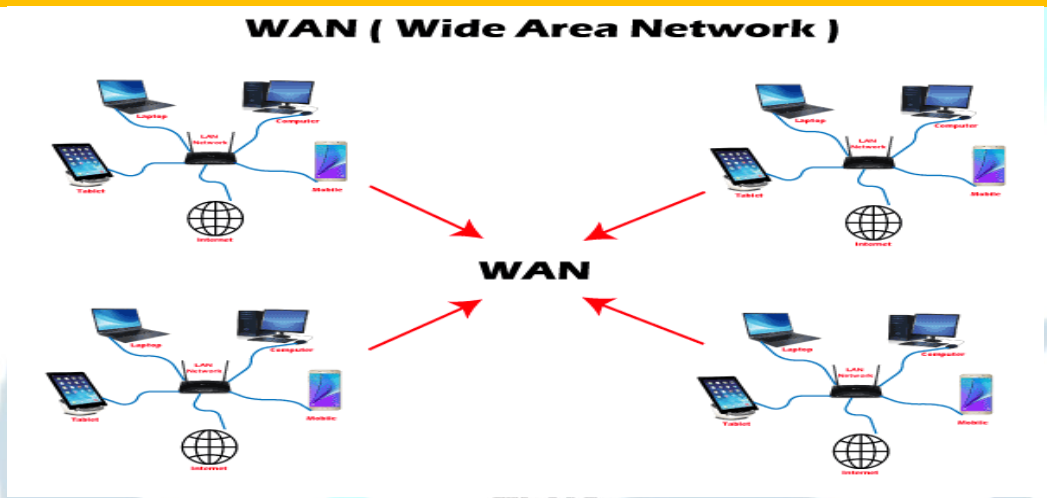
SAN consists of various **switches, servers, and disks array.** One of the advantages of SAN is that it is fault-tolerant, which means if any switch or server goes down, the data can still be accessed.

7. VPN

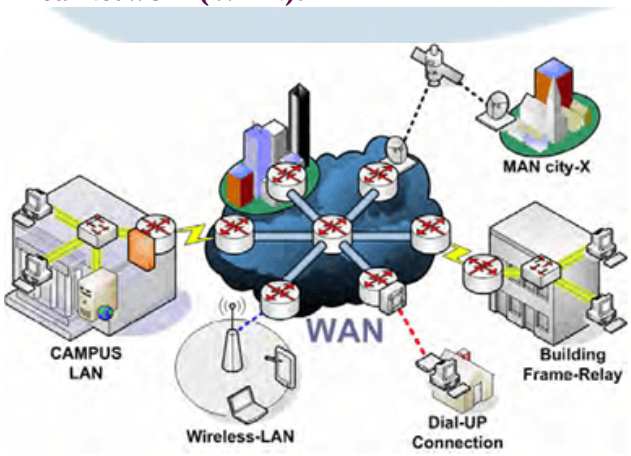


VPN or Virtual Private Network is a secure tool that encrypts point-to-point Internet connection and hides the user's IP address and virtual location. It determines an encrypted network to boost user's online privacy so as their identity and data are inaccessible to hackers.

8. WAN



Wide Area Network (WAN):



WAN extends over a large geographical area. It is not confined within an office, school, city, or town and is mainly set up by telephone lines, fiber optic, or satellite links. It is mostly used by big organizations like banks and

multinational companies to communicate with their branches and customers across the world. Although it is structurally similar to MAN, it is different from MAN in terms of its range, e.g., MAN covers up to 50 Kms, whereas WAM covers distances larger than 50 Km, e.g., 1000km or more.

A WAN works by using TCP/IP protocol in combination with networking devices such as switches, routers, firewalls, and modems. It does not connect individual computers; rather, they are designed to link small networks like LANs and MANs to create a large network. The internet is considered the largest WAN in the world as it connects various LANs and MANs through ISPs.

The computers are connected to the wide area network through public networks, such as telephone systems, leased lines or satellites. The users of a WAN do not own the network as it is a large setup connecting the remote computer systems. However, they are required to subscribe to a service provided by a telecommunication provider to use this network.

Advantages of a WAN:

- **Large Network Range:** It spans a large geographical area of 2000 km or more, e.g., from one country to another countries.
- **Centralized data:** It allows your different office branches to use your head office server for retrieving and sharing data. Thus, you don?t need to buy email servers, files server and back up servers, etc.
- **Get updated files and data:** It provides an ideal platform for companies who need a live server for their employees to exchange updated files within seconds.
- **High bandwidth:** It offers high bandwidth than a normal broadband connection. Thus, it can increase the productivity of your company by offering uninterrupted data transfer and communication.
- **Workload Distribution:** It helps distribute your workload to other locations. You can hire employees in different countries and assign them to work from your office.

Networking terms and concepts

Some of the most commonly used terms in day-to-day networking life are as discussed below:

1. IP address

An IP address or ***Internet Protocol*** is a **unique number that represents the address where you live on the Internet.** Every device that is connected to the network has a string of numbers or IP addresses unlike house addresses.

You won't find two devices connected to a network with an identical IP address. When your computer sends data to another different, the sent data contains a 'header' that further contains the devices' IP address, i.e., the source computer and the destination device.

2. Nodes

A node refers to a networking **connection point where a connection occurs inside a network that further helps in receiving, transmitting, creating, or storing files or data.**

Multiple devices could be connected to the Internet or network using wired or wireless nodes. To form a network connection, one requires two or more nodes where each node carries its unique identification to obtain access, such as an IP **address.** Some examples of nodes are **computers, printers, modems, switches, etc.**

3. Routers

A router is a **physical networking device, which forwards data packets between networks.** Routers do the data analysis, perform the traffic directing functions on the network, and define the top route for the data packets to reach their destination node. A **data packet** may have to surpass multiple routers present within the network until it reaches its destination.

4. Switches

In a computer network, a switch is a device that **connects other devices and helps in node-to-node communication by deciding the best way of transmitting data within a network (usually if there are multiple routes in a more extensive network).**

Though a router also transmits information, it forwards the information only between networks, whereas a switches forwards data between nodes present in a single network.

Switching is further classified into three types, which are as follows:

- **Circuit Switching**
- **Packet Switching**
- **Message Switching**
- **Circuit Switching:** In this switching type, a secure communication path is established between nodes (or the sender and receiver) in a network. It establishes a dedicated connection path before transferring the data, and this path assures a good transmission bandwidth and prevents any other traffic from traveling on that path. For example, **the Telephone network.**
- **Packet Switching:** With this technique, a message is broken into independent components known as packets. Because of their small size, each packet is sent individually. The packets traveling through the network will have their source and destination IP address.
- **Message Switching:** This switching technique uses the store and forward mechanism. It sends the complete unit of the message from the source node, passing from multiple switches until it reaches its intermediary node. It is not suitable for real-time applications.

5. Ports

A port **allows the user to access multiple applications by identifying a connection between network devices.** Each port is allocated a set of string numbers. If you relate the IP address to a hotel's address, you can refer to ports as the hotel room number. Network devices use port numbers to decide which application, service, or method is used to forward the detailed information or the data.

6. Network cable types

Network cables are used as a **connection medium between different computers and other network devices.** Typical examples of network cable types are **Ethernet cables, coaxial, and fiber optic.** Though the selection of cable type usually depends on the size of the network, the organization of network components, and the distance between the network devices.

Network Devices

These devices are required to amplify the signal to restore the original strength of signal and to provide an interface to connect multiple computers in a network. There are many types of network devices used in networking.

Some of them are described below

1. **Repeater** Repeaters have two ports and can connect two segments of a LAN. It amplifies the signals when they are transported over along distance so that the signal can be as strong as the original signal. A repeater boosts the signal back to its correct level.
2. **Hub** It is like a repeater with multiple ports used to connect the network channels. It acts as a centralised connection to several computers with the central node or server. When a hub receives a packet of data at one of its ports from a network channel, it transmits the packet to all of its ports to all other network channel.
3. **Gateway** It is an interconnecting device, which joins two different network protocols together. They are also known as protocol converters. It accepts packet formatted for one protocol and converts the formatted packet into another protocol. The gateway is a node in a network which serves as a proxy server and a firewall system and prevents the unauthorised access.
4. **Switch** It is a small hardware device that joins multiple computers together within one LAN. It helps to reduce overall network traffic. Switch forwards a data packet to a specific route by establishing a temporary connection between the source and the destination. There is a vast difference between a switch and a hub. A hub forwards each incoming packet (data) to all the hub ports, while a switch forwards each incoming packet to the specified recipient.
5. **Router** It is a hardware device which is designed to take incoming packets, analyse packets, moving and converting packets to the another network interface, dropping the packets, directing packets to the appropriate locations, etc.
6. **Bridge** It serves a similar function as switches. A bridge filters data traffic at a network boundary. Bridges reduce the amount of traffic on a LAN by dividing it into two segments. Traditional bridges support one network boundary, whereas switches usually offer four or more hardware ports. Switches are sometimes called multiport bridges.
7. **Modem** It is a device that converts digitalsignal to analog signal (modulator) at thesender's end and converts back analog signal to digital signal (demodulator) at the receiver's end, in order to make communication possible *via* telephone lines. A Modem is always placed between a telephone line and a computer.

Network Topology

•**Mesh topology** - Mesh is a network topology in which devices are connected with many redundant interconnections between network nodes.

•**Star topology** - Star topology is a network topology where each individual piece of a network is attached to a central node.

•**Ring topology** - Ring topology refers to a specific kind of network setup in which devices are connected in a ring and pass information to each other according to their adjacent in the ring structure.

•**Bus topology** - Bus topology is a specific kind of network topology in which all of the various devices in the network are connected to a single cable or line.

•**Tree topology** – It is a combination of characteristics of linear bus and star topologies.

Terms Related to Network

1. **Multiplexing** It is a technique used for transmitting signals simultaneously over acommon medium. It involves single path and multiple channels for data communication.
2. **Code Division Multiple Access** (CDMA) It is a channel access method used by various radio communication technologies. CDMA employs spread spectrum technology and a special coding scheme, where each transmitter is assigned a code to allow multiple users to be multiplexed over the same physical channel.
3. **Packet Switching** It refers to the method of digital networking communication that
combined all transmitted data regardless of content, type or structure into suitable sized blocks, known as packets.
4. **Public Switched Telephone Network** (PSTN) It is designed for telephone, whichrequires modem for data communication. It is used for FAX machine also.
5. **Integrated Services Digital Network** (ISDN) It is used for voice, video and dataservices. It uses digital transmission and combines both circuit and packet switching.
6. **Ethernet** It is a widely used technology employing a bus technology. An ethernet LAN consists of a single co-axial cable called Ether. It operates at 10 Mbps and provides a 48-bits address. Fast ethernet operates at 100 Mbps.
7. **Token** It is a small message used to passbetween one station to another.

OSI MODEL

OSI: The Open Systems Interconnection model (OSI Model) is a conceptual model that characterizes and standardizes the communication functions of a telecommunication or computing system without regard to their underlying internal structure and technology.

Seven layers of OSI Model

1.Physical layer - The physical layer is the first layer of the OSI Model that deals with bit-level transmission between different devices and supports electrical or mechanical interfaces connecting to the physical medium for synchronized communication.
2. Data Link Layer - The data link layer is the second layer of the OSI model. This layer is the protocol layer that transfers data in the form of frames between adjacent network nodes in a wide area network or between nodes on the same local area network segment.
3.Network Layer - The network layer is the third level of the OSI Model and the layer that provides data routing paths for network communication. Data is transferred in the form of packets via logical network paths in an ordered format controlled by the network layer.
4. Transport Layer - The transport layer is the layer in the OSI model responsible for end-to-end communication(in the form of segments) over a network. It provides logical communication between application processes running on different hosts within a layered architecture of protocols and other network components.
5. Session Layer - In the OSI model, the session layer is the fifth layer, which controls the connections between multiple computers. The session layer tracks the dialogues between computers, which are also called sessions.
6.Presentation Layer - The presentation layer is layer 6 in the OSI model. It is used to present data to the application layer (layer 7) in an accurate, well-defined and standardized format. The presentation layer is sometimes called the syntax layer.
7.Application Layer - The application layer is a layer in the OSI model and the TCP/IP protocol suite. It consists of protocols that focus on process-to-process communication across an IP network and provides a firm communication interface and end-user services.

Data transmission

NIC-Network interface card - A network interface card (NIC) is a computer circuit board or card that is installed in a computer so that it can be connected to a network.
Wireless technology - Wireless communications is a type of data, a wireless signal through wireless communication technologies and device.

Network Related Terms

i)Protocol - It is a set of rules and standards which is used by computers to exchange data or information with each other across a network.

ii) Nodes - It is a connecting point where either data transmission ends or redistribution of data starts.
iii) TCP/IP (Transmission Control Protocol/Internet Protocol) - basic communication language or protocol of the Internet. **IPV4** - 32 bits numeric address **IPV6** - 128 bits hexadecimal address
iv) File Transfer Protocol (FTP) is a standard network protocol used to transfer computer files between a client and server on a computer network.
v) An **Internet service provider (ISP)** is an organization that provides services for accessing and using the Internet.
vi) Network Service Provider (NSP) is a company that provides backbone services to an Internet service provider (ISP).
vii) Web server is a program that uses **HTTP (Hypertext Transfer Protocol)** to serve the files that form Web pages to users, in response to their requests, which are forwarded by their computers' HTTP clients.
viii) Website is a collection of related web pages, including multimedia content, typically identified with a common domain name.
ix) Web Page is a hypertext document connected to the World Wide Web.
x) Home page - the introductory page of a website.
xi) A **hyperlink** is a word, phrase, or image that you can click on to jump to a new document or a new section within the current document.
Xii) Hypertext Transfer Protocol (HTTP) is an application protocol for distributed, collaborative, hypermedia information systems.
xiii) Wireless Application Protocol (WAP) is a technical standard for accessing information over a mobile wireless network.
xiv) URL (Uniform Resource Locator) is a form of URI and is a standardized naming convention for addressing documents accessible over the Internet and Intranet.

Internet

Internet is a global network that connects billions of computers across the world with each other and to the World Wide Web. It uses standard internet protocol suite (TCP/IP) to connect billions of computer users worldwide. It is set up by using cables such as optical fibers and other wireless and networking technologies. At present, internet is the fastest mean of sending or exchanging information and data between computers across the world.

History of the Internet

The Internet, commonly referred to as "the Net," is a global wide area network (GWAN) or a network of networks that links computer systems all over the world. Generally, it is a worldwide system of computer networks that have different high-bandwidth data lines, which includes the Internet "backbone." Users at any computer can access information from any other computer via the internet (assuming they have authorization). It was known as the ARPANet for the first time, and in 1969, the ARPA, called Advanced Research Projects Agency, conceived the internet. Allowing communication between users and devices from any distance was the primary objective to create

the network. You will need an Internet service provider (ISP) in terms of connecting to the Internet since they operate as a middleman between you and the Internet. Most Internet service providers provide you DSL, cable, or fiber connection to connect to the internet. Below is a table that contains an overall history of the internet.

Year	Event
1960	This is the year in which the internet started to share information s a way for governmen researchers. And, the first known MODEM and dataphone were introduced by AT&T.
1961	On **May 31, 1961,** Leonard Kleinrock released his first paper, "Information Flow in Large Communication Nets."
1962	A paper talking about packetization was released by Leonard Kleinrock. Also, this year, a suggestion was given by Paul Baran for the transmission of data with the help of using fixed size message blocks

Before understanding this let us understand some basics related to internet:

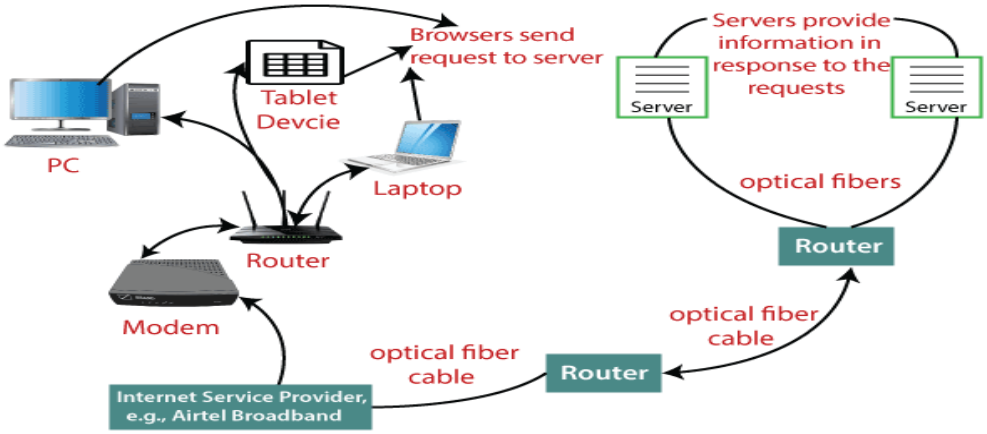
The internet works with the help of clients and servers. A device such as a laptop, which is connected to the internet is called a client, not a server as it is not directly connected to the internet. However, it is indirectly connected to the internet through an Internet Service Provider (ISP) and is identified by an IP address, which is a string of numbers. Just like you have an address for your home that uniquely identifies your home, an IP address acts as the shipping address of your device. The IP address is provided by your ISP, and you can see what address your ISP has given to your system.

A server is a large computer that stores websites. It also has an IP address. A place where a large number of servers are stored is called a data center. The server accepts requests send by the client through a browser over a network (internet) and responds accordingly.

To access the internet we need a domain name, which represents an IP address number, i.e., each IP address has been assigned a domain name. For example, youtube.com, facebook.com, paypal.com are used to represent the IP addresses. Domain names are created as it is difficult for a person to remember a long string of numbers. However, internet does not understand the domain name, it understands the IP address, so when you enter the domain name in the browser search bar, the internet has to get the IP addresses of this domain name from a huge phone book, which is known as (Domain Name Server).

