

COMPUTER FUNDAMENTALS

UNIT I : INTRODUCTION TO COMPUTERS

2 MARKS QUESTIONS WITH ANSWERS

1) What is computer?

A *computer* is an electronic device that is used for information processing.

It accepts data and instructions

Stores in its memory

Processing

Gives the results to the User.

2) Who is the father of computer?

The father of computer is **Charles Babbage**

3) Who is the first female programmer?

Lady Augusta Ada Lovelace

4) Which is the first recorded computer?

ABACUS

5) Stands for ENIAC, EDVAC, and UNIVAC.

ENIAC ☐ *Electronic Numerical Integrator And Calculator* **EDVAC** ☐

Electronic Discrete Variable Automatic Computer **UNIVAC** ☐
UNIVersal Automatic Computer

6) 1st generation computers are made up of **VACUUM TUBES**

7) 2nd generation computers are made up of **DIODES and TRANSISTORS**

8) 3rd generation computers are made up of **INTEGRATED CIRCUIT's (IC's)**

9) 4th generation computers are made up of

LSI - Large Scale Integration

VLSI - Very Large Scale Integration

10) 5th generation computers are made up of

Super Large Scale Integration (SLSI)

11) Write any two input devices.

Keyboard, Mouse, Scanner

Joystick, Microphone

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12) Write any two output devices.

☐ **Monitor, Printer, projector, speaker**

13) Expand RAM, ROM

RAM—Random Access Memory

ROM—Read Only Memory

14) Expand PROM, EPROM, and EEPROM.

PROM- Programmable Read Only Memory **EPROM** -
Erasable Programmable Read Only Memory

EEPROM-Electrically Erasable Programmable Read Only Memory

15) Expand CD,DVD

CD- Compact Disc

DVD - Digital Versatile Disc

16) Expand OMR, OCR, and MICR.

OMR - Optical Mark Recognition **OCR** -

Optical character Recognition **MICR** -

Magnetic Ink Character Reader

17) What are the types of monitors?

CRT monitors, **LCD** monitors, **LED** monitors

18) What are the types of printers?

Impact printers ☐ Dot matrix printer, Daisy wheel printer.

Not-Impact printers ☐ Ink jet printer, Laser printer.

19) Expand CPU, ALU

CPU—Central Processing Unit

ALU—Arithmetic and Logical Unit

20) What are the Types of computers?

Analog computers

Digital computers

Hybrid computers

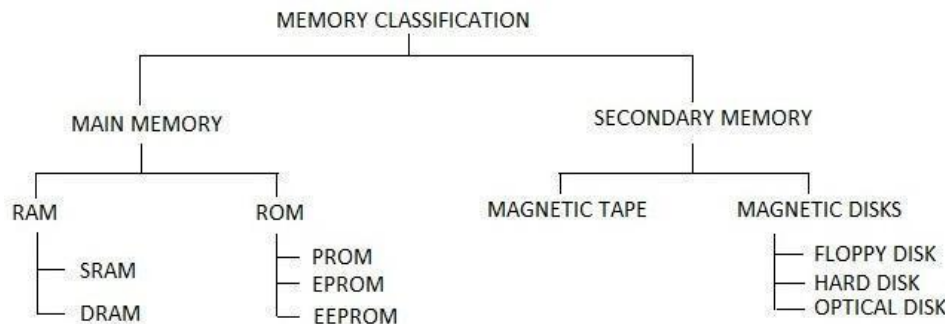
5MARKS QUESTIONS WITH ANSWERS

1) What are Characteristics of Computers?

- High processing speed
- Accuracy
- Reliability
- Huge Storage capacity
- Versatility
- Diligence
- Automation

2) Explain the classification of Memory.

MEMORY CLASSIFICATION



Main Memory (Primary Memory)

The Computer memory in computers refers mainly to the primary memory or main memory of the system. The memory consists of one or more IC chips that store data and instructions either temporarily or permanently.

There are two important memories called **Random Access Memory (RAM)** which is temporary memory and **Read Only Memory (ROM)** which is permanent memory.

RAM: The RAM, random access memory is the **read** and **write** memory. The RAM is a temporary memory because during power failure, the information stored in RAM will be erased.

The RAM chip is made up of metal oxide semiconductor. The RAM chips are classified into two types.

Static RAM (SRAM)

Dynamic RAM (DRAM)

ROM: It can only read the data that is written. It cannot erase the data written on ROM chip. The data once written do not get erased. ROM is used in laser printer, calculator etc. Other types of ROM are PROM, EPROM, and EEPROM.

Programmable Read Only Memory (PROM)

Erasable Programmable Read Only Memory (EPROM)

Electrically Erasable Programmable Read Only Memory (EEPROM)

Secondary Storage Devices:

1. Floppy Disks

A floppy disk is a thin flexible circular plastic plate coated with magnetic oxide and kept inside a square plastic jacket. The contents stored on the floppy disks are read or written by floppy disk drive (FDD). Floppy disks have slow accessing capacity, less storage capacity, portable and less expensive. But, floppy disks are not in use today. Floppy disks are normally available in two sizes.

1. 3.5 inch floppy is called a *microfloppy*. Its storage capacity ranging from 720KB to 1.44 MB of data.

2. 5.25 inch floppy is called *minifloppy*. Its storage capacity ranging from 360KB to 1.2MB of data.



Figure: A 3.5 inch Floppy disk

2. Hard Disks

A hard disk is a group of round flat metal plates that are coated with the magnetic oxide. Because of the use of metal (aluminum) in place of thin plastic, they are called hard disks. Hard disk can store from 10 gigabytes to several gigabytes. A set of disks are mounted one above the other. These plates are arranged at a distance of 0.5 inch a central hub. The diameter of each disk is 14 inch. The data is recorded on both the surfaces of a disk.



Figure: Hard Disk

Hard disks are connected to the Hard Disk Controller (HDC). The HDC is an electronic circuit that controls the hard disk. The computer sends signals to the HDC and this locates data segment on the particular surface of specific disk.

3. CD-ROM:

This is an acronym for *Compact Disk-Read Only Memory* device. CD-ROM is a compact disk with read only memory. It stores all types of data such as text, audio, video etc. It is an optical disk with a capacity to store large amount of data up to 700MB (Mega Bytes). The vendor records in the CD-ROMs and once recorded they cannot erase it and fill new data. CD-ROM is a simple round piece of plastic of about 1.2 mm of thickness. It is portable device.



Figure: CD-ROM

CD-R: This stands for *Compact Disk-Recordable*. These CDs are initially blank but you can use a special read/write CD drive unit to store programs and data onto the disc but they can only be written to once.

CD-RW: This stands for *Compact Disk-Rewritable*. These CDs are similar to CD-R type but you can read, write and delete files from the disc many times, just like a hard disk.

DVD (Digital Versatile Disk): DVD is similar to CD. It is high storage capacity devices. It can store up to 4.7GB (Giga Bytes) of data. It is not rewritable DVD. It is basically used to store music, movies.

Magnetic Tapes

Magnetic tapes are made of a plastic film-type material coated with magnetic materials to store data permanently. Data can be read as well as recorded. It is usually 12.5mm to 25mm wide and 500 m to 1200m long. These can store data in a sequential manner.

Memory Units

1 Bit – 0,1

1 Byte – 8 bits

1 Kilobyte – 1024 bytes

1 Megabyte – 1024 kilobytes

1 Gigabyte -- 1024 Megabytes

1 Terabyte -- 1024 Gigabytes

1 Petabyte -- 1024 Terabytes

1 Exabyte -- 1024 petabytes

1 Zettabyte -- 1024 Exabytes

1 Yottabyte – 1024 Zettabytes

1 Brontobyte – 1024 Yottabyte

1 Geopbyte -- 1024 Brontobyte

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3) Application of Computer.

APPLICATION OF COMPUTERS

Now-a -days computers have been employed in almost all the aspect of professional and personal life.

Education Computers have proved to be excellent teachers. Educational institutes are using computers in many ways like tele-education, virtual classroom, online classes, etc.

Science scientists have long been users of it. A new advance among scientists is the idea of a collaborator, an internet based collaborative laboratory, in which researchers all over the world can work easily together even at a distance.

Industry computers are used here to control manufacturing system and continuous running of the machinery.

Parameters like temperature, pressure, volume are monitored and controlled by computers.

Government various departments of the government use computer for their planning, control and law enforcement activities.

Health computer plays a very crucial role in this area. Activities like scanning, X-ray, tele-medicine, patient monitoring, patient records, diagnosis, etc are performed with the help of computers.

Multimedia is the field concerned with the computer controlled integration of text, graphics, drawings, animation, audio and any other

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media where each type of information can be represented, stored, transmitted and processed digitally.

Banks computers can be used in the banks to keep the records of customer's accounts.

Business using a wide range of business software a company's marketing division can produce sales forecasts and devise new strategies.

E-Commerce traditionally, commerce is seen as the exchange or buying and selling of goods and services, which involves exchange of money and sometimes transportation of goods. Electronic commerce that takes place between businesses is referred to as business-to-business.

Publication computers have made publication process an easy one. Without computers, the different parts of a publication- text, illustrations and graphics-must be created individually, then cut out and pasted down to from a page layout.

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10MARKS QUESTIONS WITH ANSWERS

1) Explain the block diagram or basic structure of a computer.

