



JAGRAN  
**Josh**

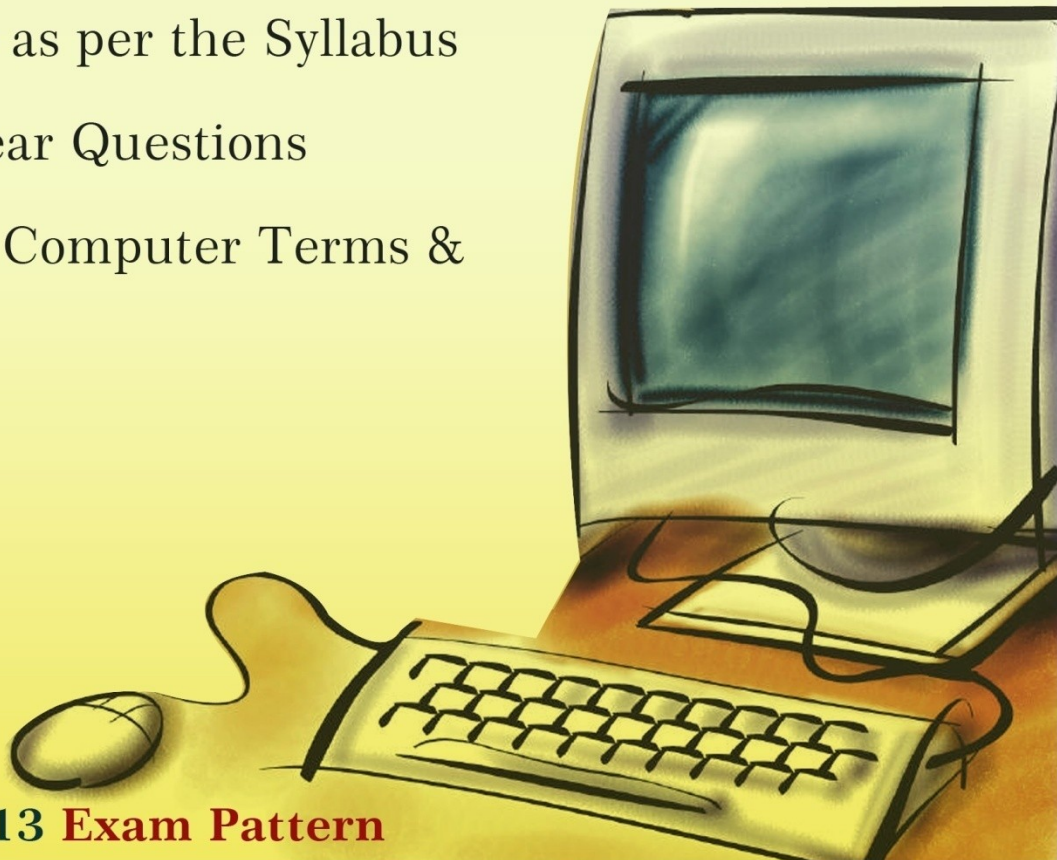
**Simplifying Test Prep**

# **IBPS Bank PO Exam 2013**

## **Computer Knowledge**

### **Inside the E-Book**

- All Important Topics as per the Syllabus
- IBPS PO Previous Year Questions
- Keyboard Shortcuts, Computer Terms & Abbreviations



**As Per IBPS PO/MT 2013 Exam Pattern**

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## Preface

Jagranjosh's IBPS Bank PO Exam 2013: Computer Knowledge eBook is a perfect blend of questions and concepts of Computer Knowledge, which will enable the students to score well in IBPS PO Written Examination 2013 to be held on 19 October 2013, 20 October 2013, 26 October 2013, and 27 October 2013.

IBPS Bank PO Exam 2013: Computer Knowledge eBook is prepared by Jagranjosh experts with true zeal and efforts. We have put in its extreme efforts in bringing out perfect preparation package by amalgamating all ingredients of concepts and terminology of Computers and Networking.

Our IBPS Bank PO Exam 2013: Computer Knowledge eBook will allow the candidates to get used to the time limit set for the examination and accordingly manage time.