For example, if you have a person's name, you can find his phone number in a phone book by searching his name. The internet uses the DNS server in the same way to find the IP address of the domain name. DNS servers are managed by ISPs or similar organizations.

Now after understanding the basics, let us see how internet works?



When you turn on your computer and type a domain name in the browser search bar, your browser sends a request to the DNS server to get the corresponding IP address. After getting the IP address, the browser forwards the request to the respective server.

Once the server gets the request to provide information about a particular website, the data starts flowing. The data is transferred through the optical fiber cables in digital format or in the form of light pulses. As the servers are placed at distant places, the data may have to travel thousands of miles through optical fiber cable to reach your computer.

\The optical fiber is connected to a router, which converts the light signals into electrical signals. These electrical signals are transmitted to your laptop using an Ethernet cable. Thus, you receive the desired information through the internet, which is actually a cable that connects you with the server.

Furthermore, if you are using wireless internet using wifi or mobile data, the signals from the optical cable are first sent to a cell tower and from where it reaches to your cell phone in the form of electromagnetic waves.

The internet is managed by ICANN (Internet Corporation for Assigned Names and Numbers) located in the USA. It manages IP addresses assignment, domainname registration, etc.

The data transfer is very fast on the internet. The moment you press enter you get the information from a server located thousands of miles away from you. The reason for this speed is that the data is sent in the binary form (0, 1), and these zeros and ones are divided into small pieces called packets, which can be sent at high speed.

Advantages of the Internet:

- **Instant Messaging:** You can send messages or communicate to anyone using internet, such as email, voice chat, video conferencing, etc.
- **Get directions:** Using GPS technology, you can get directions to almost every place in a city, country, etc. You can find restaurants, malls, or any other service near your location.
- **Online Shopping:** It allows you to shop online such as you can be clothes, shoes, book movie tickets, railway tickets, flight tickets, and more.
- **Pay Bills:** You can pay your bills online, such as electricity bills, gas bills, college fees, etc.

- **Online Banking:** It allows you to use internet banking in which you can check your balance, receive or transfer money, get a statement, request cheque-book, etc.
- **Online Selling:** You can sell your products or services online. It helps you reach more customers and thus increases your sales and profit.
- **Work from Home:** In case you need to work from home, you can do it using a system with internet access. Today, many companies allow their employees to work from home.
- **Entertainment:** You can listen to online music, watch videos or movies, play online games.
- **Cloud computing:** It enables you to connect your computers and internet-enabled devices to cloud services such as cloud storage, cloud computing, etc.
- **Career building:** You can search for jobs online on different job portals and send you CV through email if required.

What are the disadvantages of the Internet?

Although the Internet has various benefits and is one of the most powerful creations, it also contains many disadvantages. Below is given a list of the complete disadvantages of the Internet.

1. Addiction, time-waster, and causes distractions

If any person is spending much time on the Internet connected devices, he can be addicted to the Internet. An Internet addictive person can lead to spending his precious time on the Internet, rather than doing something productive. Thus, anyone who is addicted to surf the Internet can hamper workplace productivity as well.

2. Bullying, trolls, stalkers, and crime

A person who uses the Internet very frequently can face abusive or trolls' people. Another issue cyberbullying is also increasing rapidly over the years. Sometimes, you can be tracked on the Internet by hackers or unauthorize persons; they can be harmful to you by stealing your personal information.

If you are spending your more time on the Internet, so it will be easier for hackers to find your personal information through various means. To run business without as much fear of being caught, the web deep, and the hidden places on the internet can also be a place for criminals. Additionally, there are several people that provide criminals more ways to solicit their goods.

3. Spam and advertising

The Internet is the best place to advertise any service or product as compared to traditional advertising methods (for example, TV, newspaper, and radio). But you might see more spam in your inbox than junk mail in real life because digital advertising can be sent on a massive scale.

4. Pornographic and violent images

In modern times, there is a huge amount of content available on the Internet. Also, there are various resources that contain a large amount of data, such as Wikipedia, and some sites are also available that have less desirable content. Accordingly, users can see pornographic or violent images that they may not want to see while using sites.

5. Never being able to disconnect from work

The Internet is the best creation to offer connectivity and enable people to work from anywhere. Therefore, anyone can expect you to be available any time to work, even if you are not available to work there. For instance, you have received an important work-related e-mail while you may be at home and then without getting paid, end up working on the content of that e-mail.

6. Identity theft, hacking, viruses, and cheating

There are various malicious users and computer hackers that can steal your personal information and hack accounts, which can be used for identity theft and can be harmful to you personally. As the Internet connects all computers to each other, so hackers can quickly identify what computers are vulnerable to attack by scanning millions of computers. Additionally, the Internet also enables students to find others to do their homework and offers ways to cheat on their studies.

7. Affects focus and patience

The sites have an instant gratification effect that we use on the Internet every day. On-demand, they also offer a large amount of menu of things to experience and think at any moment. Getting information this way can affects your interactions and make you more impatient and less focused on your activities. To solve this problem, try to focus on more productive real-life activities like exercise or cleaning, and balance this natural effect with time away from social media.

8. Health issues and obesity

If you are surfing the Internet frequently, playing games and spending too much time on the computer, it can also lead to obesity and an unhealthy lifestyle. Also, a person who spends too much time on the computer can face a problem like carpal tunnel syndrome as a computer requires a lot of repetitive movement.

You are required to move your body parts to operate the computer, for example, typing and moving hand to the mouse are repetitive actions that can cause injuries. Understanding computer ergonomics, keeping the proper posture, and taking breaks can all help delay or prevent these injuries.

9. Depression, loneliness, and social isolation

The Internet also becomes a reason lead to depression as many people tend to compare their lives with others on social networking sites. Social networking sites provide users the option to make thousands of friends and communicate with each other. There are also available online games that allow players to communicate with

others. Although social networking sites can give you benefits to find new connections all over the world, you may find yourself disconnected from your real-life friends.

10. Buying things that you don't need

The Internet provides advantages for consumers to make purchasing, so users can purchase products frequently without putting much thought into whether they should. Also, some people can be addicted to buying items on the Internet that can cause serious debt.

11. Not a safe place for children

The Internet may not be more useful for children as they are spending much time on the Internet. Also, there are many unethical and pornography communities are available on the Internet that can cause to distract their mind. Therefore, the Internet is not beneficial for children as they can bypass parental protection with the help of different tools available on the Internet. Furthermore, if children are allowed to use the Internet, they can be addicted to it, which is also very dangerous.

12. Viruses/Malwares The frequently use of the Internet may infect your system from viruses that can damage your valuable data, which is difficult to recover. These viruses enter into the system through USBs, CIDs, and the Internet. Also, because of viruses, your system can become totally worthless.

Internet Connections

Bandwidth and cost are the two factors thatV help you in deciding which Internet connection is to use. The speed of Internet access depends on the bandwidth.

Some of the Internet connections available for Internet access are as follows

Dial-Up Connection

A Dial-up is a method of connecting to the Internet using an existing telephone. Dial-up connection uses the telephone line to connect to the Internet. When a user initiates a dial-up connection, the modem dials a phone number of an Internet Service Provider (ISP) that is designated to receive dial-up calls. The ISP then establishes the connection, which usually takes about ten seconds and is accompanied by several beeping and buzzing sounds.

Broadband Connection-The term broadband commonly refers to high speed Internet access that is always on and faster than the traditional dial-up access. It uses a telephone line to connect to the Internet. Broadband access allows users to connect to the Internet at greater speed than a standard 256 KB modem or dial-up access. Broadband includes several high speed transmission technologies such as follows

1. **Digital Subscriber Line** (DSL) It is a popular broadband connection. Itprovides Internet access by transmitting digital data over the wires of a local telephonenetwork. DSL is the most common type of broadband service. It uses the existing copper telephone lines.
2. **Cable Modem** This service enables cable operators to provide broadband using the same co-axial cables that deliver pictures and sound to your TV set. Most cable modems are external devices that have two connections, one to the cable wall outlet and the other to a computer. They provide transmission speed of 1.5 Mbps or more.
3. **Broadband over Power Line** (BPL) BPL is the delivery of broadband over the existing low and medium voltage electric power distribution network. BPL is good for areas, where there are no other broadband connections, but power

Basic Internet Terms

Domain-While every computer has its own unique address, every user using the Internet has a unique address called a domain. A domain recognizes one or more IP addresses. An example of a domain is weather.com and is part of the **URL** such as https://www.weather.com. The standard top-level domains are:

- **com -** Commercial business
- **edu -** Educational institutions
- **gov -** Government agencies
- **mil -** Military
- **net -** Networks organization
- **org -** Organizations (nonprofit)
- There are additional top-level domains that are now recognized on the Internet. They include:

- **aero -** Air-transport industry
- **biz -** Businesses
- **coop -** Cooperatives
- **info -** Unrestricted use
- **museum -** museums
- **pro -** Accountants, lawyers, physicians, and other professionals
- **tv -** Television

Some countries use a sub-domain or geographical domain as part of their address. Fox example, an academic institution such as Oxford University in the United Kingdom can use ac.uk. An example of a URL with this domain is http://www.ox.ac.uk/.

World Wide Web (WWW)-WWW was introduced on 13th March, 1989. The world wide web is a system of Internet servers that supports hypertext and multimedia to access everal Internet protocols on a single interface. The world wide web is often abbreviated as the Web or WWW. The world wide web is a way of exchanging information between computers on the Internet.

Web Page-The backbone of the world wide web is made offiles, called **pages** or **Web pages**, containinginformation and links to resources - both text andmultimedia - throughout the Internet. It is createdusing HTML. There are basically two main typesof web page as static and dynamic. The main or first page of a Website is known as home page.

Website-A group of Web pages that follow the same themeand are connected together with hyperlinks iscalled Website. In other words, "AWebsite is acollection of digital documents, primarily HTMLfiles, that are linked together and that exist on theWeb under the same domain." e.g. http://www.carwale.com is a Website whilehttp://www.carwale.com/new/ is a Web page.

Web Browser-It is a software application that is used to locate,retrieve and also display content on the worldwide web, including Web pages. Web browsers areprograms used to explore the Internet. We can install more than one Web browsers on a single computer. The user can navigate through files, folders and Websites with the help of a browser.

There are two types of Web browsers as follows

1. **Text Web Browser** A Web browser that displays only text-based information is known as text Web browser. e.g. Lynx, which provides access to the Internet in the text mode only.
2. **Graphical Web Browser** A Web browser that supports both text and graphic information is known as graphical Web browser. e.g. Internet Explorer, Firefox, **Netscape**, Safari, Google Chrome and Opera.

Note The first graphical Web browser was NCSA Mosaic.

Web Server- The Web browser is a client that requests HTMLfiles from Web servers. The server computer willdeliver those Web pages to the computers that request them and may also do other processing with the Web pages. Every Web server that is connected to the Internet is given a unique address, i.e. IP address made up of a series of four numbers between 0 to 255 separated by periods. e.g. Apache HTTP Server, Internet Information Services (IIS), Lighttpd, etc.

Q. Telnet is a [SSC CHSL 2012]

[A] search engine

[B] browser

[C] protocol

[D] gateway

Answer - C

Q. Telnet is a ..... based computer protocol.[IBPS Clerk 2012]

[A] sound

[B] text

[C] image

[D] animation

Answer - B

Q. Through ……, an administrator or another user can access someone else's computer remotely. [IBPS Clerk 2012]

[A] administrator

[B] Web server

[C] Web application

[D] telnet

Answer - D

Q. The …… service allows a group of Internet users to exchange their views on some common topic.

[A]nicnet

[B]milnet

[C] telnet

[D]usenet

Answer - D

Q. Which protocol provides E-mail facility among different hosts? [RBI Grade B 2014]

[A] SMTP

[B] FTP

[C] TELNET

[D] SNMP

Answer - A

Q. What is the full form of VoIP?

[A] Voice of Internet Power

[B] Voice over Internet Protocol

[C] Voice on Internet Protocol

[D] Very Optimised Internet Protocol

Answer - B

Q. The Internet service that provides a multimedia interface to available resources is called

[A] FTP

[B] world wide web

[C] telnet

[D] gopher

Answer - B

Q. WWW stands for [IBPS Clerk 2013, 2014]

[A] World Wide Wizard

[B] World Wide Web

[C] World Wide Wonder

[D] Wide World Web

Answer - B

Q. The …… uses an addressing scheme known as URL indicate the location of files on the web. [SSC CGL 2017]

[A] java script

[B] World Wide Web

[C] SQL

[D] String

Answer - B

Q. The WWW is made up of the set of interconnected ..... that are linked together over the Internet.

[A] electronic documents

[B] Web pages

[C] files

[D] All of these

Answer - B

Q. What is a Website? [RBI Grade B 2014]

[A] A place from where we can get information in documents and files

[B] A site that is owned by any particular company

[C] A location on the world wide web

[D] A place from where we can access Internet

Answer - C

Q. A Website address is a unique name that identifies a specific ..... on the Web.[SBI PO 2010]

[A] Web browser

[B] Website

[C] PDA

[D] link

Answer - B

Q. A (n) …… appearing on a Web page opens another document when clicked. [SBI PO 2013]

[A] anchor

[B] URL

[C] hyperlink

[D] reference

Answer - C

Q. A reference to data that reader can directly follow by selecting or hovering is

[A] hypertext

[B] hyperlink

[C] hyper media

[D] hyper markup

Answer - B

Q. A Website is collection of [IBPS Clerk 2012]

[A] graphics

[B] programs

[C] algorithms

[D] Web pages

Answer - D

Q. …… is collection of Web pages and …… is the very first page that we seen on opening of Website.

[A] Home page, Web page

[B] Website, home page

[C] Web page, home page

[D] Web page, Website

Answer - B

Q. A browser is a [RBI Grade B 2013]

[A] tool for creating a database

[B] software program to viewWeb pages on the Internet

[C] printing device

[D] software program to delete a folder

Answer - B

Q. Conference (Netscape), Netmeeting (Internet Explorer) enables (choose the option that best describes) [RBI Grade B 2012]

[A] sharing voice on the net

[B] live textual conferencing

[C] live audio conferencing

[D] live real time conferencing

Answer -D

Q. To view information on the Web you must have a [RBI Grade B 2012]

[A] cable modem

[B] Web browser

[C] domain name server

[D] hypertext viewer

Answer - B

Q. A …… is a software program used to view Web pages. [SBI Clerk 2011]

[A] site

[B] host

[C] link

[D] browser

Answer - D

Q. Which one of the following is used to browse and search for information on the Internet?

[A] Eudora

[B] Netscape

[C] FTP

[D] Telnet

Answer - B

Q. The …… which contains billions of documents called Web pages, is one of the more popular services on the Internet.[SBI Clerk 2014]

[A] Web server

[B] telnet

[C] Web

[D] collection

Answer - A

Q. What is URL? [IBPS PO 2012]

[A] A computer software program

[B] A type of programming object

[C] The address of a document or 'page' on the world wide web

[D] An acronym for unlimited resource for learning

Answer – C

Q. An absolute …… contains the complete address of a file on the nternet.[SSC CGL 2017]

[A] JavaScript

[B] URL

[C] SQL

[D] String

Answer - B

Q. Which of the following must be contained in a URL? [IBPS PO 2012]

[A] A protocol identifier

[B] The letters,WWW

[C] The unique registered domain name

[D] A protocol identifier, WWW and the unique registered domain name

Answer - D

Q. URL identifies the location of a specificWeb page on the Internet. Here URL stands for

[A] Uniform Read Locator

[B] Uniform Resource Locator

[C] Unicode Research Location

[D] United Research Locator

Answer - B

Q. Which among the following term means/refers to web address of a page?

[A] SMTP

[B] IP

[C] HTTP

[D] URL

Answer - D

Q. The last three letters of the domain name describes the type of [SSC FCI 2012]

[A] organisation (domain name)
[B] connectivity
[C] server
[D] protocol

Answer - A

Q. An educational institution would generally have the following in its domain name. [IBPS Clerk 2011]

[A] .org
[B] .edu
[C] .inst
[D] .com

Answer - B

Q. Which of the following domains is used by profit business? [SBI Clerk 2012]

[A] .com
[B] .edu
[C] .mil
[D] .net

Answer - A

Q. Specialised programs that assist users in locating information on the Web are called [RBI Grade B 2012]

[A] information engines
[B] locator engines
[C] Web browsers
[D] search engines

Answer - D

Q. Which of the following forms a part of a search engine?

[A] Spiders of Web crawlers
[B] Indexing software
[C] Search algorithm
[D] All of the above

Answer - A

Q. Which among the following is a search engine?

[A] Internet Explorer
[B] Flash
[C] Google
[D] Firefox

Answer - C

Q. A …… is the term used when a search engine returns a Web page that matches the search criteria. [IBPS PO 2011]

[A] blog
[B] hit
[C] link
[D] view

Answer - B

Q. Which is not the feature of Internet?

[A] E-mail [B] Newsgroup

[C] Chat [D] Designing

Answer - D

Q. Which among the following is an area of e-mail that is short description of the message?

[A] Subject [B] Cc

[C] Bcc [D] Attachment

Answer - A

Q. Which of the following is always a part of E-mail address?

[A] Period (.) [B] At sign (@)

[C] Space () [D] Underscore (_)

Answer - B

Q. Which one of the following is not an e-mail service provider?

[A] Hotmail [B] Gmail

[C] Bing [D] Yahoo mail

Answer - C

Q. Which of the following fields of an e-mail hides the identity of the recipients?

[A] To [B] From

[C] Cc [D] Bcc

Answer - D

Q. Sending an E-mail is similar to[SBI Clerk 2011]

[A] writing a letter [B] drawing a picture

[C] talking on the phone [D] sending a package

Answer - A

Q. Junk e-mail is also called [RBI Grade B 2012]

[A] crap [B] spoof

[C] sniffer script [D] Spam

Answer - D

Q. What can possible be the drawback of e-mails?

[A] E-mails require being physically delivered tothe user

[B] E-mails infect computer

[C] E-mails are very expensive to transmit

[D] E-mails are slow to load

Answer - B

Q. Which of the following is a valid e-mail address?

[A] name. Website@info@ed

[B] name. Website@info.in

[C] name. @Website.info.com

[D] Website.name@website.com

Answer - C

Q. What is included in an E-mail address? [IBPS Clerk 2012]

[A] Domain name followed by user's name

[B] User's name followed by domain name

[C] User's name followed by postal address

[D] User's name followed by street address

Answer - B

Q. Which of the following elements are used inan e-mail to express emotions or feelings clearly?

[A] Acronyms

[B] Abbreviations

[C] Rich text

[D] Emoticons or smileys

Answer – D

Q. If you receive an E-mail from someone you don't know, what should you do?

[A] Forward it to the police immediately

[B] Delete it without opening it

[C] Open it and respond to them saying you don'tknow them

[D] Reply and ask them for their personal information

Answer - B

Q. Which of the following cannot be part of an E-mail address?

[A] Period (.)