BASIC STRUCTURE OF A COMPUTER

A computer is a programmable device which performs the four operations:

1. Accepting data and instructions from the user
2. Storing data and instructions in its memory
3. Processing the data and instructions
4. Displaying the processed data

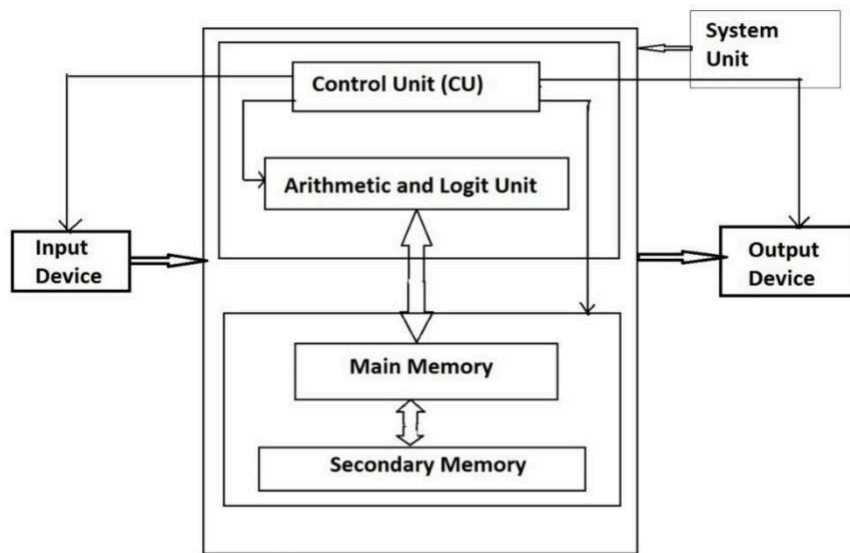


Fig: Block diagram of a computer

Input Device:

This is used to feed data and instructions into the computer. It is connected to the System unit. There are several types of input devices used for inputting data.

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Keyboard, mouse, Scanner, light pen, trackball

Joystick, touch panel, microphone, digital cameras.

OCR, OMR, MICR, Barcode Readers.

System Unit:

This is responsible for storing and processing of data and instructions. The System unit consists of CPU and memory devices.

Central Processing Unit

The term CPU stands for *Central Processing Unit*. The CPU is the main unit in a computer system, which performs all arithmetic and logical operations. It may be considered as the brain of a computer system.

The CPU consists of Control Unit (CU) and Arithmetic and Logic Unit (ALU).

Control Unit: It controls and coordinates the activities of all the units of a computer system. It sends the control and signals to various units of a computer to coordinate for a specific operation.

The functions of the **control unit** are:

Fetching data and instructions from the memory

Interpreting the instructions

Controlling the transfer of data and instruction to and from the main memory

Controlling the input and output devices

Arithmetic and Logic Unit: It performs all arithmetic operations such as addition, subtraction, multiplication, division and modulus operation. It also performs logical operations such as AND, OR and NOT.

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Memory Devices:

Memory devices are used to store the data and instructions fed by the user. The computer memory is measured in terms of bits, bytes and words. A bit is a binary digit – either a 0 or a 1. A byte is the basic unit of memory and is defined as a sequence of 8 bits. A word can be defined as a sequence of 16 bits or two bytes. The computer memory is classified into:

CPU registers

The CPU registers hold a limited amount of memory during execution. They are inside the CPU.

Main memory

The main memory is the primary memory, which holds data and instructions supplied by the user. The main memory is a temporary memory that holds data and instructions till the power supply lasts.

Ex : RAM,ROM

Secondary memory

The Secondary memory is a permanent memory, which holds data and instructions as long as user can do.

Hard Disk, Floppy Disk, CD, DVD, Pendrives.

Cache memory

The Cache memory is a high speed memory and comes in between the CPU and the main memory. Users cannot access the cache memory.

Output Devices:

Once the data and instructions are processed, the user can choose to display such results on the output devices.

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2) Write a note on history of Computers.

HISTORY OF THE DEVELOPMENT OF COMPUTERS

The history of computers can be traced back to ancient times. The evolution of computer took place as a result of man's continuous search for accurate and fast calculating device.

Abacus:

This is the first recorded computer, whose existence dates back to 2500 B.C. It was a rectangular wooden frame with beads stung on parallel wires. It is invented in china and used by the Greeks, Romans and Japanese in early days.

Pascalein:

In 1642, a French mathematician, Blaise Pascal, invented this machine. It was made up of counter wheels. This was capable of performing addition, subtraction, multiplication and division. The era of mechanical calculating machines started with the invention of the Pascalein.

Rotating wheel Calculator:

In 1671, a German mathematician, Gottfried Von Leibnitz, invented an electro-mechanical computer called the *Rotating wheel calculator*. It was designed based on the principles of counter wheels that were used in Pascalein.

Jacquard's Loom:

In 1802, a French textile manufacturer, Joseph Marie Jacquard, invented a machine which was used to automatically control the weaving loom. Jacquard employed punched cards to control the patterns of woven cloth. Thus, he was regarded as the first person to make use of punched cards.

Babbage's Engine:

In 1822, a professor of mathematics at the Cambridge University, Charles Babbage, invented the Differential Engine. This was a hand

□ Monitors, printers, speakers,

Projectors, Plotters

operated machine built with wheels, levers, and mechanical linkages. It

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was used to calculate various mathematical functions. It was so designed that once the initial values were set, it would produce the next few thousand values without mistakes.

In 1833, Charles Babbage developed the Analytical Engine. This machine consisted of five functional units such as Input unit, Memory unit, Arithmetic unit, Control unit and Output unit. The architecture of the modern digital resembles the Analytical Engine.

ENIAC:

The revolution in semiconductor technology in 1946, prompted John Mauchly and Presper Eckert to develop the first- ever electronic computer ENIAC (*Electronic Numerical Integrator And Calculator*). It was a huge machine occupying a 33 x 20 sqm hall. It consisted of 18000 valves and consumed 150 to 180 K Watts of power. This could be reset to perform other types of calculations by changing switch settings and plugs and socket connections.

EDVAC:

In 1946, to overcome the disadvantage of wiring in the ENIAC, John Von Neumann proposed a new concept of a large internal memory to store instructions and data. This is known as the *stored program concept*. The first ever computer developed on the principle of stored program concept was EDVAC (*Electronic Discrete Variable Automatic Computer*).

UNIVAC-I:

In 1951, the American Census Bureau developed a machine called UNIVAC-I. It is an acronym for *UNiversal Automatic Computer-I*. It was intended for both scientific and commercial applications.

It also had a compiler to translate programs to machine code

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3) Explain the Generations of computers.

First generation computers:

Year: **1945-55**,

Internal operations: **Vacuum tubes**.

Speed: **10^{-3} sec.**

They had limited primary memory.

They used magnetic drums as secondary storage devices.

The machine language was adapted in these machines.

Punched cards were used for input and output.

Non-portable.

Generate large amount heat.

Example: ENIAC, UNIVAC, EDVAC.

Second generation computers:

Year: **1956-63**,

Internal operations: **Diodes and Transistors**.

Speed: **10^{-6} sec.**

They had more primary memory.

Assembly language was used in these machines.

Magnetic tapes were used for secondary memory.

Punched cards were used for input and output

More Reliable, Small in size

Portable, Generate less amount of heat.

Example: IBM 1401, CDC- 1604

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Third generation computers:

Year: **1964 - 1971**

Internal operations: **Integrated Circuits (IC's)**.

Speed: **10^{-9} sec.**

They used silicon chip & semiconductor memory.

10-100 transistors used in a single silicon chip.

They introduced high level programming languages.

The concept of operating system was used.

Example: IBM System/360, CDC-6600.

Fourth generation computers:

Year: **1971 - present**

Internal operations: **LSI (Large Scale Integration)**
VLSI (Very Large Scale Integration)

Speed: **10^{-9} to 10^{-12} sec.**

Microprocessor is used.

In LSI, 100-1000 transistors in a single silicon chip.

In VLSI, 1000 to millions of transistors in a single silicon chip.

They had a huge storage capacity.

The concept of networking was introduced.

Example: IBM 3033, HP-3000(minicomputer), PDP-11 and all modern PCs.

Fifth generation computers:

Year: **Present and Future**

Internal operation: **SLSI (Super Large Scale Integration)**

Speed: **More than 10^{-12} sec.**

Millions of transistors used in a silicon chip.

The concept of Artificial Intelligence & Robotics was used.

These computers are Expensive & more reliable.

Advancement in networking Technology.

Example: Robotics, Super Computers like PARAM, CRAY, PRATYUSH, FUGAKU

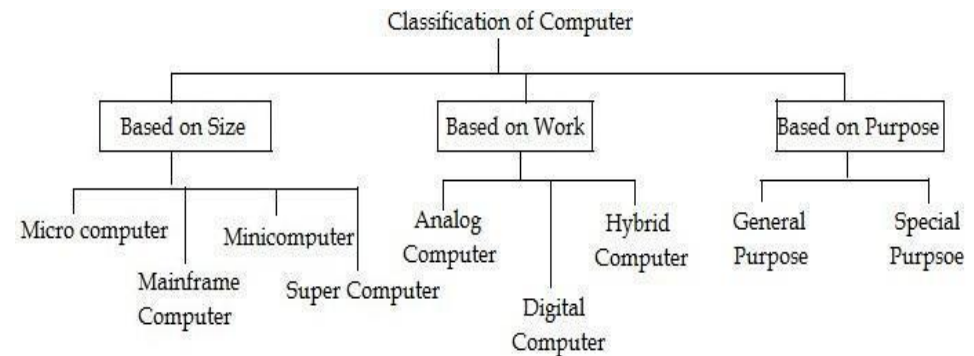
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4) Explain the classification of computers.