The IBPS Bank PO Exam 2013: Computer Knowledge e Book includes

- All Important Topics as per the Syllabus
- IBPS PO Previous Year Questions
- Keyboard Shortcuts, Computer Terms & Abbreviations used in Computer World

Jagranjosh's IBPS Bank PO Exam 2013: Computer Knowledge eBook is a remarkable adaptation in training the students for IBPS Bank PO Exam 2013. All the concept of this e book are reader-friendly and easily understandable. The students will feel more convinced on their preparation skills after completion of the book and this will enhance their overall performance at the time of the examination.

Our team at Jagranjosh.com wishes all the students appearing for the examination.

All the Best!

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## Chapter: Fundamentals of Computer

Computer is an electronic machine, which takes information as input, process it and controls the operation, which could be expressed in logical forms.

### PRIME FUNCTIONS OF COMPUTER

- Accepts data as input
- Processes data processing
- Gives output
- Store the output for further use

**Father of Computer:** Charles Babbage

### Parameters to Judge Power of Computer

- Speed
- Reliability
- Storage

### TYPES OF COMPUTER

The distinctive types of Computers are as follows:

- **Micro Computers**

Personal Computer is also called Micro Computer, which is available in many sizes and shapes. Their shapes and sizes vary from tiny Personal Digital Assistant to the big computer towers. The range of Personal Computer includes Palmtop (PPC), Laptop, Handheld (HPC) etc.

- **Mini Computer**

These computers are more powerful as compares to Micro Computers. They have high memory, good processing speed. It is also used as server in many applications. It is multiprocessing system capable to support 4 to 200 users simultaneously. It is used to carry out tasks like Engineering and Computer Aided Designs.

- **Mainframe Computer**

Mainframe computers have high memory and processing speed due to which, it is considered as heart of computer network that enable a large number of people to work at same time. These type of computers are used for large scale computing

- **Super Computer**

Super Computers are very powerful and high performance machine, which are ideally used for complex applications and scientific computations. Some examples of Super Computers are EKA, SAGA-220, Anurag.

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## COMPONENTS OF COMPUTER

A computer system consists of various functions that include:

- **Input Unit**

An input is anything that we tell the computer to process. It is provided in form of data, program, instructions, command etc. Some input devices are keyboard, pointing devices (Mouse & Trackball), lightpen, Joystick, Scanner, and Barcode Reader

- **Central Processing Unit**

Central Processing Unit processes the input by manipulating the information and also performs all processing work of computers. Its also control all the parts of computer due to which, it is called the brain of computer.

- **Memory Unit**

It is one of the vital components of computer, which stores data, calculations and results into it. It transfer data to ALU and may be volatile or non volatile in nature.

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## TYPES OF MEMORY

- a. **Primary Memory:** It keeps the data received from input devices and also hold the data being processed. RAM is an example of computer primary memory.

**RAM:** Random Access Memory

**EDO RAM:** Extended Data Output Random Access Memory

**D RAM:** Dynamic Random Access Memory

- b. **Secondary Memory**

It is permanent memory, which stores data that remain in it forever. ROM is an example of Secondary Memory. It stands for Read Only Memory that keeps contents even without power source.

RAM: Read Only Memory

PROM: Programmable Read Only Memory

EPROM: Erasable Programmable Read Only Memory

EEPROM: Electrically Erasable Programmable Memory

- **Output Unit**

An output is a data, which has been properly processed into useful form called information. We can serve the output result in storage devices for future use. Monitor, Printer, Speaker etc are Output devices.

## TYPES OF OUTPUT

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**Hardcopy:** This type of output is printed on paper or other permanent media.

**Softcopy:** This type of output is displayed on the screen and other non permanent means.

**Important:**

The speed of printer is measured in

- Cps: Character per second
- Lpm: line per minute
- Ppm: page per minute

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## SOFTWARE

Software is a set of instruction, which directs the computer to process information. It performs various functions that include controlling hardware, performing, computations, communication with other softwares. These are segregated into 3 types:

- System Software
- Application Software
- Utilities Software

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## HARDWARE

Hardware is a part of computer, which can be seen by the eyes and felt by touching. These hardware are also called peripheral. Some of the examples are printers, modems, scanner etc.