[B] At Sign (@)

[C] Space ()

[D] Underscore (_)

Answer - C

Q. Gmail belongs to

[A] great mail

[B] yahoo mail

[C] google mail

[D] gopher mail

Answer - C

Q. Which of the following is not a term pertaining to E-mail? [IBPS Clerk 2015]

[A] PowerPoint

[B] Inbox

[C] Sender

[D] Receiver

Answer - A

Q. Storage area for E-mail messages is called

[A] folder

[B] file

[C] mail box

[D] directory

Answer - C

Q. An E-mail address typically consists of a user ID followed by the……sign and thedomain name that manages the user's electronic post office box.

[A] #

[B] @

[C]&

[D] $

Answer - B

Q. Video conferencing is used for

[A] talking each other

[B] communicating purpose

[C] live conversation

[D] All of the above

Answer - D

Q. Who is the founder of 'facebook' which is currently the No. 1 social networking Website in India? [SSC CGL 2013]

[A] Orkut Buycukkokten

[B] Mark Zuckerberg

[C] Bill Gates

[D] Martin Cooper

Answer- B

Q. What is the full form of EDI? [IBPS RRB PO Mains 2018]

[A] Electronic Data Interchange

[B] Easy Data Interchange

[C] Electronic Data Interconnect

[D] Electrical Data Interconnect

Answer - A

Q. The process of trading goods over the Internet is known as [IBPS Clerk 2012]

[A] E-selling n buying

[B] E-trading

[C] E-finance

[D] E-salesmanship

Answer - B

Q. Which of the following is a group of servers that share work and may be able to back each other up if one server fails? [IBPS Clerk 2015]

[A] Channel bank

[B] Cluster

[C] Tiger team

[D] Serverless backup

Answer - B

Q. A (n) …… allows you to access your e-mail from anywhere.

[A] Forum

[B] Webmail interface

[C] Message Board

[D] Weblog

Answer - B

Q. Which of the following will be used if a sender of E-mail wants to bold, italics, etc the text message? [IBPS Clerk 2012]

[A] Reach signature

[B] Rich text

[C] Reach format

[D] Plain format

Answer - B

Q. A cookie [IBPS Clerk 2012]

[A] stores information about the user'sWeb activity

[B] stores software developed by the user

[C] stores the password of the user

[D] stores the commands used by the user

Answer - A

Q. Which on the following is most commonly used to identify return visitors to a website?

[A] logged-in visitors

[B] digital certificates

[C] electronic time stamping

[D] cookies

Answer - D

Q. Which of the following terms is associated with Internet E-mail? [SBI Clerk 2014]

[A] Plotter

[B] Slide presentation

[C] Bookmark

[D] Pie chart

Answer - C

Q. A stored link to a Web page, in order to have a quick and easy access to is later, iscalled [RBI Grade B 2014]

[A] WP-Link

[B] Bookmark

[C] Field

[D]Lengt

Answer - B

Q.The ability to easily add additional users means that a network is

[A] scalable

[B] dedicated

[C] decentralized

[D] secure

Answer - A

Q. If you wish to extend the length of the network without having the signal degrade, you would use a

[A] repeater [B] router

[C] gateway [D] switch

Answer - A

Q. A(n) ……. is a private corporate network, used exclusively by company employees.

[A] Internet [B] local area network

[C] peer-to-peer [D] intranet

Answer - D

Q. A characteristic of a file server is which of the following?

[A] Manages file operations and is shared on a network

[B] Manages file operations and is limited to one PC

[C] Acts as a fat client and is shared on a network

[D] Acts as a client and is limited to one PC

Answer - A

Q. Which of the following terms is just the collection of networks that can be joined together?

[A] Virtual private network [B] Internet

[C] Intranet [D] Extranet

Answer - B

Q. Servers are computers that provide resources to the other computers connected to a ……..

[A] Network [B] Mainframe

[C] Super computer [D] Client

Answer - A

Q. The most important or powerful computer in a typical network is

[A] desktop [B] network client

[C] network server [D] network station

Answer - C

Q. A set of rules that computer on a network use to communicate with each other are called

[A] Rules [B] Regulations

[C] Protocol [D] Netiquettes

Answer - C

Q. Which of the following refers to a small, single-site network?

[A] LAN [B] DSL

[C] RAM [D] USB

Answer - A

Q. Computer connected to a LAN (Local Area Network) can

[A] run faster

[B] go on line

[C] share information and/or share peripheral equipment

[D] E-mail

Answer - C

Q. The sharing of a medium and its path by 2 or more devices is called …….. .

[A] Modulation [B]Encoxing

[C] Line discipline [D] Multiplexing

Answer - D

Q. Which multiplexing technique transmits analog signals?

[A]FDM

[B] Synchronous TDM

[C] Asynchronous TDM

[D] Both (2) and (3)

Answer - A

Q. Network components are connected to the same cable in the ……. topology.

[A] star [B] ring

[C] bus [D] mesh

Answer - C

Q. Two or more computers connected to each other for sharing information form a …….

[A] network [B] router

[C] server [D] tunnel

Answer - A

Q. Office LANs that are spread geographically apart on a large scale can be connected using a corporate ……

[A] CAN [B] LAN

[C] DAN [D] WAN

Answer - D

Q. For separating channels in FDM, it is necessary to use

[A] Time slots [B] Bandpass filters

[C] Differentiation

[D] All of the above

Answer - B

Q. Encryption and decryption are functions of

[A] Transport layer

[B] Session layer

[C] Presentation layer

[D] All of the above

Answer -C

Q. Which type of switching uses the entire capacity of a dedicated link?

[A] Circuit switching

[B] Virtual Circuit Packet Switching

[C] Datagram packet Switching

[D] Message Switching

Answer - A

Q. A permanent virtual circuit involves

[A] Connection establishment

[B] Data transfer

[C] Connection release

[D] All of the above

Answer - B

Q. X. 21 protocol consists of

[A] Physical and frame levels

[B] Frame and packet levels

[C] Physical, frame and packet levels

[D] Only physical level

Answer - D

CHAPTER 8
DATABASE MANAGEMENT SYSTEM

What is Database?

A **database** is an organized collection of data, so that it can be easily accessed and managed You can organize data into tables, rows, columns, and index it to make it easier to find relevant information.

Database handlers create a database in such a way that only one set of software program provides access of data to all the users.

The **main purpose** of the database is to operate a large amount of information by storing, retrieving, and managing data.

There are many **dynamic websites** on the World Wide Web nowadays which are handled through databases. For example, a model that checks the availability of rooms in a hotel. It is an example of a dynamic website that uses a database.

There are many **databases available** like MySQL, Sybase, Oracle, MongoDB, Informix, PostgreSQL, SQL Server, etc.

Modern databases are managed by the database management system (DBMS).

SQL or Structured Query Language is used to operate on the data stored in a database. SQL depends on relational algebra and tuple relational calculus.

A cylindrical structure is used to display the image of a database.

Evolution of Databases

The database has completed more than 50 years of journey of its evolution from flat-file system to relational and objects relational systems. It has gone through several generations.

The Evolution

File-Based

1968 was the year when File-Based database were introduced. In file-based databases, data was maintained in a flat file. Though files have many advantages, there are several limitations.

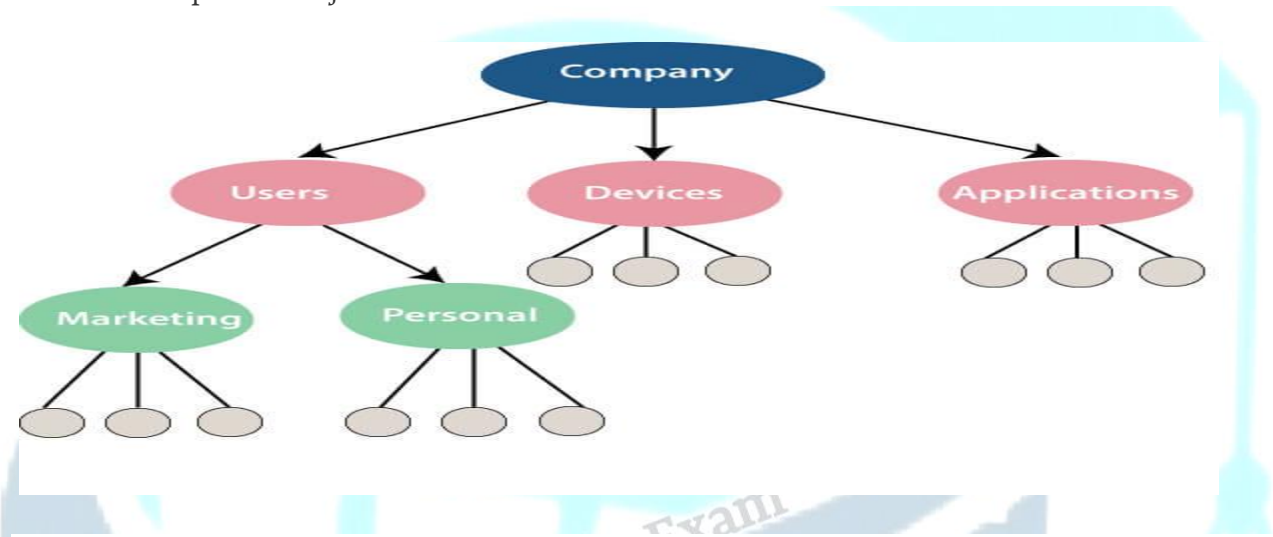
One of the major advantages is that the file system has various access methods, e.g., sequential, indexed, and random.

It requires extensive programming in a third-generation language such as COBOL, BASIC.

Hierarchical Data Model

1968-1980 was the era of the Hierarchical Database. Prominent hierarchical database model was IBM's first DBMS. It was called IMS (Information Management System).

In this model, files are related in a parent/child manner.Below diagram represents Hierarchical Data Model. Small circle represents objects.



Like file system, this model also had some limitations like complex implementation, lack structural independence, can't easily handle a many-many relationship, etc.

Network data model

Charles Bachman developed the first DBMS at Honeywell called Integrated Data Store (IDS). It was developed in the early 1960s, but it was standardized in 1971 by the CODASYL group (Conference on Data Systems Languages).

In this model, files are related as owners and members, like to the common network model.

Network data model identified the following components:

- Network schema (Database organization)
- Sub-schema (views of database per user)

- Data management language (procedural)

This model also had some limitations like system complexity and difficult to design and maintain.

Relational Database

1970 - Present: It is the era of Relational Database and Database Management. In 1970, the relational model was proposed by E.F. Codd.
Relational database model has two main terminologies called instance and schema.
The instance is a table with rows or columns
Schema specifies the structure like name of the relation, type of each column and name.
This model uses some mathematical concept like set theory and predicate logic.
The first internet database application had been created in 1995.
During the era of the relational database, many more models had introduced like object-oriented model, object-relational model, etc.

Cloud database

Cloud database facilitates you to store, manage, and retrieve their structured, unstructured data via a cloud platform. This data is accessible over the Internet. Cloud databases are also called a database as service (DBaaS) because they are offered as a managed service.

Some best cloud options are:

- AWS (Amazon Web Services)
- Snowflake Computing
- Oracle Database Cloud Services
- Microsoft SQL server
- Google cloud spanner

Advantages of cloud database

Lower costs

Generally, company provider does not have to invest in databases. It can maintain and support one or more data centers.

Automated

Cloud databases are enriched with a variety of automated processes such as recovery, failover, and auto-scaling.

Increased accessibility

You can access your cloud-based database from any location, anytime. All you need is just an internet connection.

NoSQL Database

A NoSQL database is an approach to design such databases that can accommodate a wide variety of data models. NoSQL stands for "not only SQL." It is an alternative to traditional relational databases in which data is placed in tables, and data schema is perfectly designed before the database is built.

NoSQL databases are useful for a large set of distributed data.

Some examples of NoSQL database system with their category are:

- MongoDB, CouchDB, Cloudant **(Document-based)**
- Memcached, Redis, Coherence **(key-value store)**
- HBase, Big Table, Accumulo **(Tabular)**

Advantage of NoSQL

High Scalability

NoSQL can handle an extensive amount of data because of scalability. If the data grows, NoSQL database scale it to handle that data in an efficient manner.

High Availability

NoSQL supports auto replication. Auto replication makes it highly available because, in case of any failure, data replicates itself to the previous consistent state.

Disadvantage of NoSQL

Open source

NoSQL is an open-source database, so there is no reliable standard for NoSQL yet.

Management challenge

Data management in NoSQL is much more complicated than relational databases. It is very challenging to install and even more hectic to manage daily.

GUI is not available

GUI tools for NoSQL database are not easily available in the market.

Backup

Backup is a great weak point for NoSQL databases. Some databases, like MongoDB, have no powerful approaches for data backup.

The Object-Oriented Databases

The object-oriented databases contain data in the form of object and classes. Objects are the real-world entity, and types are the collection of objects. An object-oriented database is a combination of relational model features with objects oriented principles. It is an alternative implementation to that of the relational model.

Object-oriented databases hold the rules of object-oriented programming. An object-oriented database management system is a hybrid application.

The object-oriented database model contains the following properties.

Object-oriented programming properties

- Objects
- Classes
- Inheritance
- Polymorphism
- Encapsulation

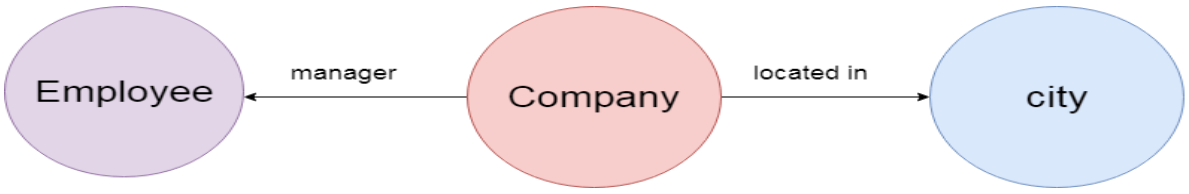
Relational database properties

- Atomicity
- Consistency
- Integrity
- Durability
- Concurrency
- Query processing

Graph Databases

A graph database is a NoSQL database. It is a graphical representation of data. It contains nodes and edges. A node represents an entity, and each edge represents a relationship between two edges. Every node in a graph database represents a unique identifier.

Graph databases are beneficial for searching the relationship between data because they highlight the relationship between relevant data.



Graph databases are very useful when the database contains a complex relationship and dynamic schema.It is mostly used in **supply chain management**, identifying the source of **IP telephony**.

DBMS (Data Base Management System)

Database management System is software which is used to store and retrieve the database. For example, Oracle, MySQL, etc.; these are some popular DBMS tools.

- DBMS provides the interface to perform the various operations like creation, deletion, modification, etc.
- DBMS allows the user to create their databases as per their requirement.
- DBMS accepts the request from the application and provides specific data through the operating system.
- DBMS contains the group of programs which acts according to the user instruction.
- It provides security to the database.

Advantage of DBMS

Controls redundancy

It stores all the data in a single database file, so it can control data redundancy.

Data sharing

An authorized user can share the data among multiple users.

Backup

It providesBackup and recovery subsystem. This recovery system creates automatic data from system failure and restores data if required.

Multiple user interfaces

It provides a different type of user interfaces like GUI, application interfaces.

Disadvantage of DBMS

Size

It occupies large disk space and large memory to run efficiently.

Cost

DBMS requires a high-speed data processor and larger memory to run DBMS software, so it is costly.

Complexity

DBMS creates additional complexity and requirements

➢ Keys in DBMS

A key is a field in the database table which is used to retrieve and sort rows in the table. Keys are used to speeding up the data accessing and creating links between different tables.

- Super Key - It is a set of one or more attributes whose values uniquely determine each entity in the database table. It is a subset of a candidate key.
- Candidate Key - It is a set of columns in the table from which primary key can be selected to identify each record. Every database table may have one or more candidate keys.
- Primary Key - It is a special key that uniquely identifies each record in the table. It has a unique value for each row of data and it cannot contain null values.
- Composite Key - It is a combination of more than one column in the table that can be used to uniquely identify each record. It is also known as a Compound key.
- Alternate Key - All keys except primary key are known as Alternate. Alternate keys are also called Secondary Keys.
- Foreign Key - Foreign key points to the primary key of another table. It acts as a reference between tables. It can accept the null and duplicate value.

COMPUTER SECURITY

Computer Network Security

Computer network security consists of measures taken by business or some organizations to monitor and prevent unauthorized access from the outside attackers.