CLASSIFICATION OF COMPUTERS

Computers are classified into three types:



Based on Size

On the basis of size, computer are categorize as follows

1. Micro computer

Microcomputers are the least powerful, yet the most widely used and fastest growing type of computers and are also called **portable computers**. Microcomputer consists of three basic categories of physical equipment i.e. system unit, input/output and memory.

Some types of microcomputer are

Desktop Computers: A desktop computer is an independent personal computer that is designed to sit on a desk in an office or home.

Note book Computers: also known as ultra book or laptop, are portable lightweight and fit into most briefcases. They include rechargeable battery, so these can work anywhere.

Tablet PCs:

Smart Phones:

There are basically mobile (cellular) phones containing the advanced features.

2. Mainframe computer

Main computers are those having large internal memory storage and comprehensive range of software. A mainframe computer serves as a backbone for the entire business world. It is considered as the heart of a network of computers or terminals that allows a large number of people to work at the same time.

Mainframe computers are IBM-370, UNIVAC-1110.

3. Minicomputer

Minicomputers are smaller in size, faster, cost lower than mainframe computers. Initially, the minicomputer was designed to carry out some specific tasks, like engineering and computer aided design (CAD) calculations. But now, they are used as central computer which is called as Server. Mini computers are IBM-17, PDP-11, HP-9000.

4. Super Computer

Super computers are the fastest and the most expensive machines. They have high processing speed compared to other computers. The speeds of supercomputers are measured in FLOPS (Floating Point Operations Per Second).

Supercomputers are used for highly calculations intensive tasks, such as weather forecasting, nuclear research, military agencies and scientific research laboratories.

Supercomputers are most powerful, large in size and memory, compared to all other computers.

Some of the super computers are CRAY, PARAM, PRATYUSH, and FUGAKU.

Based On Working of system

On the basis of work, computers are categorized as follows

1. **Analog Computer**
2. **Digital Computer**
3. **Hybrid Computer**

1. Analog Computers are used to process the data that occurs in a continuous flow such as temperature, pressure, and voltage variations etc. Analog computers are the job-oriented computers. They carry out arithmetic and logical operations by manipulating and processing of data.

2. Digital Computers are used to process alphanumeric and graphical data. Digital computers work by calculating the binary digits. A digital computer, not only performs mathematical problems, but also combines the bytes to produce desired graphics, sounds. e.g., Desktop (PC).

3. Hybrid Computers are the combination of both analog and digital computers. Machines used in hospitals like ECG and DIALYSIS are the commonly used hybrid computers.

Based on Purpose

1. General Purpose Computer

General purpose computers are those computers, which are used to solve variety of problems changing the program or instructions. E.g., to make small database calculations, accounting, etc.

2. Specific Purpose Computer

Special purpose computers are those computers which are used to solve a single and dedicated type of problem.

E.g. Automatic aircraft landing, multimedia computer.

UNIT II: SOFTWARE

2MARKS QUESTIONS WITH ANSWERS

- 1) What is software?
Software is a collection of programs. Program is a set of commands. Command is an instruction given to the computer to perform specific task.
- 2) What is system software?
System software is a set of programs to control all components of computer and to manage overall operations of a computer system.
- 3) What is application software?
Application software is computer software designed to help the user to perform singular or multiple tasks.
- 4) Write any two system software.
Operating system, compiler, and interpreter.
- 5) Write any two application software.
Word processor, spreadsheet
- 6) What is programming language?
Computer language used by programmers to write instructions that a computer can understand to do what the programmer or the computer user wants.
- 7) What is language translator?
The program which translates the program written in a programming language by the user into an executable program is known as language translator.
- 8) What is linker?
A linker is a system program that links together several object modules and libraries to form a single and coherent program (executable).
- 9) What is loader?
Loader is a kind of system software, which is responsible for loading and relocation of the executable program in the main memory.
- 10) What is operating system?
An operating system consists of a set of programs, which controls, coordinates and manages the activities of the various components of a computer system
- 11) Expand MS-DOS.
Micro Soft Disk Operating System.
- 12) Write any two internal commands in DOS.
DIR, MD, CD, COPY
- 13) Write any two external commands in DOS.
ATTRIB, CHKDSK
- 14) Write any two types of operating system.
Single user OS, Batch processing OS

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5MARKS QUESTIONS WITH ANSWERS

1) Explain the types of language translator.

LANGUAGE TRANSLATOR

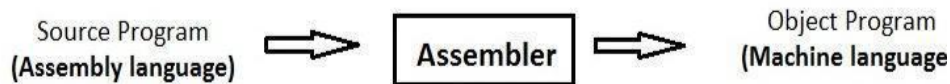
The program which translates the program written in a programming language by the user into an executable program is known as **language translator**. The program translated by language translator is understood by the hardware of the computer.

Types of language translators:

1. Assembler
2. Interpreter
3. Compiler

1. Assembler:

The software (set of programs) that reads a program written in assembly language and translates into a machine language is called as **assembler**.



2. Interpreter:

The software (set of programs) that reads a program written in high level language and **translates the program line by line** into a machine language is called as interpreter.

It translates only one statement of the program at a time.

The machine codes produced by interpreter are not saved.

An interpreter is a small program compared to compiler.

It occupies less memory space.



3. Compiler:

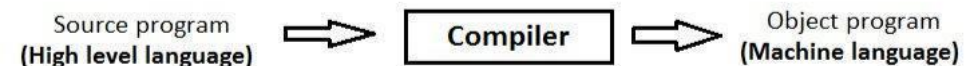
The software (set of programs) that reads a program written in high level language and **translates the entire program at once** into a machine language is called as **compiler**.

A compiler is more intelligent than an assembler.

It checks all kinds of limits, ranges, errors etc.

Its program run time is more.

The machines codes are saved permanently.



2) Write the types of operating system.

Types of Operating system

1. Single user/ single-tasking OS
2. Multiuser / multitasking OS
3. Mobile Operating system
4. Real time operating system(RTOS)
5. Multiprogramming operating system
6. Online processing
7. Batch processing operating system
8. Time sharing

3) Write the function of operating system. Functions of Operating system

Operating system is an integral part of the computer system. It is responsible for managing all the resources attached to a computer system. The operating system performs several functions.



1. Processor management

A program which is in execution is called a process (also called the job). The computer processor (CPU) executes each process. The entire process of executing a process by a processor in a computer system is called the process management.

The O.S handles the creation and deletion of processes and also manages the scheduling and synchronisation.

2. Memory management

Memory is one of the important resources in a computer which has to be managed efficiently. Every program has to be in memory for the CPU to execute it. Therefore the O.S must allocate the memory for an executing program & free it when it finishes. The process of allocation of memory for a process and deallocating when it is no longer required is called the memory management.

Managing the primary memory, sharing and minimising memory access time are the basic goals of the memory management.

3. Device management

All the electro-mechanical devices that are connected to the central processing unit (CPU) are called the peripheral devices. There are a variety of peripheral devices which are used for I/O operations, data storage and data communication.

The I/O peripheral devices have a certain characteristics which are

1. **Device speed:** The speed of I/O devices are vary from one to another.
2. **Data representation:** Data can be represented in different forms on different I/O devices.
3. **Device sharing:** The device can be shared or not shared among multiple programs running on the computer system.

Storage devices like hard disk can be shared while keyboard and mouse cannot shared.

4. **Data transfer:** Data can be transferred from one device to other for a specific operations.

4. File management

Information is a meaningful and important data in any business. And a computer stores such information in the form of files on a secondary storage device. The operating system is responsible for storing and retrieval of these files.

The file management includes creating and deleting both files and directories, allocating space for files, keeping back-up, securing, easy access to files.

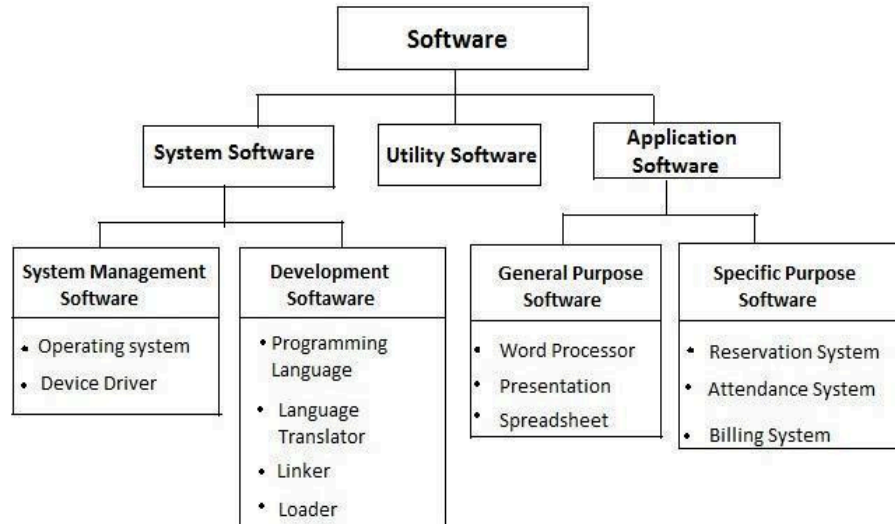
5. Storage management

It is controls all the storage operations means how the data or files will be stored into the computers & how the files will be accessed by the users. Operating system allows users to create, name, rename, read, delete the files and directories.

It also maintaining security to preventing unauthorised access to programs and data.

10MARKS QUESTIONS WITH ANSWERS

1) Explain the different types of software? Types of Software



System Software

System software is a set of programs to control all components of computer and to manage overall operations of a computer system. System software is used as a base to install and run all application software. It is an interface between user and computer hardware.



System software is divided into two major categories:

1. System management software
2. Development software

1. System development software

It includes an integrated system of programs, which manages the operations of the processor, controls input/output, manages storage resources and provides various support services.