## Historical Overview of Computer

Year	Inventor	Invention
16th Century	China	Abacus
1617	John Napier	Napier's Bones
1642	Blaise Pascal	First Calculating Machine
1671	Gottfried Von Leibnitz	Calculator (Modified Pascal's machine)
1801	Joseph Jacquard	Card of holes for weaving patterns
1823-34	Charles Babbage	Difference Engine, Analytical Engine
1880	Herman Hollerith lady Ada Lovelace	Tabulating Machine using punch cards Binary Number System
1930	Howard Aitken and Grace Hopper (IBM)	MARK-I
1937-38	Dr John Vircent Atanassoff	ABC (Atanasoff-Berry-Computer)
1946	JP Eckert and JW Mauchly	ENIAC (Electronic Numerical and Calculator)
1940's	H Goldshine, AW Burks and John Von Neumann	Stored Program Concept
1947-49	John Von Neumann	EDSAC (Electronic Delayed Storage Automatic Computer)
1950	Moor School in USA	EDVAC (Electronic Discrete Variable



		Automatic Computer)
1951	Eckert and JW Mauchly	UNIVAC-I (Universal Automatic Computer)
1953	Bell Laboratory of America	Transistor
1954	IBM Company	IBM-650 Computer
1957	John Backus, IBM	Fortran
1958	Jack Kilby and Robert Noyce	Integrated Circuit
1959	Grace Hopper	COBOL
1964	John Kemeny and Thomas Kurtz	BASIC
1969	America	ARPANET
1971	Ted Hoff	Intel 4004
1973	Xerox Corporation Company	Xerox Alto
1976	Steve Wozniak	Apple-1
1980	Microsoft Corporation	MS DOS
1981	IBM Company	First PC of IBM
1984	Apple Company	Macintosh PC of Apple
1988	Intel Company	Intel 486 Microprocessor
1991	Tim Berners-Lee	Law of WWW

1992	Jeremy and JJ Allaire	Windows 3.1
1997	Intel	Pentium-2
1999	Intel	Pentium-3
2000	Intel	Pentium-4 or uses of operating systems
2003	Allen B. Dumont	LCD Monitor
2004	Richard Stallman	Linux
2006	Microsoft Corporation	Window Vista
2007	Google	Android Operating System
2008	-	Language Operating System
2009	-	Window Explorer 8
2010	Intel	Intel® core™ processor
2011	HP	Webos Tablet

## Generations of Computer

Generation	Year	Switching Device	Storage Device	Speed	Operating system	Language	Application
First	1940-1956	Vacuum Tubes/Electronic Valves	Acoustic delay lines and later magnetic drum. 1KB memory	333 microseconds	Mainly Batch operating system	Machine and assembly languages.	Mostly scientific; later simple business systems.
Second	1956-1963	Transistors	Magnetic core, main memory, tape and disk peripheral memory. 100 KB main memory	10 microseconds	Multi-User, time sharing	High level languages, Fortran, Cobol, Algol, Batch operating systems	Extensive business applications. Engineering design optimization scientific research.
Third	1964-1971	Integrated circuits	High speed magnetic cores. Large	100 nanoseconds	Real time, time sharing	Fortran IV, Cobol 68 PL/I. Time sharing operating	Data base management systems, Online systems.

			disks 100 MB. 1 MB main memor y			system	
<b>Fourth</b>	1971- Present	Large scale integrated circuits. Micro- processors (LSI)	Semico nductor memor y, Winche ster disk. 10 MB main memor y. 1000 MB disks	300 nano second s	Time sharing networks	Fortran 77, Pascal ADA, Cobol-74	Personal computers, Distributed systems. Integrated CAD/CAM. Real time control. Graphics oriented systems.
<b>Fifth</b>	Still in developm ent phase	KIPS (Knowledge Information Processing Systems) and V V L S I (Very-Very Large Scale Integration) known as Artificial Intelligence (AI)	-	-	-	-	Information managemen t, natural language, processing, speech, character and image recongnitio n and artificial intelligence.

## Chapter: Input and Output System

### Input System

An input device is a peripheral or piece of computer hardware equipment, which is used for providing data and controlling signals to an information processing system (Computer).