Different approaches to computer network security management have different requirements depending on the size of the computer network. For example, a home office requires basic network security while large businesses require high maintenance to prevent the network from malicious attacks.

Network Administrator controls access to the data and software on the network. A network administrator assigns the user ID and password to the authorized

Internet Security Threats

Spam: These are unwanted emails. In other words, we can call them as unsolicited promotional mail.
Pharming: More advance method of Phishing in which the attackers create duplicate or similar looking website of other companies, to attract the customers and steal the data.
Cookies: These are program or information secretly stored in a computer especially an internet browser, which allows other users to monitor the internet activities of a person. These programs usually monitor the browsing nature of a person so that the companies can create better marketing strategies.
Mail Bomb: An excessively large email (typically many thousands of messages) or one large message sent to a user's email account. This is done to crash the system and prevent genuine messages from being received.
Scareware: A common trick cybercriminals use to make users think that their computer has become infected with malware to get them to purchase a fake application.
Sniffers: A software program used to monitor the traffic in a network. The hackers may use the sniffed data to access important confidential data.
Rootkit: A program designed to hide objects such as processes, files or Windows registry entries (often including its own).
Phishing: This is acquiring the personal and sensitive information of a person through official-looking emails. Users of online banking and e-commerce websites are more prone to this attack.
Spoofing: It is a type of scam where an intruder attempts to gain unauthorized access to a user's system or information by pretending to be the user.

A Firewall is a network security system that monitors and controls the incoming and outgoing network traffic based on predetermined security rules.
Spyware: It is a software that secretly collects user information while on the internet. Spyware can capture information like Web browsing habits, email messages, usernames and passwords, and credit card information.
Adware: This program launches the advertisements in the form of pop-ups. Usually, AdWords is based on the internet behaviour of the user. **Adware,** or advertising-supported software, is any software package that automatically renders advertisements to generate revenue for its author

QUESTION ANSWER

Q.Which of the following is a Web browser?

[A]Paint

[B] Power Point

[C] Fire fox

[D] Word

Answer:- C

Q.Antivirus software is an example of

[A] Business software

[B] An operating system

[C] A security utility

[D] An office suite

Answer:-C

Q.Which of the following is a Web browser?

[A] Paint

[B] Power Point

[C] Fire fox

[D] Word

Answer:-C

Q. Internet allows you to

[A] send electronic mail

[B] view Web pages

[C] connect to servers all around the world

[D] All of the abov

Answer:-D

Q.Sending an E-mail is similar to

[A] writing a letter

[B] drawing a picture

[C] talking on the phone

[D] sending a packag

Answer:-A

Q.Which of the following are all considered advantages of e-mail?

[A] Convenience, speed of delivery, generality and reliability

[B] Printable, global and expensive

[C] Global, convenience and Microsoft owned

[D] Slow delivery, reliable, global and inexpensive

Answer:-A

Q.A repair for a known software bug, usually available at no charge on the internet, is called a (n) …… .

[A]version [B] patch

[C]tutorial [D] FAQ

Answer:-B

Q.Choose the web-browser among the following:

[A] MSN messenger [B] Yahoo messenger

[C]Rediffbal. Net [D] Netscape Navigato

Answer:-D

Q.The ……., also called the Web, contains billions of documents.

[A] World Wide Web

[B] HTTP

[C] Web Portal

[D] Domain

Answer:-A

Q.When the pointer is positioned on a ……. it is shaped like a hand.

[A] grammar error [B] hyperlink

[C] screen tip [D] spelling error

Answer:-B

Q.What is the term for unsolicited e-mail?

[A]newsgroup [B]usenet

[C]backbone [D] Spam

Answer:-D

Q.The HTML code written in a text editor to make web-pages, is

[A] HTML coding tags [B] Source code

[C] Source element [D] tags

Answer:-B

Q.The process of connecting to the Internet account is

[A] LOG IN [B] LOG OUT

[C] CONNECT IN [D] CONNECT OUT

Answer:-A

Q ……. is collection of web-pages and ……. is the very first page that we see on opening of a website.

[A] Home-page, Web-page

[B] Web-site, Home-page

[C] Web-page, Home-page

[D] Web-page, Web site

Answer:-B

Q.Desirable properties of a website are

(i) a meaningful address

(ii) Help and search facilities

(iii) Links to related sites

(iv) Features to allow users to give feedback

(v) Hosting on a mainframe

[A]i, ii, iii

[B]i, ii, iii, iv

[C]i, ii, iii, iv, v

[D]i, ii, iii, v

Answer:-B

Q.HTML tags define

[A] The data types of elements of document

[B] Presentation of specified elements of a document

[C] The contents of the document

[D] The structure of the document

Answer:-B

Q.HTML and XML are markup language

[A] Specially development for the web

[B] Are based on SGML

[C] Are versions of SGML

[D] Independent of SGML

Answer:-B

Q.XML stands for

[A] Extra Markup Language

[B] Excellent Markup Links

[C] Extended Markup Language

[D] Extended Marking Link

Answer:-C

Q.XSL definition is used along with XML definition to specify

[A] The data types of the contents of XML document

[B] The presentation of XML document

[C] The links with other documents

[D] The structure of XML document

Answer:-B

Q.DTD definition is used along with XML to specify

[A] The data types of the contents of XML document

[B] The presentation of XML document

[C] The links with other documents

[D] The structure of XML document

Answer:-A

Q.What does HTML stand for?

[A] Hyper Text Markup Language

[B] Hyperlinks and Text Markup Language

[C] Hyperlink Tool Makeup Language

[D] Home Tool Markup Language

Answer:-A

Q.Antivirus software is an example of …… .

[A] business software

[B] an operating system

[C] a security system

[D] an office suit

Answer:-C

Q.W-mail addresses separate the user name from the ISP using the ……. symbol.

[A]&

[B] @

[C] %

[D]

Answer:-B

Q.An e-mail account includes a storage area, often called a(n) ……. .

[A]attachment

[B] hyperlink

[C]mailbox

[D] IP address

Answer:-C

Q.Computer language used on the Internet is …… .

[A]BASIC

[B] COBOL

[C] Java

[D] Pascal

Answer:-C

Q.When sending an e-mail, the …… line describes the contents of the message.

[A]subject

[B] to

[C]contents [D] cc

Answer:-A

Q.Which protocol provides e-mail facility among different hosts?

[A] FTP [B] SMTP

[C] TELNET [D] SNMP

Answer:-B

Q.Firewalls are used to protect against ……

[A]UauthorisedAttacks [B] Virus Attacks

[C] Data Driven Attacks [D] Fire Attack

Answer:-A

Q.The network connecting several computers all over the world is …… .

[A]Intranet [B] Internet

[C]ARPAnet [D] Network

Answer:-B

Q.The code for a Web page is written using …… .

[A] a fifth-generation language [B] Win Zip

[C]Perl [D] Hypertext Markup Languag

Answer:-D

Q.Which type of switching uses the entire capacity of a dedicated link?

[A] Circuit switching [B] Virtual Circuit Packet Switching

[C] Datagram Packet Switching [D] Message Switching

Answer:-A

Q.In order to save a Word document as a web page you need to

[A] put the appropriate graphics and links on the document

[B] save the document in simple text format

[C] use your web browser as an editor and save as URL

[D] save as HTML

Answer:-D

Q.Which device is used to access your computer by other computer or for talk over phone?

[A] RAM [B] CD ROM Drive

[C]Modem [D] Hard Driv

Answer:-C

Q.The most popular Internet activity is …… .

[A] downloading music

[B] watching movie trailers

[C] shopping for books

[D] e-mailing

Answer:-D

Q.A MODEM is connected in between a telephone line, and a …… .

[A]Network

[B] Computer

[C] Communication Adapter

[D] Serial Port

Answer:-B

Q.Most Web sites have a main page, the ……. , which acts as a doorway to the rest of the Web site pages.

[A] search engine

[B] home page

[C] browser

[D] URL

Answer:-B

Q.Firewalls are used to protect against ……

[A]UauthorisedAttacks

[B] Virus Attacks

[C] Data Driven Attacks

[D] Fire Attack

Answer:-A

Q.Which of the following statements is true about computer viruses?

[A] It can come with data

[B] It can be attached to an executable program

[C] It can be attached to a data file

[D] It can be attached to a data record

Answer:-B

Q.Firewall is used in PC for

[A]Security

[B] Authentication

[C] Data transmission

[D] All of the above

Answer:-A

Q .For locating any document on the WWW, there is a unique address known as

[A] Domain name

[B] E-mail account

[C] Home-page

[D] URL

Answer:-D

Q.Most mail programs automatically complete the following two parts in an e-mail

[A]From : and Body :

[B] From : and date :

[C]From : and To :

[D] From : and Subject :

Answer:-B

Q.Choose the web-browser among the following

[A] World Wide Web

[B] HTTP

[C] Web Portal

[D] Safari

Answer:-D

Q.To take information from one source and bring it to your computer is to …… .

[A]download

[B] upload

[C]transfer

[D] move

Answer:-C

Q.The "home page" of a web site is

[A] the largest page

[B] the last page

[C] the first page

[D] the most colourful pag

Answer:-C

Q.Specialized programs that assist users in locating information on the Web are called

[A] information engines

[B] search engines

[C] web browsers

[D] resource locator

Answer:-B

Q.HTTP in URL stands for

[A] Hyper Text to Point

[B] Hyperlink for Tiny Text Protocol

[C] Hyper Text Transfer Protocol

[D] Highlighted Text Through Pictures

Answer:-C

Q.Internet domains are classified by their functions. In that regard ".com" represents

[A]Government

[B]Commerical

[C] Non-profit organisation

[D] Internet service provide

Answer:-C

Q.Which of the following is a component of Internet?

[A] Routers to strengthen the attenuated signals

[B] Repeaters to establish physical connection between various LAN's

[C] Gateways to allow a network to use the resources of another main frame

[D] Bridges to optimise the transmission path of messages

Answer:-C

Q.The script which is designed to receive value from the web users is

[A] Web script

[B] Power C91 script

[C] Java script

[D] All of the above

Answer:-C

Q.Outlook Express is a

[A] E-Mail Client

[B] Scheduler

[C] Address Book

[D] All of the abov

Answer:-D

Q.Which of the following is not an e-mail service provider?

[A]bing

[B] outlook

[C]gmail

[D] yahoo

Answer:-A

Q.Coded entries which are used to gain access to a computer system are called

[A] Entry codes

[B] Passwords

[C] Security commands

[D] Code words

Answer:-B

Q.A computer checks the …… of user names and passwords for a match before granting access.

[A]Website

[B] Network

[C] Backup file

[D] Database

Answer:-D

Q.A medium for transferring data between two locations is called

[A] network

[B] modem

[C] communication channel

[D] BUS

Answer:-C

Q.A Program designed to destroy data on your computer which can travel to "infect" other computers is called a …….. .

[A]disease

[B] torpedo

[C]hurricane

[D] virus

Answer:-D

Q.……. are devices used to transmit data over telecommunications lines.

[A] Drives

[B] Drives bays

[C]Modems [D] Platforms

Answer:-C

Q.A half byte is known is

[A] Data [B] bit

[C]byt [D] nibble

Answer:-D

Q.E-mail (electronic mail) is

[A] an Internet standard that allows users to upload and download files

[B] a real-time typed conversation that takes place on a computer

[C] an online area in which users conduct written discussion about a particular subject

[D] the transmission of messages and files via a computer network

Answer:-D

Q.The standard protocol of the Internet is …… .

[A] TCP/IP [B] Java

[C]HTML [D] Flash

Answer:-A

CHAPTER 9

COMPUTER TERMINOLOGY

COMPUTER TERMINOLOGY

•Access - To call up information out of storage.
•**Access time** - The amount of time it takes for requested information to be delivered from disks and memory.
•**Adapte**r - A circuit board that plugs into a computer and gives it additional capabilities.
•**Amplifier** -A device that takes in a weak electric signal and sends out a strong one.
•**Analog Computer -** A computer that operates on data which is in the form of continuous variable physical quantities.
•**Android -** It is a Linux based operating system designed primarily for touchscreen mobile devices such as smartphones and tablets computer.
•**Algorithm** - A step-by-step procedure designed to solve a problem or achieve an objective.
•**Backup** - Storage of duplicate files on disks, diskettes, or some other form of magnetic medium (such as tapes) as a safety measure in case the original medium is damaged or lost.
•**Basic Input/Output System (BIOS) -** Also known as ROM BIOS. It provides an abstraction layer for the hardware, i.e., a consistent way for application programs and operating system to interact with input/output devices.
•**Binary code** - The language used by computers in which data and instructions are represented by a series of 1s and 0s.
•**Binary numbering system** - A numbering system in which all numbers are represented by various combinations of the digits 0 and 1.
•**Bug -** A software bug is an error, flaw, failure, or fault in a computer program or system produces an incorrect or unexpected result.

•**Bus -** A pathway along which electronic signals travel between the components of a computer system.
•**Command** - An instruction that causes a program or computer to perform a function.
•**Compiler** -A compiler is a computer program that -translates a series of instructions written in one computer language (called the source language) into another computer language (called the object or target language).
•**Communication -** The transmission of data from one computer to another or from one device to another is called communication.
•**Computer Graphics-** Computer Graphics are visual presentations on a computer screen. Examples are photographs, drawings, line arts, graphs, diagrams, typography numbers, symbols, geometric designs, maps, engineering drawings or other images.
•**Cold Boot** - When a computer restarts after the power cut is called a cold boot.
•**Control Panel** - It is the part of the Windows menu, accessible from the start menu, which allows users to view and manipulate basic system settings and controls, such as adding hardware. adding/removing software, controlling user accounts, changing accessibility options, etc.
•**Chat -** A method of communication in which people type text messages to each other, thereby holding a conversation over a network such as the Internet.
•**Clipboard** - A holding area in memory where information that has been copied or cut (text, graphics, sound, or video) can be stored until the information is inserted elsewhere.
•**Cookie** - A packet of information that travels between a browser and the Web server.
•**Crash** - A malfunction in hardware or software that keeps a computer from functioning.
•**Crawler** – It is an Internet bot which systematically browses the World Wide Web, typically for the purpose of Web indexing (web spidering).

•**Data** - Information consisting of letters, numbers, symbols, sound, or images—in a form that can be processed by a computer.
•**Database** - A database is a collection of information that is organized so that it can easily be accessed, managed, and updated.
•**Data abstraction** – It is the reduction of a particular body of data to a simplified representation of the whole.
•**Data processing** – It refers to the process of collecting and manipulating raw data to yield useful information.
•**Disk Operating System (DOS)** - A disk operating system (abbreviated DOS) is a computer operating system that can use a disk storage device, such as a floppy disk, hard disk drive, or optical disc.
•**Debugging -** Locating and eliminating defects in a program.
•**Delete -** A command to erase information in storage.
•**Editing** - The process of changing information by inserting, deleting, replacing, rearranging, and reformatting.
•**EDO (Extended Data Output) RAM** – It is a type of random access memory (RAM) chip that improves the time to read from memory on faster microprocessors such as the Intel Pentium.
•**Ethernet Card** - A network adapter that enables a computer to connect to the ethernet.
•**Execution Time -** The total time required to execute a program on a particular system.
•**Export** - To save information from one computer or program to another.
•**Fax** - It stands for 'Facsimile machine'. It is used to transmit a copy of a document electronically.
•**Field** - The attributes of an entity are written as fields in the table representation.
•**File -** A collection of information stored electronically and treated as a unit by a computer. Every file must have its distinctive name.
•**File Manager -** The file manager is an operating system utility that provides a user interface to work with file systems.
•**File Server** - A file server is a server that provides access to files. It acts as a central file storage location that can be accessed by multiple systems.
•**Firmware** - Firmware is a technology which has the combination of both hardware and software.
•**Fax modem** - A device built into or attached to a computer that serves as a facsimile machine and a modem.
•**Gigahertz (GHz)** - A measurement unit used to identify the speed of the central processing unit.
•**Garbage In Garbage Out (GIGO**) - It pertains to the fact that most computer errors are not errors, they are data errors caused by incorrect input data i.e. the quality of output is determined by the quality of the input.
•**Graphics Interchange Format (GIF)** - A simple file format for pictures and photographs, that are compressed so they can be sent quickly.
•**Graphical user Interface -** A Graphical User Interface (or GUI) is a method of interacting with a computer through a metaphor of direct manipulating of graphical images and widgets in addition to text.
•**Glitch** - A hardware problem that causes a computer to malfunction or crash.
•**Hard copy -** Text or graphics printed on paper; also called a printout.
•**Hard disk** - A rigid type of magnetic medium that can store large amounts of information.
•**Host computer** - A computer that provides information or a service to other computers on the Internet.
•**Hacker -** A computer criminal who penetrates and tempers with computer programs or systems.
•**Instant messaging** - A chat program that lets people communicate over the Internet in real-time.
•**Interface -** The electrical connection that links two pieces of equipment so that they can communicate with each other.
•**Intranet** - A private network established by an organization for the exclusive use of its employees.
•**Icon -** A symbol (such as a picture or a folder) that represents a certain function on your computer.
•**Information**- Information is the summarization of data according to a certain predefined purpose.
•**Input -** In order to give instructions to a computer, the information has to be supplied to it.
•**Instruction -** A command or order to a computer to perform a task.
•**Instruction Cycle -** Fetching and decoding operations of the machine cycle.
•**Interpreter** - A program that converts and executes the source code into machine code line by line.
•**Integrated Circuits (ICs) -** Multiple electronic components combined on a tiny silicon chip.
•Java - A programming language designed for programs or applets used over the Internet.
•**Justification** - Aligning lines of text at the left margin, the right margin, both margins, or the centre.
•**JPEG (Joint Photographic Experts Group)-** It is an ISO/IEC group of experts that develops and maintains standards for a suite of compression algorithms for computer image files.