Some common examples of system management programs are Operating system, device drivers.

Operating system:

It consists of programs, which controls, coordinates and manages the activities of the various components of a computer system.

Its function is to provide link between the computer hardware and the user. It provides an environment to run the programs, e.g., MS-DOS, Windows XP/ 7, UNIX, LINUX, Android.

Device drivers:

Software which is written with the objective of making a device functional when it is connected to the computer is called device driver. Every device, whether it is a printer, monitor, mouse or keyboard has a driver program associated with it for its proper functioning.

2. Developing Software

It is software which provides service required for the development and execution of application software.

Programming languages, language translator, loader, linker are required for the application software development.

Programming Languages

A programming language is an artificial language to express computation that can be performed by a computer. Programming languages are divided into two categories:

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Low Level Languages (LLL)

Low level languages are machine dependent. It is divided into two parts

Machine language

Assembly language

High Level Languages (HLL)

It is machine independent language and uses translator. It is also called source code. Some commonly used high level languages are C, C++, BASIC, PASCAL, and FORTRAN.

Language Translator

A language translator helps in converting programming languages into machine languages. There is different kind of language translators

Assembler

Interpreter

Compiler

Linker

A linker is a system program that links together several object modules and libraries to form a single and coherent program (executable).

Loader

Loader is a kind of system software, which is responsible for loading and relocation of the executable program in the main memory.

Utility Software

These programs perform tasks related to the maintenance of the computer system. These are the packages which are loaded into computer during time of installation of operating system.

They are used to support, enhance, expand and secure existing programs and data in the computer system.

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System utilities are mainly consists of the following functions.

Anti-Virus

Disk Cleaners

Application software

Application software is computer software designed to help the user to perform singular or multiple tasks. It is a set of instructions or programs designed for specific uses or applications that enable the user to interact with a computer.

There are two types of application software

1. General Purpose Software

2. Specific purpose software

2. General purpose software

General purpose software's are designed to perform general tasks.

i. *Word processing software:* It is a software program capable of creating, storing, and printing documents. Microsoft word is the popular word processing software

ii. *Presentation software:* presentation is the practice of showing and explaining the contents of a topic to an audience or learner visually. E.g., marketing managers use presentation graphics to present new marketing strategies to their superiors. **MS-PowerPoint** is the popular presentation software.

iii. *Spreadsheet software:* Spreadsheet is general purpose application software that lets us to create and store data in tabular form. **MS-Excel** is the popular spreadsheet software.

3. Specific purpose software

Specific purpose software's are designed to perform specific tasks.

Some of the specific purpose application software's are

Reservation system

Billing system

Attendance System

2) Explain the different types of programming language? Programming Languages:

Computer language used by programmers to write instructions that a computer can understand to do what the programmer or the computer user wants. Languages consist of written symbols and expressions that the user can use to communicate his ideas or logics, thoughts, feelings etc. These are the platform to develop the programs.

Programming languages are classified into 2 types:

1. Low level languages
2. High level languages

1. Low level languages:

The low-level languages are:

Machine language

Assembly language

Machine language: Machine language is the language that is directly understood by the computer. It doesn't need any translator program. We also call it machine code and it is written in binary digits 0's and 1's. It is difficult to be read and understand by humans. It is considered to be first generation language (1GL).

Advantages:

Programs are run very fast because no translator program is required for the CPU.

Disadvantages:

It is machine dependent.

User can't modify and debug the program very easily.

Assembly language: Assembly language contains symbolic codes to represent any instructions. Each instruction consists of operational code and the variable to represents the address of the memory location. It is not directly understood by the computer. It requires ***assembler*** to translate the assembly program into machine language. It is considered to be second generation language (2GL).

Advantages:

User can remember the symbolic codes.

It is quite easy to understand and develop the programs.

User can modify and debug the programs very easily.

Disadvantages:

It is machine dependent.

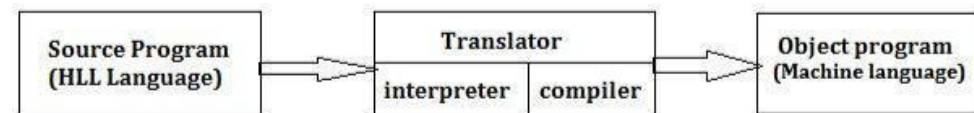
It needs the translator program, i.e. **assembler**.

2. High-level languages:

High level languages are English like languages. The elements of these languages are alphabets, digits, special symbols.

High level languages are problem-oriented language because the instructions (programs) are suitable for solving a particular problem. It is machine independent. Programs written in a high level language must be translated into machine language by a **compiler** or **interpreter**.

The compiler and interpreter are two translator programs that are used to translate the high level language programs into the machine language.



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Some High Level Languages and their Application Areas

Language	purpose	Field of Specification
BASIC (Beginners All-Purpose Symbolic Instruction Code)	General	Teaching , Training , Science
Pascal	General	Education
C	General and Specific	Education, system programming, embedded system development
COBOL (Common Business Oriented language)	Specific	Business Data Processing
FORTRAN (Formula Translation)	Specific	Scientific applications
C++	Specific	Object oriented programming
JAVA	Specific	Internet Programming

Advantages

- Easy to read and understand
- Easy to write, modify and debug.
- It is machine Independent language.

Disadvantages:

- It requires a translator.
- It doesn't execute directly on computer.

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- 3) Explain the different types of internal and external commands in MS DOS.

MS-DOS

This is an acronym for Micro Soft Disk Operating System. This was developed by Bill gates of Microsoft Corporation, USA. DOS is a command line interface based operating system. MS-DOS 1.0 was released in 1981 for IBM computers. DOS commands are classified into two types:

1. Internal commands
2. External commands

Internal Commands

Internal commands are built into the operating system as part of a file called COMMAND.COM.

They are loaded into the memory whenever you switch on your computer. When you type an internal command, MS-DOS performs it immediately.

DIR-command

This displays the list of directories and files. Type **DIR** at **C:/>** prompt and then press the ENTER key.

Syntax : **C:\> DIR**

C:\>DIR/p – Displays a list of directories and files page-wise
C:\>DIR/w – Displays a list of directories and files width-wise
C:\>DIR/a – Displays all directories

C:\>DIR/l – Displays a list of directories and files in lowercase letters

CLS-Command

This command is used to clear the screen.

C :> CLS

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DATE-Command

This is used to display the current date or set the new date.
Type the DATE command

C:\> DATE

The current date is: Wed 10/10/2016

Enter the new date: (mm-dd-yy)

TIME-Command

This is used to display the current time or set the new time.
Time the TIME command

C:\> TIME

And press ENTER key.

The current time is: 11:26:55.34

Enter the new time:

VER-Command

It displays current version of operating system

Syntax: **C:\>Ver**

COPY CON Command

Copy con command is used to create new text file.

Syntax: **C:\> copy con <file name>**

Here type the file contents

To save and close the file, Press (ctrl+z) or press F6 function key.

Example: C:\> copy con kck.txt

Hello students!

Wish you happy Learning..

Press Ctrl+z or F6 key on keyboard.

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TYPE-Command

It is used to display or read the file contents.

Syntax: **C:\> TYPE filename**

Example:

C:\> TYPE kck.txt

Hello Students!

Wish you happy Learning..

REN-Command

It is used to change the file name.

Syntax: **C:\> REN <old name> <new name>**

Where, old name is an existing filename.

Example: C:\> REN kck.txt col.txt

MKDIR-Command

This is used to create new directories.

Syntax: **C:\> MKDIR dirname**

Example: C:\> MKDIR prabhu

CD-Command

Change directory command is used to change from one directory to another.

Syntax: **C:\> CD dirname**

Example: C:\> CD prabhu

C:\prabhu> (now you are in prabhu directory)

RD-Command

This command is used to remove the directories. It deletes only the empty directory.

Syntax: **C:\> RD dirname**

Example: C:\> RD prabhu

COMPUTER FUNDAMENTALS

COPY-Command

This is used to copy one file to another. That is, it duplicates an existing file.

Syntax: **C:\> copy file1 file2**

Example: C:\> copy kck.txt college.txt

MOVE Command

This command is used to transfer file to any directory.

Syntax: **C:\> MOVE filename Destination**

Example: C:\> Move kck.txt D:\

DEL-Command

This command is used to erase or delete a file from disk.

Syntax: **C:\> DEL filename**

Example: C:\> DEL kck.txt

External Commands

Files with the extension COM or EXE are external commands. Because these commands are commands and are not built into the operating system.

ATTRIB-Command

This is used to view or change the attributes associated with files such as read only, hidden, and system files.

- +H** To make Hidden file(s)
 - +R** To make Read-only file(s)
 - H** To remove Hidden file setting
 - R** To remove Read-only file setting
-

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Examples

- i) C:\> ATTRIB +R biodata.doc
- ii) C:\> ATTRIB +H college.txt
- iii) C:\> ATTRIB -R kck.doc
- iv) C:\> ATTRIB -H file.txt

EDIT-Command

This command is used to create a file and also to make changes or modify the file contents.

Syntax: **C:\> EDIT filename**

Example: C:\> EDIT kck.txt

FORMAT-Command

This is used to format the disks for use with DOS. If any information is present in drive, that will be erased.

Syntax: **C:\> FORMAT drivename**

Example: C:\> FORMAT D:

DISKCOPY-Command

This is used to copy all files with its directory structure from one floppy disk into another floppy disk. This command is restricted only to floppy disks.

Syntax: **C:\> DISKCOPY drive: drive:**

Example: C:\> DISKCOPY A: C:

CHKDSK-Command

This command checks the disk directories, files and reports the disk and memory status.