### TYPES OF INPUT DEVICES

1. **Keyboard:** It is human interface device, which is represented as a layout of buttons. Each button or key could be used to input linguistic character to a computer for particular functions.
2. **Pointing Devices (Mouse & Trackball):** These are any human interface devices that allow users to input spatial data to a computer. Eg: mouse, trackball, Glidepad
3. **Game Devices:** The motion of cursor is controlled by joystick or arrow buttons (Game Pad)
4. **Pen Input:** It is especially used in Personal Digital Assistant (PDA). It is used for Data input, Pointing Device, and Command Gesture etc.
5. **Touch Screen:** The touchscreen enables the selection by just touching the screen.
6. **Digitizers and Graphic Tablet:** The Tablets have Special Command for the conversion of drawing and photos.
7. **Page Scanner:** It works like copy machine and captures whole image for converting to the digital image.
8. **Hand Scanner:** It can move across document or picture. It can capture only a section of a page or a large image.
9. **Bar Codes:** It is used at the retail shops to track inventory and calculate the sale at the checkout counter.
10. **Optical Character:** It uses letters or special characters that are especially shaped to be easy for the machines to read.

## Output System

An Output System is computer hardware equipment, which is used to communicate the result of data processing system.

### TYPES OF OUTPUT DEVICES

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1. **Printer:** A printer prints the content on the monitor onto a paper. The speed of a printer could be measured in character per second (cps), line per minute (lpm), and page per minute (ppm). The quality of prints can be measured in DPI (Dot Per Inch). There are two types of printer:

#### Impact Printer

- a) Dot Matrix Printer
- b) Daisy Wheel
- c) Chain & Band Printers

#### Non Impact Printer

- a) Inkjet Printer
- b) Thermal Printer
- c) Laser Printers

2. **Screen (Monitor):** The Monitor is a screen on which words, numbering, and graphic could be seen. The device that displays computer output has various names comprising

- a) Screen
- b) Monitor
- c) Visual Display Terminal
- d) Cathode Ray Tube
- e) Visual Display Unit
- f) Liquid Crystal Display

### TYPES OF SCREEN

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- a) Monochrome
- b) Color
- c) CRT
- d) LCD
- e) Plasma Screens

**SOME OTHER OUTPUT DEVICES ARE AS FOLLOWS:**

- Data projector
- Large Format Printers
- Microfilms
- Speaker
- Headphones
- Floppy Disk
- Computer Disk

## Chapter: Processing System

### PROCESSING SYSTEM

Processing System mediates between the input system and output system, which is process of thinking as done by the computer.

Processing Systems includes

- Calculations
- Comparisons
- Decisions

The thinking process in the computer is done by manipulating the digital digits as all information in modern computer is stored as a string of zeros or ones off or on.

1bit= one on or off position

1 byte = 8 bits

The entire processing part occurs in the central processing unit of the computer system.

### COMPONENTS OF PROCESSING UNITS

#### Central Processing Unit (CPU)

Central Processing Unit or CPU is also known as the brain of computer where entire processing is done. Most of the computers contain one processing chip.

#### CONTROL UNIT (CU)

This is the part of the computer, which controls the machine cycle. It takes a number of cycles to do even a simple addition of two numbers.

It performs the various functions:

- **Fetch:** It gets an instruction from main memory.
- **Decode:** It translates it into computer commands.
- **Execute:** It processes the command.
- **Store:** It writes the result to main memory.



## ARITHMETIC LOGIC UNIT (ALU)

- It is the part, which executes the computer's commands.
- It does either a basic arithmetic operation or the logical comparisons.
- The arithmetic operation may include + - \* /
- The logical comparisons may include > < = not =

### Machine Cycle

**Fetch** In this cycle an instruction is fetched from the main memory.

**Decode** In this cycle, the fetched instruction is translated into the computer commands.

**Execute** In this cycle, the command is actually processed.

**Store** In this cycle, the result is written into the main memory.

The immense speed of the computer enables it to do millions of such steps in a second.

## MEMORY ADDRESSES

A memory address holds 1 byte of data where

- 1 bit = 0 or 1/on or off
- 1 byte = 8 bits
- 1 kilobyte = 1024 bytes
- 1 megabyte = 1024 kilobytes (K or KB)

## PROCESSOR SPEED

- Processor speed is affected by system clock rate.
- The rate of an electronic pulse is used to synchronize processing.
- It is measured in megahertz (MHz) where 1 MHz = 1 million cycles per second or in gigahertz (GHz) where 1 GHz = 1 billion cycles per second

## PHYSICAL COMPONENTS OF COMPUTER

The Physical Components of a computer are directly involved in processing. They are

- Microprocessor

- Memory device
- Motherboard

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## MICROPROCESSOR

- This is a single silicon chip containing CPU, ALU and some memory.
- The microprocessor chip is located on a large circuit board called the main board or motherboard.
- The physical size of a computer chip is very small.