•**Kernel -** It is the fundamental part of a program, such as an operating system, that resides in memory at all times.
•**Key Field -**A unique field in a record used to distinguish one record from another.
•**Label -** One or more characters used to Identify a statement and instruction or a data field in a computer program.
•**Landscape -** A printer feature, generally controlled by software, which rotates the output image by 90-degree to print across the length rather than the width of the paper.
•**Link** - A communication path between two nodes or channel.
•**Loop -** A sequence of instructions that is executed repeatedly until a terminal condition occurs.
•**Megahertz (MHz)** - A measurement used to identify the speed of the central processing unit.
•**Memory -** The part of a computer that stores information.
•Menu - A list of choices shown on the display screen.
•**Merge -** Combining two or more files into a single file.
•**Microprocessor -** A complete Central Processing Unit (CPU) contained on a single silicon chip.
•**MIDI -** Stands for Music Instrument Digital Interface. It allows a computer to store and replay a musical instrument's output.
•**Minimize -** A term used in a GUI operating system that uses windows. It refers to reducing a window to an icon, or a label at the bottom of the screen, allowing another window to be viewed.
•**MIPS -** An acronym derived from Million of Instruction Per Second (MIPS) It is used to measure the speed of a processor.
•**Morphing -** The transformation of one image into another image.
•**MS-DOS -** An early operating system developed by Microsoft Corporation (Microsoft Disc Operating System).
•**Multitasking -** simultaneously working with several programs or interrelated tasks that share memories, codes, buffers and files.
•**Multithreading -** It is a facility available in an operating system that allows multiple functions from the same application packages.
•**Multiuser -** A Multi-user operating system is a computer operating system which allows multiple users to access the single system with one operating system on it.
•**Multiplexer -** It is a device that combines multiple input signals into an aggregate signal for transmission.
•**Notebook computer** - A portable computer. Also known as a laptop computer.
•**Object** - Refers to a particular instance of a class where the object can be a combination of variables, functions, and data structures.
•**Operating system (OS) -** Software that manages the internal functions and controls the operations of a computer.
•**Open Source Software (OSS)** - Free Open Source Software (FOSS), also called just Open Source or Free Software, is licensed to be free to use, modify, and distribute.
•**Optical character reader (OCR)** -A device that can scan text from hard copy and enter it automatically into a computer for storage or editing. Also called an optical scanner.

•Piracy - Unauthorized copying of some purchased software.
•**Pixel** - The pixel is the basic unit of programmable colour on a computer display or in a computer image.
•**Port** – In computer hardware, a port serves as an interface between the computer and other computers or peripheral devices. In computer terms, a port generally refers to the female part of the connection. Computer ports have many uses, to connect a monitor, webcam, speakers, or other peripheral devices.
•**Portrait** - It is a mode in which the printer orients content for reading across the shorter length (the width) of the sheet of paper.
•**Plug-and-play -** The ability to plug in a peripheral and have it work without difficulty.
•**Primary Key** - A primary key is a field in a table which is unique and enables you to identify every record in that table.
•**Program -** An established sequence of instructions that tells a computer what to do. The term program means the same as software.
•**Pseudocode** - Pseudocode is an artificial and informal language that helps programmers develop algorithms.
•**Push technology** - A process that allows a user to obtain automatic delivery of specified information from the Internet to the user's computer—for example, stock market quotes, weather forecasts, and sports scores.
•**Query -** A query is a request for information from a database.
•**Queue -** A queue is an example of a linear data structure, or more abstractly a sequential collection.

•**Record** - A record (also called struct or compound data) is a basic data structure. A record is a collection of fields, possibly of different data types, typically in fixed number and sequence.
•**Response time** - The time a computer takes to execute a command.
•**Retrieve** - To call up information from memory or storage so that it can be processed in some way.
•**Rich Text Format (RTF)** - RTF is a file format that lets you exchange text files between different word processors in different operating systems.
•**Routing** - Routing is the process of selecting a path for traffic in a network, or between or across multiple networks.
•**Scanner** - A scanner is a device that captures images from photographic prints, posters, magazine pages, and similar sources for computer editing and display.
•**Search engine** - A free program that helps Web users locate data using a keyword or concept.
•**Sector** - A sector is a subdivision of a track on a magnetic disk or optical disc.
•**Server** - A computer that delivers data to other computers (clients) linked on the same network.
•**Shareware -** Software that usually may be downloaded and used initially without charge.
•Socket - A network socket is an endpoint of a connection in a computer network.
•**Swapping** - A process can be swapped temporarily out of memory to a backing store, and then brought back into memory for continued execution.
•**Synchronisation**- Synchronization is the coordination of events to operate a system in unison.
•**Telecommunications** - The process of sending and receiving information through telephones, satellites, and other devices.
•**Teleconferencing** - Teleconferencing means meeting through a telecommunications medium. It is a generic term for linking people between two or more locations by electronics.
•Telnet - A protocol that allows a computer to connect with a host computer on the Internet.
•**Template** - Refers to a sample document that has already some details in place.
•**Terminal -** Any device that can transmit or receive electronic information.
•Text - Broadly speaking, the material displayed on a screen or printed on paper.
•**Time Sharing or Multitasking** - Time sharing is a technique which enables many people, located at various terminals, to use a particular computer system at the same time.
•**Topology** - Topology is the arrangement of the various elements (links, nodes, etc.) of a computer network.
•**Touchpad** - The device on a laptop computer that takes the place of a mouse.
•**Universal Serial Bus (USB)** - A common standard for connecting multiple peripherals to a computer as needed.
•**Upload** - Uploading is the transmission of a file from one computer system to another, usually a larger computer system.
•**Utility** - A utility is a small program that provides an addition to the capabilities provided by the operating system.
•**User-friendly** - Describes hardware or software that is easy to use.
•**Webcam** - A video camera that sends live images over the Internet to a Web site.
•**ZIP -** ZIP is an archive file format that supports lossless data compression. A ZIP file may contain one or more files or directories that may have been compressed.

CHAPTER 10
COMPUTER ABBREVIATION

- AAC: Advanced Audio Coding.
- ABI: Application Binary Interface.
- ABR: Available Bit Rate.
- AD: Active Directory.
- ADC: Analog – to – Digital Converter / Apple Display Connector (DVI Variant).
- AHA: Accelerated Hub Architecture.
- ALGOL: Algorithmic Language.
- AJAX: Asynchronous JavaScript and XML.
- ALU: Arithmetic Logical Unit.
- AMD: Advanced Micro Devices.
- AMR: Audio Modern Riser.
- APCI: Application – Layer Protocol Control Information.
- API: Application Programming Interface.
- ARPANET: Advanced Research Projects Agency Network.
- ASCII: American Standard Code for Information Interchange.
- ASP: Application Service Provider / Active Server Pages.
- AST: Abstract Syntax Tree.
- ATA: Advanced Technology Attachment.
- ATM: Asynchronous Transfer Mode.
- AVC: Advanced Video Coding.
- AVI: Audio Video InterLeaved.
- AWT: Abstract WIndowToolKit.
- BAL: Basic Assembly Language.
- BASIC: Beginner All – Purpose Symbolic Instruction Code.
- BCD: Binary Coded Decimal.
- BER: Bit Error Rate.
- BFD: Binary File Descriptor.
- BGP: Border Gateway Protocol.
- BIN: Binary.
- BINAC: Binary Automatic Computer.
- BIOS: Basic Input Output System.
- BIT: A Binary Digit.
- BLOB: Binary large Object.
- BLOG: Web Log.
- BPS: Bits Per Second.
- BMP: Basic Multilingual Plane.
- BT: BitTorrent / Bluetooth.
- BW: Bandwidth.

- CAD: Computer – Aided Design.
- CAE: Computer – Aided Engineering.
- CAI: Computer – Aided Instruction.
- CAQA: Computer – Aided Quality Assurance.
- CC: C Compiler / Carbon Copy.
- CD: Compact Disk / Change Directory.
- CDMA: Code Division Multiple Access.
- CD-R: Compact Disk – Recordable.
- CD-ROM: Compact Disk – Read – Only Memory.
- CD-RW: Compact Disk – Rewritable.
- CG: Computer Graphics.
- CGA: Color Graphics Array.
- CGI: Common Gateway Interface / Computer – Generated Imaginary.
- CMOS: Complementary Metal – Oxide Semiconductor.
- CIFS: Common Internet File System.
- CIM: Common Information Model.
- CLI: Command Line Interface.
- CNC: Computer Numerical Control.
- COBOL: Common Business – Oriented Language.
- CPU: Central Processing Unit.
- CRS: Computer Reservation System.
- CTR: Cathode Ray Tube.
- CSI: Common System Interface.
- CSV: Comma – Separated Values.
- CTCP: Client – to – Client Protocol.
- CTL: Computation Tree Logic.
- CTS: Clear to Send.
- CUA: Common User Access.
- DAO: Data Access Objects.
- DAP: Direct Access Protocol.
- DAT: Digital Audio Tape.
- DB: DataBase.
- DBA: Database Administrator.
- DBMS: Database Management System.
- DCC: Direct Client – to – Client.
- DDR: Double Data Rate.
- DES: Data Encryption Standard.
- DFD: Data Flow Diagram.
- DFS: Distributed File System.
- DHTML: Dynamic Hyper Text Markup Language.
- DIVX: Digital Video Express.
- DVE: Digital Video Effects.
- DLL: Dynamic Link Library.
- DLP: Digital Light Processing.
- DMA: Direct Memory Access.

- DNS: Domain Name System.
- DOS: Disk Operating System.
- DPI: Dots per INCH.
- DOS-PMI: Disk Operating System – Protected Mode Interface.
- DSL: Digital Subscriber Line / Domain – Specific Language.
- DBSN: Database Source Name (ODBC).
- DTE: Data Terminal Equipment.
- DTR: Data Terminal Ready.
- DVD: Digital Versatile Disk / Digital Video Disk.
- DVD-R: Digital Versatile Disk – Recordable.
- DVD-ROM: Digital Versatile Disk – Read Only Memory.
- DVD-RW: Digital Versatile Disk – Rewritable.
- DVI: Digital Visual Interface.
- DVR: Digital Video Recorder.
- EBCDIC: Extended Binary Coded Decimal Interchange Code.
- EEPROM: Electronically Erasable Programmable Read Only memory.
- EID: Electronic ID Card.
- EIGRP: Enhanced Interior Gateway Routing Protocol.
- ELF: Executable and Linkable Format.
- ELM: Electronic Mail.
- ENIAC: Electronic Numerical Integrator and Computer.
- EOF: End of File.
- EOL: End of Line.
- EOM: End of Message.
- EPROM: Erasable Programmable Read Only Memory.
- ECU: Extended Unix Code.
- EST: Electrostatic Discharge.
- EXE: Executable.
- FAT: File Allocation Table.
- FAQ: Frequently Asked Questions.
- FDC: Floppy Disk Controller.
- FDD: Floppy Disk Drive.
- FDMA: Frequency-Division Multiple Access.
- FIFO: First In First Out.
- FHS: Filesystem Hierarchy Standard.
- FCS: Frame Check Sequence.
- FPU: Floating Point Unit.
- FS: File System.
- FSB: Front Side Bus.
- FTP: File Transfer Protocol.
- FXP: File Exchange Protocol.
- Gb: Gigabit.
- GB: Gigabyte.
- GCR: Group Code Recording.
- GDI: Graphics Device Interface.
- GIF: Graphics Interchange Format.

- GIGO: Garbage In Garbage Out.
- GPL: General Public License.
- GPRS: General Packet Radio Service.
- GPU: Graphics Processing Unit.
- GUI: Graphical User Interface.
- HCI: Human Computer Interaction.
- HD: High Density.
- HDD: Hard Disk Drive.
- HD DVD: High Definition DVD.
- HDL: Hardware Description Language.
- HHD: Hybrid Hard Drive.
- HID: Human Interface Device.
- HIG: Human Interface Guidelines.
- HP: Hewlett-Packard.
- HPFS: High Performance File System.
- HT: Hyper Threading.
- HTM: Hierarchical Temporal Memory.
- HTML: Hypertext markup Language.
- HTTP: Hypertext Transfer Protocol.
- HTTPD: Hypertext Transfer Protocol Daemon.
- HTX: Hyper Transport Expansion.
- HVD: Holographic Versatile Disk.
- HZ: Hertz.
- IBM: International Business Machines.
- IC: Integrated Circuit.
- ICMP: Internet Control Message Protocol.
- ICP: Internet Cache Protocol.
- ICT: Information and Communication Technology.
- IDL: Interface Definition Language.
- IDE: Integrated Development Environment / Integrated Drive Electronics.
- IE: Internet Explorer.
- IGMP: Internet Group Management Protocol.
- IGRP: Interior Gateway Routing Protocol.
- IHV: Independent Hardware Vendor.
- IIS: Internet Information Server.
- IM: Instant Messaging.
- IMAP: Internet Message Access Protocol.
- I/O: Input / Output.
- IP: Internet Protocol.
- IPC: Inter-Process Communication.
- IPP: Internet Printing Protocol.
- IrDA: Infrared Data Association.
- IRP: I/O Request Packet.
- IRQ: Interrupt Request.
- ISC: Internet Storm Center.

- ISO: International Organisation for Standardization.
- ISOC: Internet Society.
- ISP: Internet Service Provider.
- ISR: Interrupt Service Routine.
- ISV: Independent Software Vendor.
- IT: Information Technology.
- ITU: International Telecommunication Union.
- J2EE: Java 2 Enterprise Edition.
- J2ME: Java 2 Micro Edition.
- J2SE: Java 2 Standard Edition.
- JDK: Java Development KIT.
- JPEG: Joint Photographic Experts Group.
- JRE: Java Runtime Environment.
- JS: Java Script.
- JSON: Java Script Object Notation.
- JSP: Java Server Pages.
- JUG: Java User Group.
- Kb: Kilobit.
- KHz: Kilohertz.
- KBPS: Kilobit per second.
- KVM: Keyboard, Video, Mouse.
- LAN: Local Area Network.
- LED: Light-Emitting Diode.
- LIFO: Last In First Out.
- LSB: Least Significant Bit.
- MAN: Metropolitan Area Network.
- MANET: Mobile Ad-Hoc Network.
- Mb: Megabit.
- MB: Megabyte.
- MBCS: Multi Byte Character Set.
- MBR: Master Boot Record.
- MDI: Multiple Document Interface.
- MICR: Magnetic Ink Character Recognition.
- MIDI: Musical Instrument Digital Interface.
- MIMO: Multiple-Input Multiple Output.
- MIPS: Million Instructions Per Second.
- MIME: Multipurpose Internet Mail Extensions.
- MHz: Megahertz.
- MMU: Memory Management Unit.
- MMX: Multi-Media Extensions.
- MNG: Multiple-image Network Graphics.
- MOSFET: Metal-Oxide Semiconductor Field Effect Transistor.
- MPEG: Motion Pictures (coding) Experts Group.
- MPL: Mozilla Public License.
- MSB: Most Significant Bit.

- MS-DOS: Microsoft Disk Operating System.
- MVS: Multiple Vendor System.
- NFS: Network File System.
- NIC: Network Interface Controller.
- NIO: New I/O.
- NMI: Non-Maskable Interrupt.
- NNTP: Network News Transfer Protocol.
- NOP: NO Operation.
- NOS: Network Operating System.
- NT (Windows): New Technology.
- NTFS: NT File System.
- NTP: Network Time Protocol.
- NVRAM: Non-Volatile Random Access Memory.
- OOP: Object-Oriented Programming.
- OPML: Outline Processor Markup Language.
- OS: Operating System.
- OSS: Open Source Software.
- OCR: Optical Character Reader..
- P2P: Peer-To-Peer.
- PAN: Personal Area Network.
- PAP: Password Authentication Protocol.
- PATA: Parallel ATA.
- PC: Personal Computer.
- PCB: Printed Circuit Board.
- PC DOS: Personal Computer Disk Operating System.
- PCI: Peripheral Component Interconnect.
- PCIe: PCI Express.
- PCL: Printer Command Language.
- PERL: Practical Extraction and Reporting Language.
- PGA: Pin Grid Array.
- PHP: PHP: Hypertext Preprocessor.
- PIC: Peripheral Interface Controller / Programmable Interrupt Controller.
- PINE: Program for Internet News & Email.
- PIO: Programmed Input/Output.
- PLC: Power Line Communication / Programmable Logic Controller.
- Pnp: Plug-and-Play.
- PoE: Power Over Ethernet.
- POST: Power-On Self Test.
- PPC: Power PC.
- PPI: Pixels Per Inch.
- PPP: Point-to-Point Protocol.
- PPPoA: PPP over ATM.
- PPPoE: PPP over Ethernet.
- PPTP: Point-to-Point Tunneling Protocol.
- PSU: Power Supply Unit.

- QDR: Quad Data Rate.
- QFP: Quad Flat Package.
- QoS: Quality of Service.
- QFP: Quick File Access.
- RAD: Rapid Application Development.
- RADIUS: Remote Authentication Dial In User Service.
- RAID: Redundant Array of Independent Disks.
- RAIT: Redundant Array of Inexpensive Tapes.
- RAM: Random Access Memory.
- RARP: Reverse Address Resolution Protocol.
- RDBMS: Relation Database Management System.
- RDF: Resource Description Framework.
- REEAL: Recursive Functions Algorithmic Language.
- RF: Radio Frequency.
- RGB: Red, Green, Blue (RGBA- Red, Green, Blue, Alpha).
- RIP: Routing Information Protocol.
- ROM: Read Only Memory.
- ROMB: Read-Out Motherboard.
- ROM-DOS: Read Only Memory-Disk Operating System.
- RTOS: Real Time Operating System.
- SAN: Storage Area Network.
- SATA: Serial ATA.
- SAX: Simple API of XML.
- SBP-2: Serial Bus Protocol 2.
- SBU: Standard Build Unit.
- SCSI: Small Computer System Interface.
- SDL: Simple Direct Media Layer.
- SDN: Service Delivery Network.
- SDR: Software-Defined Radio.
- SDRAM: Synchronous Dynamic Random Access Memory.
- SFTP: Secure FTP/Simple File Transfer Protocol.
- SHDSL: Single-pair High-speed Digital Subscriber Line.
- SIMD: Single Instruction, Multiple Data.
- SIMM: Single InLine Memory Module.
- SMBIOS: System Management BIOS.
- SMTP: Simple Mail Transfer Protocol.
- SP: Service Pack.
- SPI: Serial Peripheral Interface.
- SQL: Structured Query Language.
- SUS: Single UNIX Specification.
- SVD: Structured VLSI Design.
- SVG: Scalable Vector Graphics.
- SVGA: Super Video Graphics Array.
- TB: TeraByte.
- TCP: Transmission Control Protocol.