Syntax: **C:\> CHKDSK drive: pathname**

Example: C:\> CHKDSK A: files

COMPUTER FUNDAMENTALS

UNIT III : WINDOWS

2MARKS QUESTIONS WITH ANSWERS

1) **What is windows?**

Windows is a computer operating system developed by Microsoft Corporation. Windows is a graphical user interface (GUI) operating system, which manages the hardware and software resources of a computer.

2) **What is Desktop?**

Desktop is first screen we see after we switch on the computer. This is the large background area of the Windows screen and icons, menus, and dialog boxes appear.

3) **What is taskbar?**

Taskbar is the horizontal line located at the bottom of the desktop with start button and some indicators. It is especially used for switching between opened programs and folders.

4) **What is icon?**

An icon is a small colorful graphical picture that represents an object like a file, folder, program or any hardware components of the computer.

5) **What is recycle bin?**

Recycle bin makes it easy to delete and undelete files and folders. When a file or folder is deleted from any location, windows store it in the recycle bin.

6) **What is file?**

File is the collection of related data. It is an electronic record of document, programs etc. that has been named and stored in the computer.

7) **What is folder?**

A folder is a location where you can store files and subfolders.

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8) **What is control panel?**

Control panel contains a number of icons used to perform different settings of the computer.

5MARKS QUESTIONS WITH ANSWERS

1) **What are the features of windows?**

New look and improved interface

Fast user switching

Remote desktop

Desktop cleanup wizard

Plug and play support for hardware

Better File and Folder Management.

Support major networking protocols.

Better security.

2) **How to create a new file in windows.**

Step 1: Specify the location where you want create a new file

Step 2: Click **Right side button** on mouse

Step 3: After open one new menu. Select **New**

Step 4: **Choose** which type of file you want to create

3) **How to create a new folder in windows.**

Step 1: **Specify** the location where you want to create a new folder

Step 2: Click **right side** button on the mouse

Step 3: Choose **New**

Step 4: Select **Folder**

Step 5: A highlighted folder icon called [**New Folder**] will appear

Step 6: Change the name of new folder

Step 7: Finally press **<ENTER >** key on keyboard.

4) Write steps to **Copying folders or files.**

Step 1: Choose the file or folder which you want to copy

Step 2: Click **right side button** on the mouse Pop-up menu will appear

Step 3: Select **copy** for copying

Step 4: Specify the location where you to copy

Step 5: Click **right side** button on the mouse Pop-up menu will appear

Step 6: Select **paste**

5) Write steps to **Moving folders or files.**

Step 1: Choose the file or folder which you want to move.

Step 2: Click **right side button** on the mouse Pop-up menu will appear

Step 3: Select **cut** for moving

Step 4: Specify the location where you to move

Step 5: Click **right side** button on the mouse Pop-up menu will appear

Step 6: Select **paste**

6) Write steps to **Renaming folders or files.**

Step 1: Choose the file or folder which you want to rename.

Step 2: Click **right side button** on the mouse Pop-up menu will appear

Step 3: Select **Rename.**

Step 4: Change the new name as your requirement.

Or

- Choose the file or folder which you want to rename.
- Press **F2** key on keyboard.

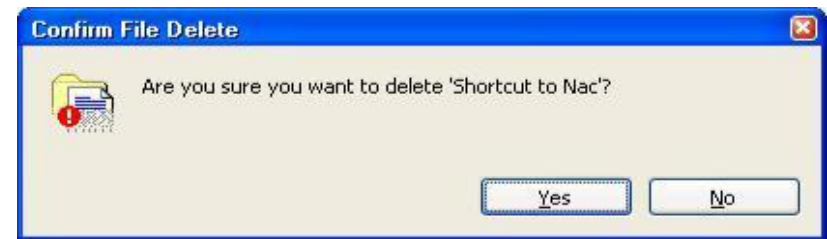
7) Write steps to **Delete the file or folder**

Step 1: Choose the file or folder which you want to delete.

Step 2: Click **right side button** on the mouse Pop-up menu will appear

Step 3: Select **Delete.**

Step 4: **Dialog box** will appear



Step 5: Click **yes** on dialog box. Deleted item will goes to **Recycle bin.**

10MARKS QUESTIONS WITH ANSWERS

1) What is start button? Explain different items in start menu.

Start button is located at left side bottom of the screen. Click once on the start button to open a menu of choices.


ITEMS OF START MENU.

1. All Programs
2. My computer
3. My Documents
4. Control panel
5. Search
6. Help & support
7. Run
8. Shutdown

The current user name appears at the top of the Start menu.

This area displays the programs you use most often. If a program doesn't appear here you can find it under "All Programs."

Lists all the programs that are installed on your computer.



The right side of the Start menu gives you quick access to your documents, files, and system settings. You can also find three very important icons here that were found on the Desktop in previous versions of Windows:

- My Documents**
Provides a convenient location to save your files.
- My Computer**
Displays all the available drives on your computer.
- My Network Places**
Displays the network locations available on your computer.

is you use most often. If a
ave to look under "All

nstalled on your computer,
h several submenus in
g for.

your files. In previous
was located on the Windows

on.

your photos and pictures.

your music files.

, and files on your
lows, My Computer was

on the network. In
work Places was located on

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ser can log on to your

irting your computer.

COMPUTER FUNDAMENTALS

UNIT IV : MICROSOFT WORD

2MARKS QUESTIONS WITH ANSWERS

- 1) What is word processor?
Word processor is a software program capable of creating, storing and printing documents.
- 2) Write any two word processing packages.
MS Word, Norton editor, Word perfect, Kingston WPS, Office Libre.
- 3) What is MS word?
Microsoft word is word processor software. It is used to create documents, letters. Invoices, prepare bills etc.. Storing and printing.
- 4) What is Save and Save As?
Save command is used to save document with its current name and its current location. It updates a saved document.
Shortcut key is: Ctrl+S

Save As command is used to save a document for the first time with a new name or to save a document in a different location.
Shortcut key is: F12
- 5) What are Header and Footer?
A header is the top margin of each page, and footer is the bottom margin of each page. Headers and footers are useful for including material that you want to appear on every page of a document such as your name, the title of the document, or page numbers.
- 6) What is Macro?
A macro is a shortcut for executing a series of instructions. A macro records your keystrokes as you type, and whenever you need to repeat the same keystroke again, you can call macro.

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- 7) What is mail merge?
Mail merge is the process of transferring selected information from one document to another document. It helps to create the database of all business contacts, friends, relatives, colleagues etc., and these databases are automatically merged with the main body of the letter.
- 8) Write the Shortcut keys for cut, copy and paste.
Cut: CTRL + X
Copy: CTRL + C
Paste: CTRL + V
- 9) Write the Shortcut keys for save, save As, print.
Save: Ctrl + S
Save As: F12
Print: Ctrl + P

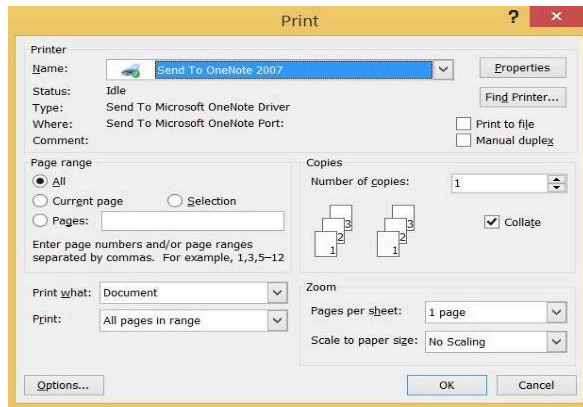
5MARKS QUESTIONS WITH ANSWERS

- 1) Write steps to create new document in MS Word.
Step 1: Click on **File** menu
Step 2: Select **New** option
Step 3: Select **Blank Document** icon
Step 4: Click on **Ok** button
- 2) Write steps to open document in MS Word.
Step 1: Click on **File** menu
Step 2: Select **Open** option
Step 3: Select **Drive & Folder Name**
Step 4: select the **Filename**
Step 5: Click on **Open** button

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- 3) Write steps to save document in MS Word.
- Step 1: Click on **File** menu
 - Step 2: Select **Save As** option
 - Step 3: Select **Drive & Folder Name**
 - Step 4: Type the **Filename or Document Name**
 - Step 5: Click on **Save** button
- 4) Write steps to print document in MS Word.
- Step 1: Click on **File** menu
 - Step 2: Select **Print** option The dialogue box will appear



- Step 3: Select the **PrinterName** from the List box
- Step 4: Select the desired **Page Range** like **All**, **Current page**, **Pages**, **Selection**
- Step 5: Specify the **Number of copies** to print
- Step 6: Click on **Ok** button

Some important shortcut keys

Open a document: Ctrl + O	Create a new document: Ctrl + N
Save the current document: Ctrl + S	Save As: F12
Print: Ctrl + P	Bold: Ctrl + B
Italics: Ctrl + I	Underline: Ctrl + U
Undo: Ctrl + Z	Redo: Ctrl + Y
Help: F1	Cut: Ctrl+ X
Copy: Ctrl+ C	Paste: Ctrl+ V
Spelling & grammar: F7	Find: Ctrl + F
	Replace: Ctrl + H

- 5) What are the features of MS word?

Features of MS Word

- The contents of text can be deleted, added or modified easily.
- It helps in setting margins, line spacing, alignments of text or paragraph.
- It provides various fonts and styles ,like Font face, size, color.
- Cut , copy and paste options are available
- **We can set header and footer**
- It provides various Bullets and numbering option.
- It provides spelling and grammar option.
- We can insert tables , pictures easily.
- Find and replace option .
- It provides facility Mail merge and macro option
- MS word allows to type different languages like kannada, Hindi, Tamil..etc
- Ms word has password protection to protect the document from unauthorized access.