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## MEMORY DEVICES

They may include

**Vacuum Tube** This is the oldest type that cannot hold up long and generate a lot of heat.

**Core** These are small metal rings that represents on and off. They are relatively slow.

**Semi Conductor** This is integrated circuit on a chip. The modern computers use this for their memory.

### Motherboards

The motherboards have a number of slots for memory and all the slots contain the same size memory board.

### Connectors

This is the slot where cables connect to motherboard for the things like hard drives, floppy drives and CD Rom drives.

### ISA Slots

This board has three slots for the things like video cards, sound cards, internal modems etc.

### Keyboard Plug

This is the slot where the keyboard attaches through the back of computer.

## MEMORY SLOTS

- There are four short slots for the semiconductor memory.
- This board has two long slots for a new kind of memory called DIMM DRAM.
- This board can support a maximum of 256 MB of memory.

## PCI Slots

This board contains four slots for the peripherals like video cards, internal modems, sound cards etc.

## Power Connection

This is the slot where power supply connects to the motherboard.

## Processor Socket

This is the slot where the processor plugs into the motherboard.

## Chapter: Computer Storage

### Introduction

Storage is a media and methods, which is used to keep information available for later use.

#### COMPUTER STORAGE IS OF TWO TYPES

- **Primary Storage**
- **Secondary Storage**

#### PRIMARY STORAGE

- It is the main memory of computer.
- It keeps track of current processing
- It is volatile, *i.e.*, turning the power off erases all of the data.
- For main memory, computers use RAM or Random Access Memory.
- These memory chips are the fastest, but most expensive type of storage.

Main Memory = Primary Storage

#### SECONDARY STORAGE

- It is the auxiliary storage of computer.
- It keeps track of what is not currently being processed.
- It is the stuff that is 'Filed away', but is ready to be pulled out when needed.
- It is non-volatile, *i.e.*, turning the power off does not erase the data.
- Auxiliary storage is used for input data and programs as well as saving the result of processing.

Auxiliary Storage = Secondary Storage

### Magnetic Disks

These are commonly used type of auxiliary storage. They come in numerous sizes and materials and by the method of magnetism data are stored on the magnetic surface. The advantages of

using magnetic disk is high storage capacity, reliable and providing the direct access to data. There is a drive that spins the disk very quickly underneath a read/write head. It reads data from a disk and writes data to a disk.

## DISKETTE/FLOPPY DISK

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These disks come in two different sizes that are

(i)  $5\frac{1}{4}$ "

(ii)  $3\frac{1}{2}$ "

Both sizes are made of mylar with an oxide coating. This coating provides the magnetic quality for the disk.

## DISK FORMAT

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All the magnetic disks have the similar format. They are divided into the following areas

- (i) **Tracks** A track is a circular ring on one side of the disk and each track has a number. The diagram given here shows three tracks of a disk.
- (ii) **Sectors** A disk sector is a wedge shaped piece of the disk as shown in the given figure.  
  
A track sector is the area of intersection of a track and a sector.
- (iii) **Clusters** A cluster is a set of track sectors, ranging from 2 to 32. 1 cluster is the minimum space used by any read or write
- (iv) **Cylinders** A cylinder is a set of matched tracks.

## WHEN A DISK IS FORMATTED

- All data is erased.
- All the surfaces are checked for physical and magnetic defects.
- A root directory is created to list where things are on the disk.

## DISK CAPACITY

The capacity of a magnetic disk depends on the following factors

- The number of sides used (either single-sided or double sided).
- The recording density (*i.e.*, closeness of the bits on a track sector of the innermost track).
- The number of tracks on the disk.