- TTA: True Tap Audio.
- TTF: True Type Font.
- TTL: Transistor-Transistor-Logic.
- TTS: Text-to Speech.
- TTY: Teletype.
- UAC: User Account Control.
- UPS: Uninterruptible Power Supply.
- URI: Uniform Resource Identifier.
- URL: Uniform Resource Locator.
- VBA: Visual Basic for Applications.
- VBS: Visual Basic Script.
- VFAT: Virtual FAT.
- VFS: Virtual File System.
- VGA: Video Graphics Array.
- VGCT: Video Graphics Character Table.
- VLAN: Virtual Local Area Network.
- VM: Virtual Memory.
- VOD: Video On Demand.
- VoIP: Voice Over IP.
- VPN: Virtual Private Network.
- VPU: Visual Processing Unit.
- VT: Video Terminal.
- WAN: Wide Area Network.
- WAP: Wireless Access Protocol.
- Wi-Fi: Wireless Fidelity.
- WinFS: Windows Future Storage.
- WINS: Windows Internet Naming Service.
- WLAN: Wireless Local Area Network.
- WMA: Windows Media Audio.
- WMV: Windows Media Video.
- WOL: Wake-on-Lan.
- WOM: Wake-on-Modem.
- WPA: Wi-Fi Protected Access.
- WSDL: Web Services Description Language.
- WUSB: Wireless Universal Serial Bus.
- WWAN: Wireless Wide Area Network.
- WWID: World Wide Identifier.
- WWW: World Wide Web.
- XAML: Extensible Application Merkup Language.
- XHTML: Extensible Hypertext Markup Language.
- XML: Extensible Markup Language.
- XNS: Xerox Network Services.
- XMMS: X MultiMedia System.
- XSL: Extensible StyleSheet Language.
- XSL-FO: Extensible StyleSheet language Formatting Objects.

- XSLIT: Extensible StyleSheet language Transformations.
- XUL: XML User Interface Language.

Q. ALU is

[A] Arithmetic Logic Unit

[B] Array Logic Unit

[C] Application Logic Unit

[D] None of above

Answer - A

Q. VGA is

[A] Video Graphics Array

[B] Visual Graphics Array

[C] Volatile Graphics Array

[D] Video Graphics Adapter

Answer - A

Q. MSI stands for

[A] Medium Scale Integrated Circuits

[B] Medium System Integrated Circuits

[C] Medium Scale Intelligent Circuit

[D] Medium System Intelligent Circuit

Answer - A

Q. WAN stands for

[A]Wap Area Network

[B] Wide Area Network

[C] Wide Array Net

[D] Wireless Area Network

Answer - B

Q. MICR stands for

[A] Magnetic Ink Character Recognition 0

[B] Magnetic Ink Code Reader

[C] Magnetic Ink Cases Reader

[D] None

Answer - A

Q. EBCDIC stands for

[A] Extended Binary Coded Decimal Interchange Code

[B] Extended Bit Code Decimal Interchange Code

[C] Extended Bit Case Decimal Interchange Code

[D] Extended Binary Case Decimal Interchange Code

Answer – A

Q. BCD is

[A] Binary Coded Decimal

[B] Bit Coded Decimal

[C] Binary Coded Digit

[D] Bit Coded Digit

Answer - A

Q. ASCII stands for

[A] American Standard Code for Information Interchange

[B] American Stable Code for International Interchange

[C] American Standard Case for Institutional Interchange

[D] American Standard Code or Interchange Information

Answer - A

Q. "GUI" Stands for

[A] Gnutella Universal Interface

[B] Graphical user interface

[C] Graphic Uninstall/install

[D] General utility interface

Answer - B

Q. IBM Stands for

[A] International Business Machine

[B] Inter connected Business Machine

[C] Internal Business Machine

[D] Interacting Business Machine

Answer - A

Q. BIOS stands for

[A] Basic Input Output Service

[B] Basis Inner Outer Services

[C] Better Input Output Services

[D] Basic Input/Output System

Answer - D

Q. CPU stands for

[A] Computer Processing Unit

[B] Central Processing Unit

[C] Computer Protection Unit

[D] Central Processing Upload

Answer - B

Q. In MICR, C stands for

[A] Code

[B] Colour

[C] Computer

[D] Character

Answer - D

Q. 'MICR' technology used for clearance of cheques by banks refers to

[A] Magnetic Ink Character Recognition

[B] Magnetic Intelligence Character Recognition

[C] Magnetic Information Cable Recognition

[D] Magnetic Insurance Cases Recognition

Answer - A

Q. The acronym HTML stands for

[A] High Transfer Machine Language

[B] Hypertext Markup Language

[C] High Transmission Markup Language

[D] Hypermedia Markup Language

Answer - B

Q. IT stands for

[A] Information Technology

[B] Integrated Technology

[C] Intelligent Technology

[D] Interesting Technology

Answer - A

Q. What is the full form of KB related to computer?

[A] Key Block

[B] Kernel Boot

[C] Kilo Byte

[D] Kit Bit

Answer - C

Q. CD-ROM stands for

[A] Central processing unit

[B] CD-remote open mouse

[C] CD resize or minimize

[D] CD-read only memory

Answer - D

Q. Reusable optical storage will typically have the acronym

[A] CD

[B] DVD

[C] ROM

[D]RW

Answer – D

Important One Liner

- Algorithms can handle most system functions that aren't handled directly by the operating system
- Device drivers are small, special-purpose programs
- LAN refers to a small, single site network
- A collection of programs that controls how your computer system runs and processes information is called operating system
- When we are working on a document on a PC the document is temporarily stored in RAM
- Information travels between components on the motherboard through buses
- Microsoft is a vertical market application
- RAM refers to the memory in your computer
- Computers connected to a LAN can share information and / or share equipment
- Magnetic tape is not practical for applications where data must be quickly recalled because tape is a sequential access medium
- In Late 1988 computer viruses land in India for the first time
- ALU is a part of the CPU
- In computer technology a compiler means a program, which translates source program into object program
- American computer company IBM is called big blue
- The first IBM PC did not have any ROM The digital computer was developed primarily in UK Programs which protect a disk from catching an infection are called antidotes
- The first movie with terrific computer animation and graphics was released in 1982 is Tron
- An integrated circuit is fabricated on a tiny silicon chip
- The word size of a microprocessor refers to the amount of information that can be stored in the byte
- Daisy-wheel printer cannot print graphics
- In the IBM PC-AT, the word AT stands for advanced terminology
- Dedicated computer means which is assigned one and only one task
- Real time programming type of computers programming is used for aero plane ticket reservation system
- RAM means memory which can be both read and written to
- Laser printer uses light beam and electro statically sensitive black powder
- A program written in machine language is called assembler
- International business machine was the first company in the world to build computer for sale
- PARAM is a parallel computer
- Data transfer rate in modems is measured in bits per second
- A compiler cannot detect logical errors in source programs
- Throughput, turnaround time, response time are measures of system performance
- A floppy disk rotates at 100rpm
- The storage capacity of a cartridge tape is 400 MB
- Ada language is associated with real time processing
- MS DOS is usually supplied on a cartridge tape
- Kernel of MS-DOS software resides in ROM
- Kernel is the only art of an operating system that a user cannot replace or modify
- A disk worm is an example of optical devices
- The first private internet service provider in India was Satyam infoway
- HIT RATIO is associated with cache performance
- Abstraction is associated with object oriented technology and database technology
- A multithreaded program uses multiple processes
- Oracle 8i is an example of OORDBMS
- ALPHA, RIOS, SPARC are examples of RISC Processors
- A language used to describe the syntax rules is known as meta language
- The standard protocol (communication rules for exchange of data) of the internet is TCP/IP
- DBMS is a simple, fourth generation language used for data retrieval

- The Pentium processor contains thousands of transistors
- Q.Which command in DOS can be used to recover accidentally deleted files? UNDELETE
- Q.A computer program that converts an entire program into machine language at one time is called? Characters
- Q.In which year, the Microsoft company was founded? 1975
- Q.What is the personal computer operating system that organizes and uses a graphic desktop environment? Windows
- Q. What are Light pen and joystick? Input Devices
- Q. What is a half byte also called as? Nibble
- Q. The first programming language was – FORTRAN
- Q. Which stores data permanently in a computer – ROM
- Q. Which is a main system board a computer – Mother Board
- Q. What is a bug in a computer terminology – an error in program
- Q. An electronic path, that sends signals from one part of computer to another is – Bus
- Q. USB is which type of storage device – Tertiary
- Q. Who is known as father of Artificial Intelligence - John Mc Carthy
- Q. Which term is related to database – Oracle
- Q. Computer resolution measures – Number of Pixels
- Q. One nibble is equal to how many bits – 4 Bits
- Q. What can be considered as basic building blocks of a digital circuit – Logic Gates
- Q. What is full form of RAM – Random Access Memory
- Q. Which among following is secondary storage device – Hard Disc
- Q. What is responsible for specifying address of a memory location - Address Bus
- Q. ULSI microprocessor is used in which generation of computers – Fifth Generation
- Q. Where is cache memory is located – CPU
- Q. Which function key is used to check spellings – F7
- Q. Which type of software is an operating system - System Software
- Q. If a computer has more than one processor then it is known as – Multiprocessor
- Q. Which program is run by BIOS to check hardware components are working
- properly while computer is turned ON – Post
- Q. What is responsible for finding and loading operating system into RAM -
- Bootstrap Loader
- Q. Full form of URL is – Uniform Resource Locator
- Q. Which type of storage device is a BIOS- Primary
- Q. Which is most common language used in web designing – HTML
- Q. BIOS is used for – Loading Operating System
- Q. Who was the father of Internet – Vin Cerf
- Q. In banking, railways etc which computers are used – Main Frames
- Q. Intersection of columns and rows is called a- Cell
- Q. 1 Mega Byte is equal to - 1024 Kilo Bytes
- Q. What is full form of EXIF- Exchangeable Image File Format
- Q. C ++ is a …….. Programming language- modular
- Q. What is called a group of commands written in a phased manner to solve a problem or perform a task – algorithm
- Q. What is made by displaying an algorithm in the form of a diagram – Flowchart
- Q. If full flowchart is not available on one page, it is added by which shape's coordinator with the second page- arrow
- Q. Which figure is used in a flowchart for decision- Diamond
- Q. E-mail accounts have storage areas often called – mailboxes
- Q. The inventors and promoters of www- Tim burners Lee
- Q.Full form of LAN? Local Area Network
- Q. ASCII stands for__? American Standard Code for Information Interchange

- Q. Which operations are performed by RAM - Read and Write
- Q. WWW stands for- World Wide Web
- Q.A computer cannot 'boot' if it does not have the__? Operating system
- Q. What is the other name for programmed chip? LSIC
- Q. A normal CD- ROM usually can store up to _____data? 680 MB
- Q.What does DMA stand for? Direct Memory Access
- Q. Which is most common tool used to restrict access to computer system? Passwords
- Q. The technology that stores only essential instructions on a microprocessor chip and thus enhances its speed is referred as__? RISC
- Q. A DVD is an example of an__? Optical Disc
- Q. What is called the ordered group of instructions written for computer- Program
- Q. In which languages programs are written for computers, which languages go to them- Programming
- Q. Fortran is a programming language in which programs are written for …… functions- Scientific
- Q. To translate the program written in a programming language into computer …….. language is mandatory- Machine
- Q. Program written in BASIC is translated into machine language by ……. - Interpreter
- Q. Documents, Movies, Images and Photographs etc are stored at a – File Server
- Q. Where are saved files stored in computer - Hard disk
- Q. A normal CD- ROM usually can store up to _____data? 680 MB
- Q.What does DMA stand for? Direct Memory Access
- Q.Full form of LAN? Local Area Network
- Q. What is the meaning of OSI, in terms of computers? Open system Interconnection
- Q. Which type of storage device is a BIOS? Primary
- Q. What is the extension type of the excel 2007 files? .xlsx
- Q. Collecting personal information and effectively posing as another individual is known as the crime of__? Identity theft
- Q. The amount of vertical space between lines of text in a document is called__? Line Spacing
- Q.A _____ is approximately a million bytes? Megabyte
- Q. Daisy wheel, Drum, chain etc are the__? Printers
- Q. XML stands for __? Extensible Markup Language
- Q. What kind of scheme is the HTTP protocol? Request/Response
- Q. Magnetic disk is an example of__? Secondary Memory
- Q.What do we use to change the appearance and positioning of text document in MSWord? Formatting
- Q. Help Menu is available at which button? Start
- Q. Which file contains permanent data and gets updated during the processing of transactions? Master File
- Q. When did arch rivals IBM and Apple Computers Inc. decide to join hands? 1991
- Q.What kind of memory is both static and non -volatile? ROM
- Q.An error in software or hardware is called a bug. What is the alternative computer jargon for it? Glitch
- Q.Unwanted repetitious messages, such as unsolicited bulk e-mail is known as__? Spam
- Q. The common name for the crime of stealing passwords is__? Spoofing
- Q. BIOS stands for __? Basic Input Output System
- Q. Who is regarded as Father of "C'programming language? Dennis Ritchie
- Q. Computers manipulate data in many ways, and this manipulation is called__? Processing
- Q. Where does most data go first with in a computer memory hierarchy? RAM

Practice Set 1

Q1.What is extension of PowerPoint slide slow?
A) .pps
B) .ppt
C) .pptx
D) .ps
Answer:- A

Q2.Which of the following is a private search engine?
A)Google
B)Yahoo
C)Rediff
D)DuckDuckGo
Answer:- D

Q3.Name the first web browser?
A)WWW
B)IE
C)Yandex
D)Archie
Answer:- A

Q4. Name the first graphical web browser?
A)Yandex
B)Edge
C)Mosiac
D)Baidu
Answer:- C

Q5. How do you measure the speed of dot matrix?
A)Page per minute
B)Characters per minute
C)Line per minute
D)Paragraph per minute
Answer:- B

Q6. A key which help to connect data is one secondary table to that in a primary table is called?
A)Toggle key
B)Primary key
C)Unique key
D)Foreign key
Answer:- D

Q7.What is the Character limits for a gmail?
A)240

B)320
C)440
D)255
Answer:- B

Q8. Which of the following memory is used in digital camera?
A)Flash Memory
B)Cache Memory
C)Virtual Memory
D)Buffer Memory
Answer:- A

Q9. Name the first Virus in world
A)Reaper
B)Creeper
C)Brain
D)CBrain
Answer:-B

Q10. What is the short cut key to insert a bullet point in Ms word?
A)Ctrl+Shift+L
B)Ctrl+Shift+N
C)Alt+Shift+F6
D)Ctrl+K
Answer:- A

Q11. Which of the following is computer graphics type?
A)Raste& Vector
B)Raster and Scalar
C)Scalar only
D)Video and image
Answer:- A

Q12. Pretty goods privacy used in ?
A)Search Engine
B)Browser Security
C)Email Security
D)FTP Security
Answer:- C

Q13. In Ms word , table with four rows and five columns has __ cells?
A)10
B)15
C)8
D)20
Answer:- D

Q14. A block of text automatically added to the end of an outgoing email is called ?
A)Signature
B)Encryption
C)Footer
D)Decryption
Answer:- A

Q15. What is the shortcut key to create a blank presentation in Ms PowerPoint?
A)Ctrl+K
B)Ctrl+H
C)Ctrl+N
D)Ctrl+I
Answer:- C

Q16. What is the extension of MsPowerpoint ?
A).ppt
B).pps
C).pptm
D).ppsx
Answer:- A

Q17. Which of the following is not a third generation programming language?
A)PASCAL
B)COBOL
C)JAVA
D)Assembly Language
Answer:- D

Q18. Which of the following shortcut key is used to launch "Find and Replace" with active ho to tab in Ms word?
A)F1
B)F3
C)F5
D)F2
Answer:- C

Q19. What is the name of first web page ?
A)Mosiac
B)CERN
C)Creeper
D)Epic
Answer:- B
Explanation-[CERN – European Organisation for Nuclear Research]

Q20.Which OSI layer has user to user interaction?
A)Application
B)Data Link
C)Transport
D)Network

Answer:- A

Q21. ____ can automatically sort, count , total or average the data stored in Spreadsheet ?
A)Chart
B)PivotTable
C)Graph
D)SmartArt
Answer:- B

Q22. Which one amongst not a inter network?
A)LAN
B)MAN
C)WAN
D)None
Answer:- A

Q23.To connect a network in different protocol which of the following are used?
A)Bridge
B)Firewall
C)Router
D)Gateway
Answer:- D

Q24.Name a language used for creating a database?
A)C
B)C++
C)SQL
D)Java
Answer:- C

Q25.Which of the following is subscription based product from Microsoft?
A)Microsoft Office 2007
B)Microsoft 365
C)Microsoft office 2016
D)Microsoft Office 2003
Answer:- B