10MARKS QUESTIONS WITH ANSWERS

1) Explain Mail Merge in MS word.

Step 1: Click on **Tools** menu

Step 2: Select **Letters and Mailings** option

Step 3: Select **Mail Merge** option

The Mail Merge taskpane appears



Step 4: Select **Letters** option

Click Next: Starting document

Step 5: Select **Use the current document** option

Click Next: Select recipients

Step 6: Select **Type a New List** option

Step 7: Click on **Create** option

The **New Address List** dialog box appears



Step 8: Enter the necessary data.

Click **New Entry** option to enter another record

Step 9: Click on **Next: Write your Letter**

Step 10: Click on **More Items** option

Insert Merge Field dialog box appear

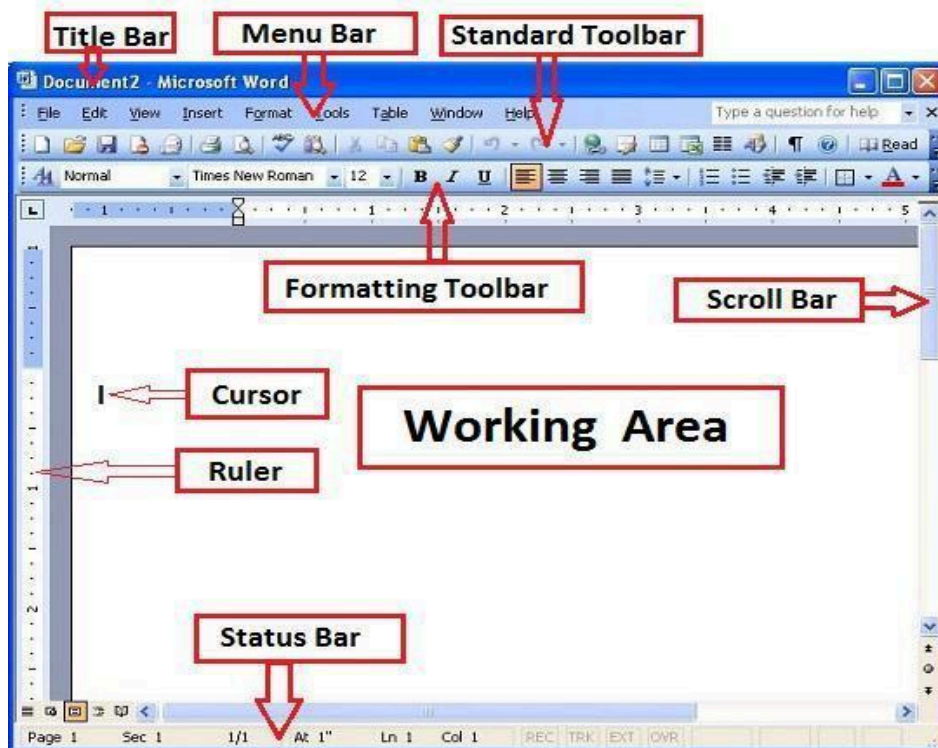


Step 11: Click **Next: Preview your letters** option

Step 12: Click **Next: complete the merge** option

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2) Explain main parts of MS Word.



Title Bar:

Title Bar appears at the top of the screen. It displays the name of the program and name of the document. It has minimize, maximize and closing buttons.

Menu Bar:

Menu Bar appears below the Title Bar. It displays menus such as File, Edit, View, Insert, Format, Tools, Table, Windows, and Help.

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Standard Toolbar:

Standard Toolbar consists of buttons for the most commonly used and shortcut commands such as New, Save, Open and Print.

Formatting Toolbar:

Formatting Toolbar Consists of buttons for accessing commonly used formatting features and commands such as Font face, Font Size, Font color, Bold, Italic, Underline, alignments, etc.

Ruler:

Ruler measures the width and shows the margins.

Scroll Bar:

Scroll Bar is used to movements of document. There are two Scroll Bars.

Horizontal Scroll bar – It is used for movements of page left or right.

Vertical scroll bar – It is used for movements of page up or down.

Cursor:

Cursor is the blinking vertical line in the work Area that shows the location.

Status Bar:

Status Bar displays information about the cursor position. It shows page number, the column number and the line number.

COMPUTER FUNDAMENTALS

UNIT V: MICROSOFT EXCEL

2MARKS QUESTIONS WITH ANSWERS

1) What is MS Excel?

MS Excel is a spreadsheet program where one can record data in the form of tables. It is easy to analyze data in an Excel spreadsheet.

Microsoft Excel is a spreadsheet program used to record and analyze numerical and statistical data.

2) What is spread sheet?

A **spreadsheet** is a file that exists of cells in rows and columns and can help arrange, calculate and sort data. Data in a **spreadsheet** can be numeric values, as well as text, formulas, references and functions.

3) Write any two spreadsheet packages.

MS Excel, Lotus 1-2-3, iWork numbers, LibreOffice

4) What is workbook and worksheet?

Workbook is an excel file where the user can store his data. Each workbook consists of several worksheets.

Worksheet is a file made of rows and columns that help sort, organize, and arrange data efficiently, and calculate numerical data.

5) What is cell?

A *cell* is a rectangular box that occurs at the intersection of a vertical column and a horizontal row in a worksheet.

Columns are identified by **letters (A, B, C.....)**

Rows are identified by **numbers (1, 2, 3.....)**

6) How many rows and columns in ms excel 2003?

Rows: 65536

Columns: 256

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7) What is formula?

A **formula** is an expression that operates on values in a range of cells. For example, =A1+A2+A3.

8) What is chart in MS Excel?

A chart is graphical representation of spreadsheet. Chart gives a clear picture about the data, which makes it easy to understand.

Examples: Column chart, pie chart, Line chart etc...

5MARKS QUESTIONS WITH ANSWERS

1) Write steps to create new workbook in MS Excel.

Step 1: Click on **File** menu

Step 2: Select **New** option

Step 3: Select **Blank Workbook** icon

Step 4: Click on **Ok** button

2) Write steps to open workbook in MS Excel.

Step 1: Click on **File** menu

Step 2: Select **Open** option

Step 3: Select **Drive & Folder Name**

Step 4: select the **Filename**

Step 5: Click on **Open** button

3) Write steps to save workbook in MS Excel.

Step 1: Click on **File** menu

Step 2: Select **Save As** option

Step 3: Select **Drive & Folder Name**

Step 4: Type the **Filename or Workbook Name**

Step 5: Click on **Save** button

4) What are the features of MS word?

Features of MS Excel

1. Add Header and Footer

MS Excel allows us to keep the header and footer in our spreadsheet document.

2. Find and Replace Command

MS Excel allows us to find the needed data (text and numbers) in the workbook and also replace the existing data with a new one.

3. Password Protection

It allows the user to protect their workbooks by using a password from unauthorized access to their information.

4. Data Filtering

Filtering is a quick and easy way to find and work with a subset of data in a range. A filtered range displays only the rows that meet the criteria you specify for a column. MS Excel provides two commands for filtering ranges: AutoFilter; Advanced Filter;

5. Data Sorting

Data sorting is the process of arranging data in some logical order. MS Excel allows us to sort data either in ascending or descending order.

6. Built-in formulae

MS Excel has got many built-in formulae for sum, average, minimum, etc. We can use those formulae as per our needs.

7. Create different charts

MS Excel allows us to create different charts such as bar graph, pie-charts, line graphs, etc. This helps us to analyze and compare data very easily.

8. Automatically edits the result

MS Excel automatically edits the result if any changes are made in any of the cells.

9. Formula Auditing

Using formula auditing we can graphically display or trace the relationships between cells and formulas with blue arrows. We can trace the precedents (the cells that provide data to a specific cell) or the dependents (the cells that depend on the value in a specific cell).

10MARKS QUESTIONS WITH ANSWERS

1) Explain different types of functions in MS Excel.

A **function** is a **predefined formula** that helps perform common mathematical functions.

Syntax : **=function(Value,.....)**

Example: **=sum(2,3,4,5)**

There are many functions in MS excel

1. Mathematical or Arithmetic funtions

1) ROUND()

This function rounds a number to a specified numbers of digits

Syntax: = **ROUND(number, num_digits)**

Example: =ROUND(3.765, 1) .., returns 3.8

2) SQRT()

This function returns the square root of a specified number.

Syntax: = **SQRT(number)**

Example: = **SQRT(16)**.. Returns 4

3) SUM()

Adds all the numbers in a range of cells.

Syntax: =**SUM (number1, number2 ...)**

Example: =SUM(1,2,4,6,8) .., returns 21

4) ABS()

Returns the absolute value of a number.

Syntax: =**ABS(number)**

Example: =ABS(-23) .., returns 23

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5) PRODUCT()

Multiplies all the numbers given as arguments and returns the product.

Syntax: **=PRODUCT(number1,number2,...)**

Example: **=PRODUCT (4,5) ..** returns 20

2. Statistical Functions

1) MAX()

Returns the largest value in a set of values. Syntax:

=MAX(number1,number2,...)

Example: **=MAX(3,7,32,45,21) ..**
returns 45

2) MIN()

Returns the smallest value in a set of values. Syntax:

=MIN(number1,number2,...) Example:

=MIN(3,7,32,45,21) .. returns 3

3) COUNT ()

Counts the number of cells that contain numbers and also numbers within the list of arguments.

Syntax: **=COUNT(value1,value2,...)**

Example: **=COUNT(3,7,32,45,21) ..** returns 5

4) AVERAGE()

Returns the average of the arguments.