## CAPACITY OF DISKS

- 5  $\frac{1}{4}$ " floppy -360 KB or 1.2 MB
- 3  $\frac{1}{2}$ " floppy -720 KB or 1.44 MB

## HARD DISKS

- Early ones-20 MB
- Currently-120 +GB
- Where 1 GB = 1 gigabyte = 1024 MB

## ACCESSING DATA

In order to access the data, the various steps are required that are as follows:

- Seek:** moves the head to proper track , which measured as seek time in terms of milliseconds.
- Rotate:** It rotates the disk under the head to the correct sector that is measured as rotational delay in terms of milliseconds.
- Settle** It lowers the head to disk and waits for vibrations from moving to stop. It is measured as settling time in terms of milliseconds.
- Data Transfer** It copies data to main memory and is measured as data transfer rate in terms of Kbps.

## MAGNETIC TAPE

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Magnetic tapes are same as VCR tape in the way of storing data. The speed of data access can be quite slow, however, when the tape is long and whatever desired is not near the start. Therefore, this is used for mainly major backups of large amounts of data.

## TYPES OF MAGNETIC TAPE

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There are mainly two types of magnetic tape as Tape Reel and Tape Cassette. Each of the type has its own requirements. The older systems designed for networks use reel-to-reel tapes. Newer systems use cassettes holding more data than that of the huge reels.

### Tape Formats

The magnetic tape is divided into the following format

#### Density

Higher density means more data on shorter tape. It is measured as bpi = bits per inch. It ranges from 800 bpi to 6250 bpi.

#### Blocks

Just as a floppy is divided into tracks and sectors, in the same way, a tape is divided into logical blocks. One file can take up a number of logical blocks, but must take up one whole block at least.

## GAP

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The gaps set on the tape are of two types

- (i) Interblock gap – It separates logical blocks.
- (ii) Interrecord gap – It is wider and separates the records.

## OPTICAL DISKS

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For the optical disks, an entirely different method is used to record data. They include the various kinds of CD and DVD disks.

### FEATURES OF OPTICAL DISKS

- They are formed of layers.
- Data are arranged in a spiral groove on starting from the centre of the disk.

- Digital data are in form of 1's and 0's.
- The different types of optical disks use different materials and methods to absorb and reflect the light.
- The absorption and reflection of laser light is read as a '1' or a '0' by the computer.
- In a

CD	DVD	Type	Data Layer	Metal Layer
CD-ROM	DVD-ROM	Read only	Molded	Aluminium
CD-R	DVD-R DVD+R	Recordable (Once)	Organic dye	Silver, gold, silver alloy
CD-RW	DVD-RW DVD+RW	Rewritable	Phase changing metal alloy film	Aluminium

### READ ONLY

- CD-ROM (Compact Disc-Read Only Memory) is the most common type of optical disk.
- It looks like an audio CD but the recording format is quite different.
- CD-ROM disks are used for computer software.
- DVD stands for Digital Video Device and are used for recording movies.
- The CDs and DVDs are of the Write Once Read Many (WORM) variety.
- They can't be changed once they are created.
- The data layer of this disk is physically molded into the polycarbonate.



### WRITE ONCE

- The optical disks (CD-R, DVD-R and DVD + R) that we can record on our own computer are called writable or recordable.
- A writable disk is useful as a backup medium when we need long term storage of our data.
- The data layer for this disk is an organic dye that the writing laser changes.

### REWRITE

- A rewritable disk is an option for backup storage of changing data.  
  
For example CD-RW, DVD-RW, DVD + RW, DVD + RAM.
- We can erase and write on these disks as many as 1000 times, for CD-RW and even 100000 times for the DVD-RW types.
- The data layer for this disk uses a phase changing metal alloy film.

### ADVANTAGES OF OPTICAL DISKS

- An optical disk is physically harder to break or melt or warp.
- It is not sensitive to being touched as it can be cleaned.
- It does not get affected by the effect of magnetic fields.
- They can hold much more data than floppy disks.
- An optical disk is a great resource to store the software and data.

## OTHER DEVICES

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### FLASH MEMORY

- They are solid state devices that read and write data electrically, instead of magnetically.
- Devices like digital cameras, digital camcorders and cell phones use compact flash, smart media or another flash memory card.

### USB DRIVE

- They are also known as flash drive, flash pen, thumb drive, key drive and mini - USB drive.
- They are small in size and can plug into a USB port on the computer.
- They have storage capacities from 8 MB to 1 GB.
- Some of them include password protection and the ability to run software right off the USB drive.