Q26.WPA is a type of security in Wi-Fi. What is A stands in WPA?
A)Active
B)Accumulator
C)Access
D)Adaptor
Answer:- C
Explanation [WPA- wi-fi protected access]

Q27. What is the attachment size limit in G-mail ?
A)15 MB
B)25 MB
C)20 MB

D)30 MB
Answer:- B

Q28. Internet Message Access Protocol(IMAP) uses __port number?
A)110
B)25
C)120
D)143
Answer:- D

Q29. Simple Mail Transfer Protocol (SMTP) is used to transfer?
A)Audio and Video
B)Only text files
C)Image and Audio
D)All of these.
Answer:- B

Q30. What is the name of first search Engine ?
A)Archie
B)Yahoo
C)Gophar
D)Baidu
Answer:- A

Q31. What is the shortcut key to create a new worksheet in Ms Excel?
A)Ctrl+N
B)Shift +F11
C)Alt + F4
D)Ctrl+F6
Answer:- B

Q32. In Ms Excel 2021 a typical worksheet has___ column width?
A)250 characters
B)600 characters
C)255 Characters
D)550 characters
Answer:- C

Q33. How many times undo levels can be used in a worksheet?
A)50
B)100
C)200
D)75
Answer:- B

Q34.Which of the following layer is responsible for process to process delivery in a general network model?
A)Network Layer
B)Data Link Layer

C)Session Layer
D)Transport Layer
Answer:- D

Q35. In IP address 192.168.1.255 is assigned as ?
A)Device Address
B)Unicast Address
C)Broadcast Address
D)Gateway Address
Answer:- C

Q36.What is the command to open wordpad in windows 10/11?
A)Write
B)Word
C)Winword
D)Msword
Answer:- A

Q37.What is the maximum height of a row in Ms Excel 2021?
A)255 points
B)100 points
C)409 points
D)250 points
Answer:- C

Q38. Ctrl+Enter shortcut is used for ?
A)Page Break
B)Line Break
C)Paragraph Break
D)Superscript
Answer:- A

Q39._____ translates and excutes program at run time line by line?
A)Loader
B)Complier
C)Fodder
D)Interpreter
Answer:: D

Q40.While booting operating system is loaded into?
A)RAM
B)ROM
C)Hard Disk
D)Cache
Answer:- A

Q41. IEEE standard for Bluetooth is___
A)IEEE 802.15
B)IEEE 802.15.1

C)EEE 802.16
D)IEEE 802.11
Answer:- B

Q42. The first mainframe computer was?
A)UNIVAC
B)Mark- 1
C)Analytical Engine
D)EDVAC
Answer:- B

Q43. First Microprosser in the world?
A)ENIAC
B)UNIAC
C)EDVAC
D)ALTAIR 800
Answer-D

Q44. Which one of the following device is required to set up a LAN?
A)NIC
B)RAM
C)ROM
D)Scanner
Answer:- A

Q45. How many bits in a 4 nibble?
A)64
B)8
C)16
D)32
Answer:- C

Q46.What is the smallest and largest font size available in font size tool formatting bar in Ms word 2019/2021?
A)8 & 64
B)8 & 72
C)8 & 68
D)11 & 64
Answer:- B

Q47. How much storage is free on Gmail?
A)10 GB
B)20 GB
C)15 GB
D)25 GB
Answer:- C

Q48.A Browser is an HTTP?
A)Client
B)Agent
C)Server
D)Workstation
Answer:- A

Q49. @ invented in which year?
A)1971
B)1972
C)1998
D)1995
Answer:- B

Q50. In computer network , short message that travels around the communication medium is called ?
A)Bus
B)Star
C)Mesh
D)Token
Answer:- D
Q50.____ is an application of computer science to provide data about biological system?
A)Bioinformatics
B)Biodiversity
C)Biotechnology
D)Biosynthesis
Answer:-A

Practice Set 2

Q1. _____ is used to translate private IP addresses (non-routable) into public IP addresses (routable)?
A)NAT
B)DHCP
C)DNS
D)ICMP
Answer:- A

Q2. Which of the following is an Indian web browser?
A)Epic
B)Safari
C)Baidu
D)Google Chrome
Answer:- A

Q3.Shortcut key to open find and replace box in Ms Excel?
A)Shift+F6
B)Shift+F1
C)Shift+F5
D)Shift+F7
Answer:- C

Q4.In which Generation of Computer the FORTRON language was used?
A)First Generation
B)Second Generation
C)Third Generation
D)Fourth Generation
Answer:- B

Q5.Non Impact Printer based on ?
A)Typewritting printing mechanism
B)Electrical Mechanism
C)Mechanical Mechnasim
D) Electromagnetic Mechnasim
Answer:- B

Q6.What type of software a device driver is ?
A)Application Software
B)Spreadsheet
C)System software
D)Presentation
Answer:- C

Q7.Logical address IP converts into physical one ?
A)ARP
B)IRAP

C)SMTP
D)POP3
Answer:- A
Explanation-[Address Resolution Protocol]

Q8. Which function is not in Excel?
A)Sum
B)Average
C)Count
D)Autograph
Answer:- D

Q9.Which is not an antivirus ?
A)NORTON
B)AVAST
C)BURN
D)MCAFEE
Answer:- C

Q10. Which of the following files cannot be attached with an email?
A)MP3
B)exe
C)Jpg
D)ping
Answer:- B

Q11. The storage locations in the internal storage of a CPU is called?
A)vLocations
B)vContents
C)vFile
D)vAddress
Answer:- D

Q12.AVI format was developed by ?
A)Microsoft
B)Apple
C)Macromedia
D)IBM
Answer:- A

Q13.TIMES NEW ROMAN is what?
A)Font style
B)Font face
C)Font size
D)Font effect
Answer:- C

Q14. Which protocol runs on port number 25?
A)SMTP

B)IMAP
C)POP3
D)MIME
Answer:- A
Explanation-[Simple Mail Transfer Protocol]

Q15. By using this option in E-mail anyone can see who you sent this email to?
A)BCC
B)Mail user agent
C)IMAP
D)CC
Answer:-
Explanation-[CC[Carbon Copy]

Q16. It allows you to hide recipient in email message?
A)BCC
B)CC
C)DuckDuckGo
D)SSL
Answer:- A
Explanation-[BCC- Blind Carbon Copy]

Q17.What is the shortcut key for undo the last action in word?
A)Ctrl+y
B)Ctrl+Z
C)Ctrl+H
D)Ctrl+B
Answer:- B

Q18. The boot sector files of the system are stored in which compute memory?
A)RAM
B)ROM
C)CACHE
D)REGISTER
Answer:- B

Q19.Which of the following is smallest entity of memory?
A)Cell
B)Block
C)Instance
D)Set
Answer:- A

Q20. How many types of RAM are available?
A)3
B)5
C)2

D)1
Answer:- **C**

Q21. Which among the following is not a modifier key?
A)Ctrl
B)Alt
C)Shift
D)Caps Lock
Answer:- D

Q22.First electronic computer was?
A)ENIAC
B)EDVAC
C)TIFRAC
D)UNIVAC
Answer:- **A**

Q23.First Super Computer in world ?
A)PARAM 8000
B)UNIVAC
C)CDC 6600
D)TRIFAC
Answer:- C

Q24. First computer Antivirus was?
A)Creeper
B)Reaper
C)Brain
D)CBrain
Answer:- B

Q25.Name the microsoft word processing software?
A)Ms word
B)Ms Excel
C)Ms PowerPoint
D)Ms outlook
Answer:- A

Q26. Name the Microsoft spreadsheet software?
A)Ms word
B)Ms Excel
C)Ms PowerPoint
D)Ms Access
Answer:- B

Q27.Among these which is not the version of Ms office?
A)office 2016
B)office 2003
C)office 2019

D)office 2011
Answer:- D

Q28.Letter , E- mail message, Envelopes labels comes under which tab of Mail Merge?
A)Start Mail Merge
B)Select Recipient
C)Edit Recipient
D) Finish & Merge
Answer:- A

Q29.What is the name of column heading for each category in data source?
A)Data field
B)Field
C)Fied Name
D)Record
Answer:- C

Q30.Which file starts Ms word ?
A)Winword.exe
B)Word365.exe
C)Word.exe
D)Msword.exe
Answer:- A

Q31. Which enables us to send the same letter to different person?
A)Macros
B)Mail Merge
C)Template
D)All of these
Answer:- B

Q32.Which of the following is not a valid data type in Excel?
A)Values
B)Character
C)Label
D)Formula
Answer:- B

Q33. Which component of Ms Excel displays the address of the active cell?
A)Formula Bar
B)Name Box
C)Row Header
D)Column Header
Answe:- B

Q34. In order to perform a calculation in a spreadsheet you need to use a
A)Table
B)Formula
C)Field

D)Label
Answer:- B

Q35.Which type of Model is OSI ?
A)Practical Model
B)Realistic Model
C)Conceptual Model
D)Complex Model
Answer:- C

Q36. Ethernet uses a ____ physical address that is imprinted on the network interface card (NIC)?
A)6 Byte
B)32 Byte
C)64 Byte
D)128 Byte
Answer:- A

Q37. TCP/IP network was designed by ?
A)OSI Scientist
B)IANA Scientist
C)DARPA Scientist
D)Microsoft Scientist
Answer:- C

Q38.Tcp/ IP Model does not have this layer but OSI model have this layer?
A)Session Layer
B)Network Layer
C)Application Layer
D)Transport Layer
Answer:- A

Q39. Name the first software require to run Internet ?
A)Operating System
B)Search Engine
C)Post
D)Browser
Answer:- D

Q40. Name the browser developed by Apple?
A)Chrome
B)Safari
C)Edge
D)Internet Explorer
Answer:- B

Q41. Internet works on ?
A)Packet Switching
B)Searching Switching
C)Character Switching

D)All of these
Answer:- A

Q42. Linux is an ___ operating system.
A) Open Source
B) Microsoft
C) Windows
D) Mac
Answer:- A

Q43. While writing an Algorithm instructions are written from ?
A)Top to Bottom
B)Left to Right
C)Right to Left
D)Bottom to Top
Answer:- A

Q44. What type of DRAM is synchronised with the system clock ?
A)SRAM
B)PRAM
C)ERAM
D)SDRAM
Answer:- D

Q45. ____ can automatically sort, count, total or average the data stored in Spreadsheet?
A)PivotTable
B)SmartArt
C)Chart
D)Graph
Answer:- A

Q46. What kind of protocol is used to provide internet access from mobile?
A)TCP/IP
B)ISD
C)WAP
D)HTTP
Answer:- C
Explanation-[WAP- wireless application protocol]

Q47. The secret code that restricts entry to some programs?
A)Password
B)Access code
C)Entry Code
D)Passport
Answer:- A

Q48. A network geometric arrangement in which a single connecting line is shared by a number of nodes is called ?
A)Star Topology

B)Ring Topology
C)Bus Topology
D)Mesh Topology
Answer:- C

Q49. Inventor of C++ ?
A)Martin Cooper
B)Vin Cerf
C)Charles Babbage
D)Bjarne Stroustrup
Answer:- D

Q50. Name the attack in which attackers overload computing ornetwork resources?
A) Distribution of Service
B) Duplication of work
C) Cyber Attack
D) Denial of Service
Answer:- D

Practice Set 3

Q1. First Computer designed by Charles Babbage was ?
A) Analytical Engine
B) ENIAC
C) UNIVAC
D) TIFRAC
Answer:- A

Q2. Name the Microsoft presentation software?
A) Ms Word
B) Ms Excel
C) Ms PowerPoint
D) Ms Access
Answer:- C

Q3. Name the Microsoft video conferencing service ?
A) Meet
B) Team
C) Zoom
D) WhatsApp
Answer:- B

Q4. Which of the following is the first computer printer?
A) Laser
B) Inkjet
C) Dot Matrix
D) None
Answer:- C

Q5. The resolution of a printer is measured in ?
A) Dots per inch
B) Dot per character
C) Dot per second
D) Dot per minute
Answer:- A

Q6. IRC stands for?
A) Internet resource channel
B) Internet Routing Channel
C) Internet Relay chat
D) Internet Right Council
Answer:- C

Q7. The quality of the stream in internet depends on ____ used in encoding.
A) Bit- Rate
B) Dual Rate

C) Block Rate
D) Mono rate
Answer:- A

Q8. How much date can be stored on a dual layer blue ray disc?
A) 30 GB
B) 40 GB
C) 50 GB
D) 25 GB
Answer:-C

Q9. The server in the internet is also known as ?
A) Host
B) Hub
C) Gateway
D) Bridge
Answer:-A

Q10. What is the by default file name of Ms Excel 2021?
A) Sheet 1
B) File 1
C) Excel 1
D) Book 1
Answer:- D

Q11. Which allows you to print both side of the printer?
A)Fuser
B)Duplexer
C)Toner
D)None
Answer:- B

Q12. The ALU of a computer response to the commands coming from ?
A)Control Memory
B)Primary Memory
C)Cache Memory
D)Flash Memory
Answer:- A

Q13. What is the shortcut key for hide the row in Ms Excel?
A)Ctrl+0
B)Ctrl+9
C)Ctrl+8
D)Alt+9
Answer:- B

Q14. Printer use which port?
A)Serial port
B)SCSI Port

C)Parellel Port
D)HDMI Port
Answer:- C

Q15. What is the speed of computer measured in ?
A)Nanosecond
B)Gigahertz
C)Mega Byte
D)Kilo Second
Answer:- B

Q16. What is the minimum and maximum Row and column in word?
A)1 and 1
B)2 and 1
C)1 and 3
D)1 and 2
Answer:- A

Q17. In general, a file is basically a connection of all related ?
A)Rows and Columns
B)Datebase
C)Field
D)Records
Answer:- D

Q18. Which of the following best describes windows 11?
A)Open Source OS
B)Real Time OS
C)Multitasking OS
D)Adware OS
Answer:- C

Q19. Which of the following circuit is used to store one bit of data ?
A)Flip-Flop
B)Encoder
C)Decoder
D)Register
Answer:- A

Q20.By Default, Excel positions number in a cell?
A)Left aligned
B)Justify
C)Centre
D)Right aligned
Answer:-D

Q21. Pressing f8 for three times selects?
A)word
B)Paragraph

C)Sentence
D)Entire Document
Answer:- C

Q22. What type of key are Ctrl and Shift?
A)Modifier Key
B)Toggle Key
C)Function Key
D)3 finger key
Answer:- A

Q23. Which of the following have the fastest access time ?
A)Magnetic Disk
B)Compact Disk
C)Magnetic tape
D)Semiconductor Memories
Answer:- D

Q24. Which shortcut is used for centre alignment?
A)Ctrl+J
B)Ctrl+E
C)Ctrl+R
D)Ctrl+L
Answer:- B

Q25. _____ is a form of malicious spam in banks that attempt to steal personal information through text messages?
A)Skimming
B)Phishing
C)Smishing
D)Ransomware
Answer:- C

Q26. WorldWideWeb Browser was renamed by?
A)Nexus
B)Cern
C)Mosiac
D)www
Answer:- A

Q27. First web page went live on ?
A)1999
B)1991
C)1998
D)1994
Answer:- B

Q28. Last version of Internet Explorer was?
A)IE 9
B)IE 8
C)IE 11
D)IE 12
Answer:- C

Q29. Who provide us Internet?
A)TCP
B)ISP
C)FTP
D)HTTP
Answer:- B

Q30. Internet services were launched in India on?
A)15 August,1995
B)15 August, 1990
C)15 August, 1997
D)15 August,2000
Answer:- A

Q31.Name the mother of first Programmer of internet?
A)Grace Hopper
B)Hedy Lamarr
C)Ada Augusta
D)Radia Perlman
Answer:- C

Q32.Which Search Engine is most secure?
A)Google
B)DuckDuckGo
C)Baidu
D)Bing
Answer:- B

Q33.Wi-Fi speed is measured in?
A)Hertz
B)Bps
C)MBPS
D)Mbps
Answer:-D

Q34.Name the India's first web browser?
A)Mozila
B)Param
C)Epic
D)Chrome
Answer:- C

Q35. Which of the following is not a search Engine?
A)Bing
B)Safari
C)Ask
D)Yahoo
Answer:- B

Q36. WAN is the example of which topology?
A)Ring
B)Star
C)Bus
D)Mesh
Answer:- A

Q37. How many bit in IPv4 address?
A)64
B)128
C)32
D)8
Answer:- C

Q38. What is the maximum zoom percentage in Ms-Excel 2010?
A)400%
B)300%
C)250%
D)500%
Answer:- A

Q39. What is the shortcut command to enter a new sheet in the workbook?
A)Shift+F12
B)Shift+F10
C)Shift+F11
D)Shift+F9
Answer:- C

Q40. Which type of memory cannot be erased and reprogrammed ?
A)EEPROM
B)PROM
C)Flash
D)Cache Memory
Answer:- B

Q41. Which is today's most popular USB flash drive portable device?
A)CD
B)DVD
C)Floppy Drive
D)Pen Drive
Answer:- D

Q42. Which of the following can be called as Universal Gate ?
A)NOR
B)NOT
C)OR
D)AND
Answer:- A

Q43. Text code originally used in PC's is ?
A)URF
B)OEM
C)ASCII
D)EBCDIC
Answer:- C

Q44. ____ is the act of attempting to acquire information such as usernames, passwords, & credit card details ?
A)Hacking
B)Spoofing
C)Phising
D)Spooling
Answer:- C

Q45.One megabyte is approximately equal to?
A)1000 bytes
B)1000 bits
C)1 million bytes
D)1 million bits
Answer:- C

Q46.Which is the smallest and largest font size available in font size tool formatting bar in Ms PowerPoint 2019/2021?
A)12 & 7
B)8 & 64
C)8 & 72
D)8 & 96
Answer:- D