Syntax:

=AVERAGE(number1,number2,...)

Example: **=AVERAGE(10,20,30,40) ..** returns 25

3. Logical functions

1) AND()

Returns TRUE if all its arguments are TRUE; returns FALSE if one or more argument is FALSE.

Syntax: **=AND(logical1,logical2, ...)**

Example: **= AND(3<5, 8 = 8) ..** returns TRUE

2) OR()

Returns TRUE if any argument is TRUE; returns FALSE if all arguments are FALSE.

Syntax: **=OR(logical1,logical2,...)**

Example: **= OR(3<5, 8 = 9) ..** returns TRUE

3) NOT()

Reverses the value of its argument.

Syntax: **=NOT(logical)**

Example: **=NOT(3<5) ..** returns FALSE

4. Date and Time Functions

1) DATE ()

Returns the sequential serial number that represents a particular date.

Syntax: **=DATE(year,month,day)**

Example: **=DATE(2021,3, 12) ..** retruns 3/12/2021

2) NOW()

Returns the serial number of the current date and time.

Syntax: **=NOW()**

Example: **=NOW() ..** returns 3/15/2021 10:11

3) TODAY()

Returns the serial number of the current date.

Syntax: **=TODAY()**

Example: **=TODAY()**., returns **3/15/2021**

2) Explain the different types of charts in MS Excel.

A chart is graphical representation of spreadsheet. Chart gives a clear picture about the data, which makes it easy to understand.

Types of charts

1)Column charts

2)Line charts

3)Pie charts

4)Bar charts

10)Radar charts

5)Area charts

Stock charts

6)XY (scatter) charts

7)Surfacecharts

8)Doughnutchart

9) Bubble charts

6

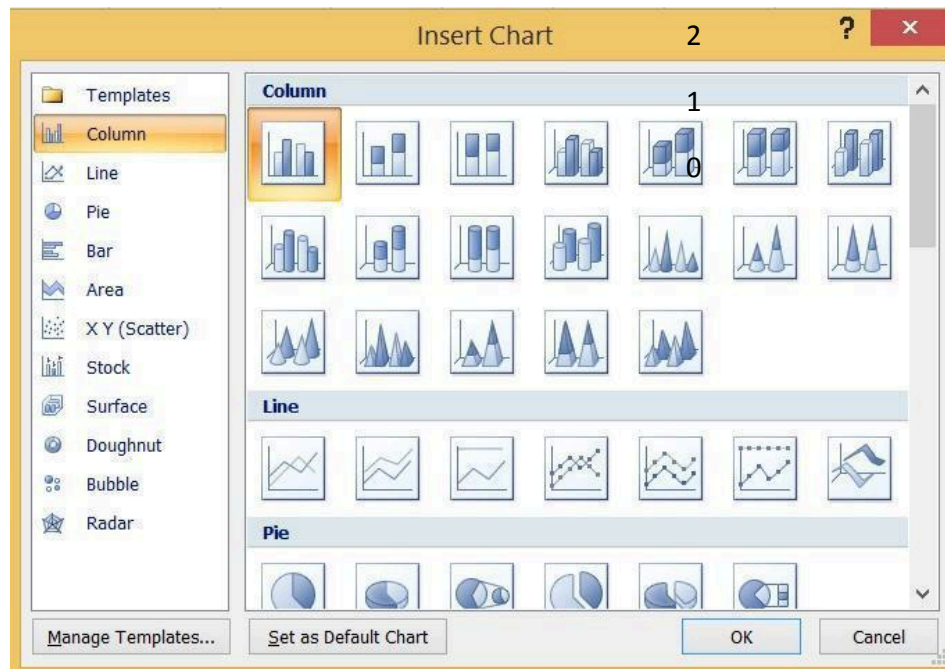
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11)

4

3

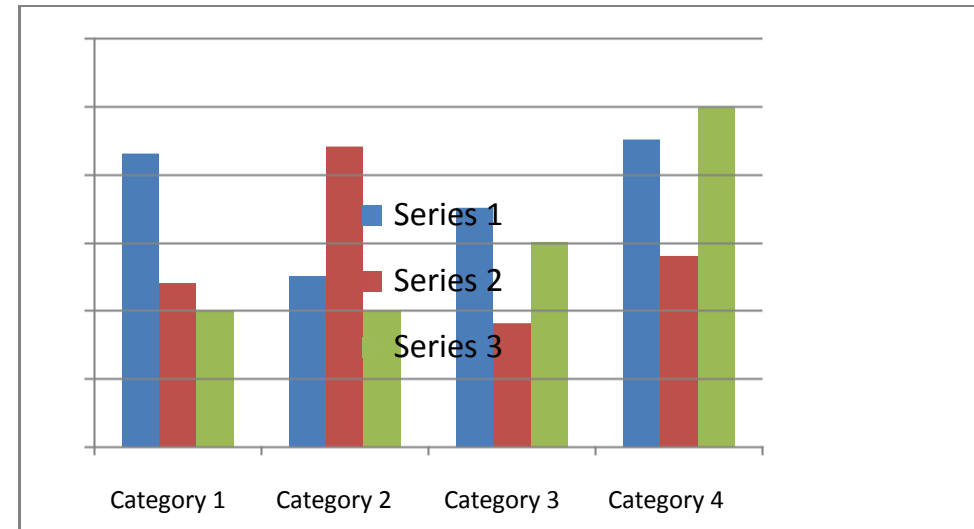
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1)Column charts

Column charts are useful for showing data changes over a period of time or for illustrating comparisons among items.

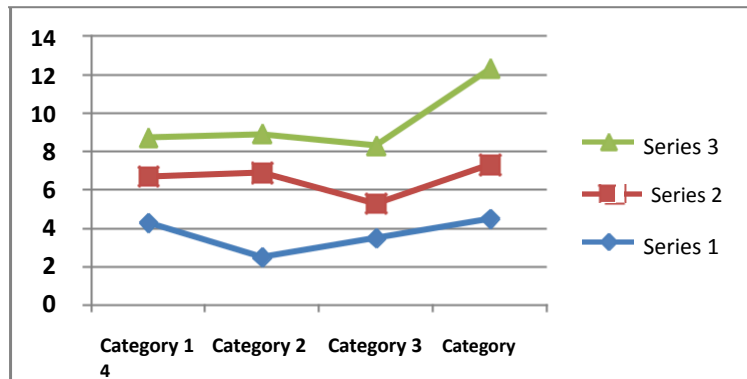
In column charts, categories are typically organized along the horizontal axis and values along the vertical axis.



2)Line charts

Line charts can display continuous data over time, set against a common scale, and are therefore ideal for showing trends in data at equal intervals.

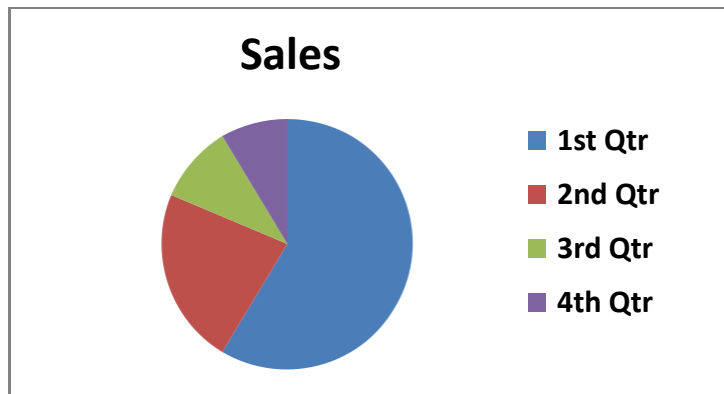
In a line chart, category data is distributed evenly along the horizontal axis, and all value data is distributed evenly along the vertical axis.



3) Pie charts

Pie charts show the size of items in one data series proportional to the sum of the items

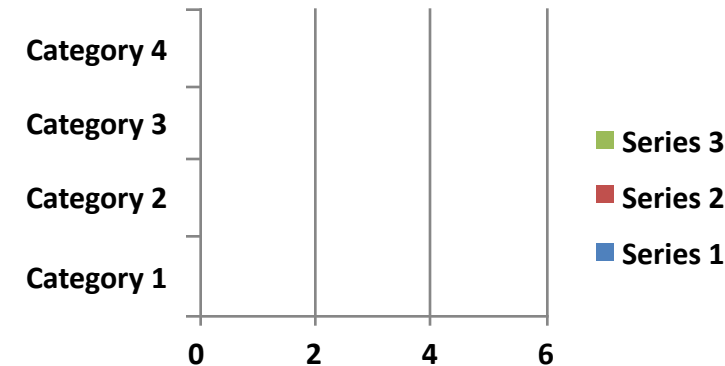
The data points in a pie chart are displayed as a percentage of the whole pie.



4) Bar charts

Data that is arranged in columns or rows on a worksheet can be plotted in a bar chart.

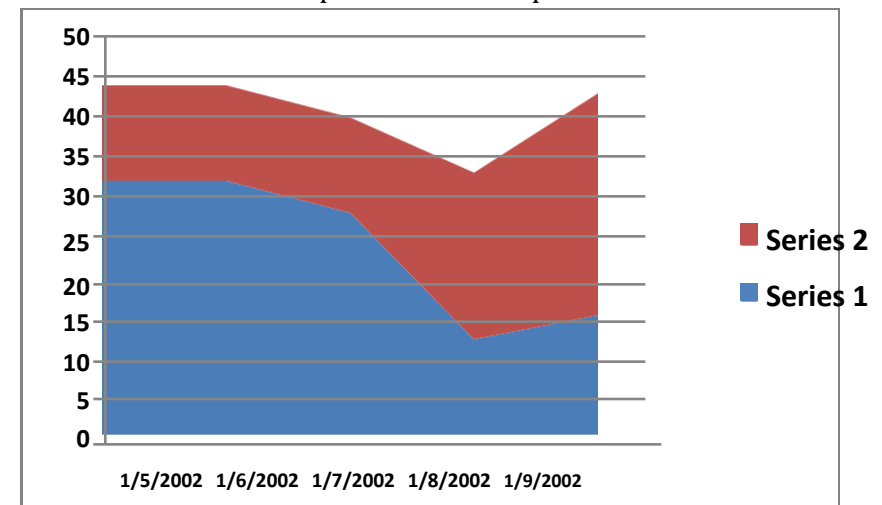
Bar charts illustrate comparisons among individual items.



5) Area Charts

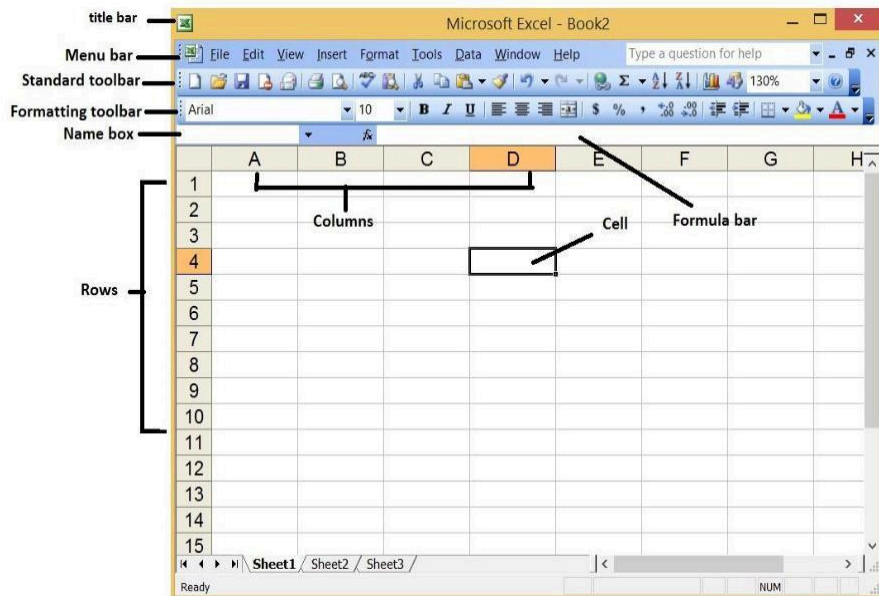
Area charts emphasize the magnitude of change over time, and can be used to draw attention to the total value across a trend.

For example, data that represents profit over time can be plotted in an area chart to emphasize the total profit.



COMPUTER FUNDAMENTALS

3) Explain Main Parts of MS Excel?



Title Bar:

Title Bar appears at the top of the screen. It displays the name of the program and name of the workbook. It has minimize, maximize and closing buttons.

Menu Bar:

Menu Bar appears below the Title Bar. It displays menus such as File, Edit, View, Insert, Format, Tools, Table, Windows, and Help.

Standard Toolbar:

Standard Toolbar consists of buttons for the most commonly used and shortcut commands such as New, Save, Open and Print.

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Formatting Toolbar:

Formatting Toolbar Consists of buttons for accessing commonly used formatting features and commands such as Font face, Font Size, Font color, Bold, Italic, Underline, alignments ., etc.

Scroll Bar:

Scroll Bar is used to movements of spreadsheet.

There are two Scroll Bars.

Horizontal Scroll bar – It is used for movements of spreadsheet left to right.

Vertical scroll bar – It is used for movements of spreadsheet up or down.

NameBox:

This shows the address of the active cell.

Columns

Each Excel spreadsheet contains 256 columns. Each column is named by a letter or combination of letters.

Rows

Each spreadsheet contains 65,536 rows. Each row is named by a number

Cell

A cell is a rectangular box that occurs at the intersection of column and row in a worksheet.

Formula bar

The Formula bar displays information entered—or being entered as you type—in the current or active cell. The contents of a cell can also be edited in the Formula bar.

UNIT VI: MICROSOFT POWERPOINT

2MARKS QUESTIONS WITH ANSWERS

1) What is Microsoft powerpoint?

Microsoft PowerPoint is a software application that is particularly used to present data and information by using text, diagrams with animation, images, and transitional effects, etc in the form of slides.

2) What is presentation?

A presentation is the process of communicating a topic to an audience. It is typically a demonstration, introduction, lecture, or speech meant to inform, inspire, to present a new idea or product.

3) What is slide?

A slide is a single page of a presentation. The slide contains the information can include text, pictures, charts, video, and sound.

4) What is layout?

Layout is the specific arrangement of text and images on a slide. Layouts consisting of simple titles and text. It can include animation, sounds, and other multimedia objects in your layout.

5) What is transition?

A slide transition is the visual effect that occurs when you move from one slide to the next slide during a presentation. You can control the speed, add sound, and customize the look of transition effects.

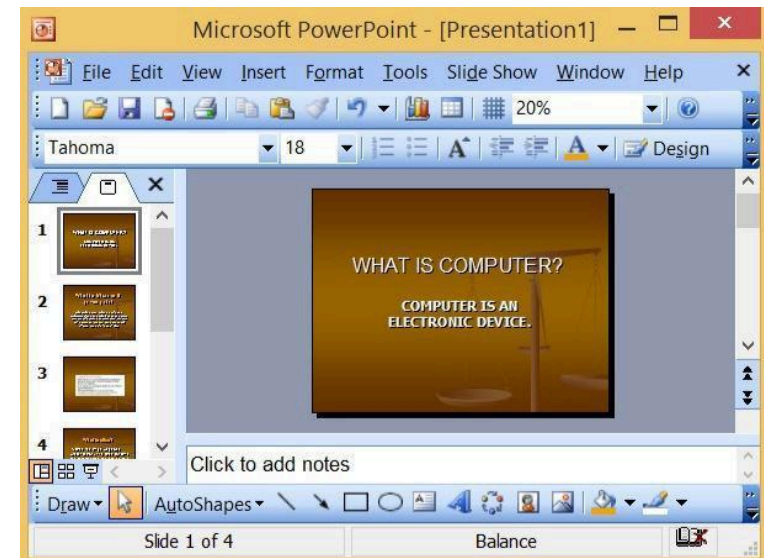
5MARKS QUESTIONS WITH ANSWERS

1) Explain different types of views.

PowerPoint supports multiple views to allow users to gain the maximum from the features available in the program. Each view supports a different set of functions and is designed accordingly.

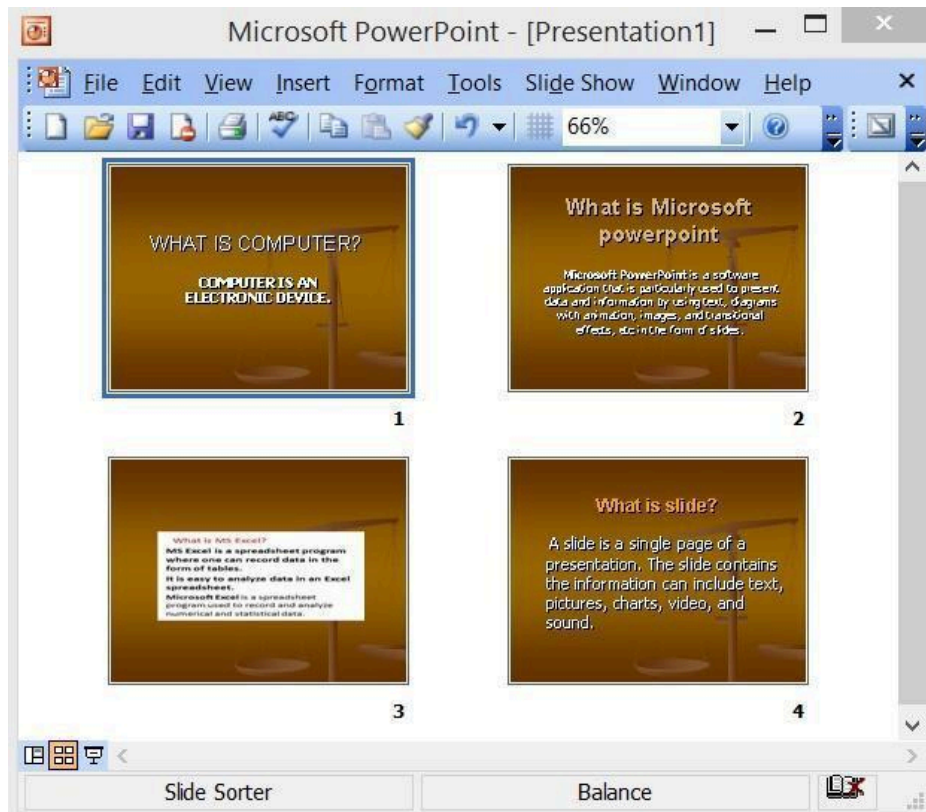
1. Normal View

This is the default view in PowerPoint and this is primarily used to create and edit slides. You can create/ delete/ edit/ rearrange slides, add/ remove/ modify content and manipulate sections from this view.



2. Slide Sorter view

This view uses the entire PowerPoint window to display thumbnails of your slides. You can use this view to organize your presentation by dragging and dropping the slides into a preferred sequence.



3. Slide Show View

Slide Show view occupies the full computer screen, exactly like an actual presentation. In this view, you see your presentation the way your audience will. You can see how your graphics, timings, movies, animated effects, and transition effects will look during the actual presentation.