Q47. What is the process of copying software programs from secondary storage media to the hard disk called?
A)Installation
B)Storage
C)Upload
D)Configuration
Answer:- A

Q48. A software interrupt is also called a/an?
A)Trap
B)Query
C)Trigger

D)Interrupt handler
Answer:- A

Q49.In PowerPoint , Themes could be found under ?
A)Transition Tab
B)Design Tab
C)Insert Tab
D)Animation Tab
Answer:- B

Q50. MAC address is a ___ bit number ?
A)32
B)64
C)48
D)24
Answer:- C

Practice Set 4

Q1. A term related sending date to a satellite is ?
A) Network
B) Local Hub
C) Uplink
D) Data Link
Answer:- C

Q2. Name the device which first broadcast then Unicast?
A)Hub
B)Bridge
C)Repeater
D)Router
Answer:- B

Q3. The proxy server reduces load on ?
A)Original Server
B)Duplicate Server
C)Compressing server
D)Downloading server
Answer:- A

Q4. MAC address also called as?
A)Physical Address
B)Hardware Address
C)Burned – in Address
D)All of these
Answer:- D

Q5. What is the format of MAC address?
A)Binary format
B)Octagonal Format
C)Hexadecimal Format
D)Packets format
Answer:- C

Q6. Which class is reserved for future use ?
A)Class B
B)Class C
C)Class E
D)Class D
Answer:- C

Q7. Who invented GUI(graphical user interface) features?
A)Vint Cerf
B)Charles Babbage
C)Mochley
D)Xerox PARC
Answer:- D

Q8. What is the shortcut key to find and replace in word?
A)Ctrl + K
B)Ctrl + H
C)Ctrl + J
D)Ctrl+ N
Answer:- B

Q9. What is the shortcut key for to switch from one word document to another open word ?
A) Ctrl + Shift+ F6
B) Alt + Shift +F6
C)Ctrl + Alt +F7
D)Ctrl+ Shift + L
Answer:- A

Q10. Maximum text file size limit of Ms word document?
A)48 MB
B)32 MB
C)25 MB
D)30 MB
Answer:- B

Q11. Default left margin in latest version in word is ?
A)1.25 inch
B)1.50 inch
C)1 inch
D)2.5 inch
Answer:- C

Q12. The first cell in Excel worksheet is label as ?
A)A1
B)2A
C)AA
D)0B
Answer:- A

Q13.Collection/ grid of columns and rows is called ?
A)Workbook
B)Cells
C)Worksheet
D)Format
Answer:- C

Q14.The keyboard shortcut to navigate between different worksheet?
A)Ctrl + Right Arrow click
B)Ctrl+ Page Up
C)Alt + Page up/ down
D)Shift + Alt+ Page up
Answer:- B

Q15. Total columns in Ms Excel 2003 worksheet?
A)1048576
B)16,384
C)256
D)65536
Answer:- C

Q16. To delete one word to the left of cursor in Ms PowerPoint?
A)Delete
B)Ctrl+ Backspace
C)Enter
D)Backspace
Answer:- B

Q17. Punch Card invented by ?
A)Edward and Mochley
B)Ray Tamilson
C)Herman Hollerith
D)Vint Cerf
Answer:- C

Q18. World's first software written by?
A)Ada Lovelace
B)Martin Cooper
C)Mark Andreessen
D)Alan Emtage
Answer:- A

Q19. Which device is used in Network Layer in OSI Model?
A)Hub
B)Repeater
C)Cables
D)Router
Answer:- D

Q20. TCP/ IP network layer was designed by ?
A)ARP
B)RARP
C)DARPA
D)IANA
Answer:- C

Q21.Which of the following IP address class is multicast?
A)Class A
B)Class B
C)Class C
D)Class D
Answer:- D

Q22.Gateway is also called ?
A)Proxy Server
B)Nic
C)OUI
D)Segments
Answer:- A

Q23. MIME (multipurpose internet mail extension) uses which port number?
A)143
B)25
C)110
D)No port
Answer:: D

Q24. Which among the following is a E-mail – Security ?
A)PGP(retty Goods Privacy)
B)SSL (secured socket layer)
C)TLS(transport layer security
D)All of these
Answer:- D

Q25.F8 key for three times selected ?
A)A word
B)A patience
C)A sentence
D)A paragraph
Answer:- C

Q26. Which shortcut key in Ms Excel 2021 is used to hide the selected rows?
A)Ctrl + I
B)Ctrl + 0
C)Ctrl + 9
D)Ctrl + K
Answer:- C

Q27.Which shortcut key is used in Google Chrome browser to access downloads history?
A)Ctrl +J
B)Ctrl+ H
C)Ctrl + O
D)Ctrl+ L
Answer:- A

Q28. Which shortcut key is used in Google Chrome to open Task Manager?
A)Ctrl + Alt + Delete
B)Ctrl+ Shift + T
C)Shift + Esc
D)Alt + tab
Answer:- C

Q29. "A drive " and "B drive" in a computer is reserved for?
A)Hard disk
B)Compact Disk
C)DVD
D)Floppy Disk
Answer:- D

Q30. What command is used to permanently remove a database table?
A)Drop
B)Delete
C)Remove
D)Backspace
Answer:- A

Q31.What refers to the international telephone system that uses copper wires to carry analog voice data ?
A)ISDN
B)VOIP
C)PSTN
D)TRAI
Answer:- C
Explanation- [PSTN- Public switched telephone Network]

Q32. In TCP/IP network 127.0.0.1 is which type of IP Address?
A)Public Address
B)Private Address
C)Loopback Address
D)Static Address
Answer:- C

Q33. This IP- 15.200.200.200 belongs to which class?
A)Class A
B)Class B
C)Class C
D)Class D
Answer:- A

Q34. Which memory is fastest among all the memories in a computer?
A)RAM
B)Cache Memory
C)EPROM
D)SSD

Answer:- B

Q35. Identifying the source of problem is called as ?
A)Trouble Shooting
B)Debugging
C)Analysing
D)Corrupting
Answer:- A

Q36.Which bus carries information between processors and peripheral?
A)Control Bus
B)Data Bus
C)Address Bus
D)All of these
Answer:- B

Q37.What type of virus uses computer hosts to reproduce itself?
A)Time Bomb
B)WORM
C)Macro Virus
D)Melissa Virus
Answer:- B
Explanation- [Write once read many- Worm]

Q38.Who invented RAM &ROM ?
A)Tim Berners Lee
B)Reynold B Johnson
C)Robert Heath Dennard
D)Robert Nyoce
Answer:- C

Q39. In computer , the unit Hertz is used to measure the speed of ?
A)SMPS
B)RAM
C)Hard Disk
D)Processor
Answer:- D

Q40.What is shortcut to see clipboard in windows 10/windows 11?
A)Ctrl + C
B)Ctrl + V
C)Windows key+ V
D)Windows key + C
Answer:- C

Q41. A ____ is a software you can use on a trial basis before paying for it?
A)Open Source
B)Freeware
C)Shareware

D)Annoywqre
Answer:- C

Q42. What is the latest units used to count the speed of a printer?
A)DPI
B)CPM
C)PPM
D)Both 1&2
Answer:- C
Explanation- [PPM- page per minute]

Q43. Vendor created program modification are called?
A)Patches
B)Antivirus
C)Holes
D)Knits
Answer:- A

Q44.Which of the following is the default standard layout in Ms PowerPoint 2021?
A)Black Slide
B)Title and Content Slide
C)Title slide
D)All of these
Answer:- C

Q45. Which of the following view in Ms PowerPoint 2021 is used to add comments?
A)Slide Sorter View
B)Notes Page View
C)Normal View
D)All of these
Answer:- B

Q46. The email standard limited the username to ___characters and the domain name to ____ characters?
A)65,255
B)55,200
C)64,255
D)55, 255
Answer:- C

Q47.Which of the following buttons are present in the Quick Access Toolbar by default in Ms word 2010?
A)Undo, Redo, Name
B)Undo, Redo, Cut
C)Paste , Redo, Copy
D)Save, Undo, Redo
Answer:- D

Q48.____ is a type of malware that is often disguised as legitimate software?
A)Rootkit
B)Ransoware
C)Trojan
D)Keylogger
Answer:- C

Q49.What do you press in Ms Excel 365 to enter the current date in a cell?
A)Ctrl + ;
B)Ctrl + shift +;
C)Ctrl + Shift + :
D)Ctrl + F12
Answer:- A

Q50. ____are devices used to transmit data over telecommunication lines?
A)Router
B)Switch
C)Modem
D)Bridge
Answer:- C

Practice Set 5

Q1. Name the attack in attackers overload computing or network resources?
A) Distribution of service
B) Cyber Attack
C) Denial of service
D) Phising
Answer:- C

Q2.A block of text automatically added to the end of an outgoing email is called?
A)Attachment
B)Signature
C)Footer
D)Encryption
Answer:-B

Q3.Which of the following is not third generation programming language?
A)COBOL
B)BASIC
C)PASCAL
D)Assembly Language
Answer:- D

Q4.Code of Android Operating system was written in which programming language?
A)Java
B)C
C)C++
D)All of these
Answer:- D

Q5.Linux is just ?
A)Kernal
B)Operating system
C)System software
D)Language
Answer:- A

Q6.What is the name of the latest version of Google Android 13?
A)Red Velvet Cake
B)Tiramisu
C)Snow Cone
D)Pie
Answer:- B

Q7.What is the range of class A IP address ?
A)1-126
B)0-225

C)2-127
D)1-123
Answer:- **A**

Q8.Who invented Mac Address?
A)Xerox PARC
B)Douglas Englebert
C)Charles Babbage
D)Vin Cerf
Answer:- A

Q9.____ is the process of dividing the disk into track and sectors?
A)Tracking
B)Formatting
C)Crashing
D)Alloting
Answer:- B

Q10.Which of the following search engines continuously sends out that starts on a homepage of a server and pursue all links stepwise?
A)Cookies
B)Packets
C)Spiders
D)Paddle
Answer:- **C**

Q11.The un authorised copying and distribution of software is known as ?
A)Software Piracy
B)Hacking
C)Copyright
D)Clipboard
Answer:- A

Q12.ULSI technology used in which generation of computer?
A)2 generation
B)3 generation
C)5 generation
D)1 generation
Answer:- D

Q13. Hide option is present in the ___ tab in Ms-Excel 2010 ribbon bar .
A)Data
B)File
C)Insert
D)View
Answer:- D

Q14.In an Ms- Excel 2010 sheet, a cell with text overflow problem can be dealt with___
A)Text Bumping

B)Text Aligning
C)Text Wrapping
D)Text Merging
Answer:- C

Q15.Hospital and big Universities are examples of which topology?
A)Mesh
B)Star
C)Tree
D)Ring
Answer:- C

Q16.A typewriter – like tool, which is used to send data or commands to the computer is called,?
A)Joystick
B)OCR
C)Mouse
D)Keyboard
Answer:- D

Q17.An ___ device is generally a piece of equipment that sends information to a primary device?
A)Input Device
B)Output Device
C)Storage Device
D)Optical Device
Answer:- A

Q18.Browser plugins also called or similar to?
A)Quick Time
B)Web Crawler
C)ActiveX Controls
D)Silver light
Answer:- C

Q19.What is the shortcut key to select the word to the left in Ms word?
A)Ctrl+Shift +Left Arrow key
B)Ctrl+Alt+Left Arrow key
C)Ctrl+left Arrow key
D)Ctrl+Hone
Answer:- A

Q20.The ___ displays the application name of the document in Ms- Word 2010?
A)File Tab
B)Ribbon
C)Quick Access Toolbar
D)Title Bar
Answer:- D

Q21.___ shortcut key is used in Ms Excel 2010 to go to the insert tab?
A)Alt+U
B)Alt+N
C)Alt+F
D)Alt+I
Answer:- D

Q22.Which of the following operating system do you use for a client server network?
A)Windows XP
B)Ms- Dos
C)Windows 2000
D)Windows 95
Answer:- C

Q23.Which of the following is not a version of Mac OS version?
A)MacOs 11 Big Sur
B)MacOs 10.15 Catalina
C)MacOs 10.12 Sierra
D)MacOs 1.5 Cupcake
Answer:- D

Q24. Version 6 of IP address has how many byte?
A)128
B)16
C)48
D)32
Answer:- B

Q25.What is the full form of ICMP?
A)Internet Cache Message Protocol
B)Internet Connection Memory Protocol
C)Internet Control Message Protocol
D)Internet Command Message Protection
Answer:- C

Q26.UNIVAC 1108 belongs to the 2nd Generations of computer. What is the full form of UNIVAC ?
A)Universal Automatic Computer
B)Universal Automation Computer
C)Universal Artificial Computer
D)Unique Automatic Computer
Answer:- A

Q27.Which of the following is not a series of Supercomputer PARAM that was developed by Indian Scientists?
A)PARAM 8000
B)PARAM BRAHMA
C)PARAM 8600
D)PARAM MITRA

Answer:- D

Q28.Which of the following is a Supercomputer developed by India?
A)Param Yuva
B)Onshape
C)Venngage
D)Pixir
Answer:- A

Q29.The most common example of a scripting virus is a ____ attack?
A)Momos
B)Ccmos
C)DDos
D)LLos
Answer:- C

Q30. .com in URL is___?
A)High – Level Domain
B)Top Level Domain
C)Test Top Level Domain
D) Infrastructure level Domain
Answer:- B

Q31.In which folder are unfinished emails stored without sending them?
A)Drafts
B)Trash
C)Sent
D)Spam
Answer:- A

Q32.Which one of the following is not an operating system?
A)Java
B)Mint
C)Ms Dos
D)Ubuntu
Answer:- A

Q33.Which commands are used to switch between outline and slides pane in normal view?
A)Ctrl+Shift+Tab
B)Ctrl+Shift+Alt
C)Ctrl+Shift+A
D)Ctrl+Shift+B
Answer:- A

Q34.Which of the following is an antivirus software?
A)Google
B)XML
C)Norton
D)Microsoft

Answer:- C.

Q35.First computer to use keep program concept?
A)EDSAC
B)UNIVAC
C)COBOL
D)TRIFAC
Answer:- A

Q36.It is approximately a million bytes?
A)Gigabyte
B)Terabyte
C)Megabyte
D)Kilobyte
Answer:- C

Q37.What is the by default file name of Ms-Excel 2021?
A)Sheet 1
B)Book 1
C)Excel 1
D)Document 1
Answer:- B

Q38.A computer virus that actively attacks an antivirus program or programs in an effort to prevent detection is?
A)Worm
B)Retrovirus
C)Trojan
D)Ghost Virus
Answer:- B

Q39.Software that monitors your online computer activities is known as ?
A)Spyware
B)Freeware
C)Malware
D)Firmware
Answer:- A

Q40.Which of the following web browser was developed by the microsoft?
A)Mozilla
B)Chrome
C)Opera
D)Internet Explorer
Answer:- D

Q41. Which of the following is the primary job of an operating system?
A)Command Resources
B)Map Utilities
C)Manage Resources

D)Map Users
Answer:- C

Q42.Which type of ports are also known as COM ports?
A)Parallel
B)Serial
C)Rj-45
D)Dum Dum
Answer:- B

Q43.In first generation of computers, they used ____?
A)Batch Processing
B)Networking
C)Multi Programming
D)Multi Threading
Answer:- A

Q44.When you are working on a document on PC, where is the document temporarily stored?
A)Motherboard
B)ROM
C)CPU
D)RAM
Answer:- D

Q45.A ____ is a professionally designed "empty" document that can be adapted to the user's need?
A)File
B)Guide
C)Template
D)User Guide file
Answer:- C

Q46.____ is a communication technology used by some incoming mail servers?
A)TCP
B)POP
C)FTP
D)TELNET
Answer:- B

Q47.In a computer file system which among the following is top or first in hierarchy?
A)Root directory
B)Parent directory
C)Home directory
D)Working directory
Answer:- A

Q48.____ is a malware that is created to generate revenue for its developer?
A)Trojan
B)Ransomware
C)Spyware

D)Adware
Answer:- D

Q49.Which of the following holds the processed results that are awaiting output?
A)Control Unit
B)ALU
C)Motherboard
D)Main Memory
Answer:- D

Q50.Which of the following is/are examples of software in computer?

A) Keyboard
B) CPU
C) Joy Stick
D) MS Office
Answer- D

IMPORTANT NOTICE FOR PAID STUDENTS

Welcome to everyone to join us for study well but you are requested to follow the daily target on daily basis by heart with 100% efforts . We are giving the targets daily you to complete on daily basis but your are not doing that with honesty then we can do nothing to improve. So the main thing is your dedication is must with our daily .So definitely you will be improved your GA section (CA+SA+BA) and you will pass the exam with flying colours.So please you all are request to complete daily targets with honesty and dedication. If you find any problem then please make cantactus.Because we have already given many selectionfrom our AK APARCHIT paid group by giving targets with PDFs and further it will be continued ..... So please complete the targets regularly given by us in our AK APARCHIT paid group.

I promise you we complete Your GA section(CA +BA +SA) But you will forget each and everything till mains besides studies .Definitely results will be splendid...

Note:- Please do maintain the dignity of the group and don't change your name after joining group... Good luck for your next step of life.

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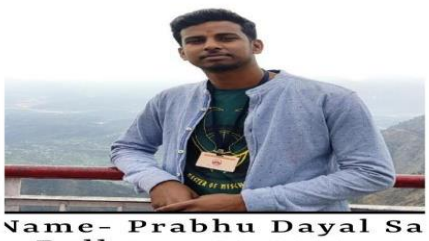

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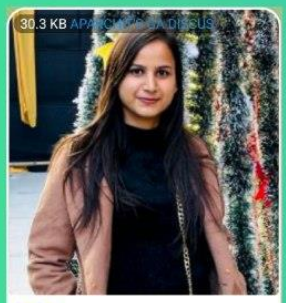

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