### REMOVABLE HARD DRIVES

- They are special drives that compress the data.
- They are regular external hard drive that can be used for back up.

### OPTICAL CARDS

- A chip on this type of card holds information like health records and auto repair records.
- They can hold more data than the smart cards as they don't need to do any processing.

## Chapter: Operating System

### INTRODUCTION

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An operating system consists of a set of programs that controls, coordinates and supervises the activities of distinctive components of a computer system. Its function is to establish a link between the computer hardware and the user.

**"An operating system is a software, or a series of programs, which performs various types of functions in order to manage and organize files."**

Some of the most commonly used operating systems are MS DOS, WINDOWS, LINUX, SOLARIES, CP/M etc. Operating system can be classified as follows

**Multi-user:** It allows two or more users to run programs at the same time. Some operating systems permit hundreds or even thousands of concurrent users.

**Multi-tasking:** It enables more than one program to run concurrently.

**Multi-processing:** It supports running a program on more than one CPU.

**Multi-threading:** Allows different parts of a single program to run concurrently.

**Real-time Processing:** Responds to input instantly. They are used to control machinery, scientific instruments and industrial systems, general-purpose operating systems, such as **DOS** and **UNIX** are not real-time processing.

---

### FUNCTIONS OF OPERATING SYSTEM

- Controlling the execution of various programs.
- Managing devices (like storage and retrieval of files on the disks).
- Process Management
- Memory Management
- Input/Output Management
- Information Management
- User Interface

### COMMON OPERATING SYSTEM MS DOS

- The term DOS stands for Disk Operating System developed by Microsoft for micro computers.
- DOS is a single user operating system.
- It has a Character User Interface (CUI) *i.e.*, communication between a computer and the user is through characters.
- In DOS, one has to key in the commands on the prompt. Prompt is a place where commands are issued. It may look like

C:\>

or

C:\WINDOWS\>

File Extensions	Meaning
.EXE	Executable Files
.COM	Command Files
.BAT	Batch Files
.DOC	Document Files
.TXT	Text Files
.PRG	Program Files
.OVR	Overlays
.SYS	System Files

---

### WINDOWS 95 AND WINDOWS 98

- They are actual operating systems on their own.
- The previous versions of windows use DOS as the operating system and adding a graphical user interface which will do the multitasking.
- Windows 95 operating system can take advantage of the 32 - bit processors.

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### WINDOWS ME

- Windows Me stands for Windows Millennium Edition.
- It is an upgrade of windows 98 released in 14 September, 2000.
- The system resources required for this operating system are significantly higher than previous versions of windows.

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### WINDOWS NT

- It stands for Windows New Technology.
- It is an operating system for client-server type networks.
- The latest version of NT has a user interface that is practically identical to Windows 95.
- Windows NT has higher demands for the disk space and memory.

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### APPLE MACINTOSH

- It is a multi-tasking operating system.
- It was a first graphical interface to achieve commercial success.
- Apple products are of high quality and always more expensive than comparable products.
- The current version is Mac OS X; which is version 10.

## UNIX

- UNIX is an operating system developed by Bell Labs to handle complex scientific applications.
- It is a multi-user and multi-tasking operating system.
- It is a command line interface.
- X-windows is a graphical interface for UNIX that is easier to work with than windows 98.

## LINUX

- Linux is an operating system similar to UNIX that is becoming more and more popular.
- It is an open source program created by Linux Torvalds at the University of Finland.
- Open source program means that the underlying computer code is freely available to everyone.
- The programmers can work directly with the code and add features.

## UTILITIES

Utility-programs perform tasks related to the maintenance of our computer's health - hardware or data.

## FILE MANAGEMENT

- These programs make it easier to manage our files.
- Many programs are written to help the user find files, create and organize directories, copy, move and rename files.
- The newer graphical interfaces that come with operating systems like Windows 95 have reduced the need for alternate file management programs.

## DISK MANAGEMENT

- These programs involve formatting and defragmenting disks.
- Defragmenting means putting files on the disk so that the whole file is in sequence.

- These programs reduce the time to access the file.

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### MEMORY MANAGEMENT SOFTWARE

- It handles where the programs put their current data in RAM.
- They move certain memory-resident items out of the way.
- They increase the memory available by getting all the unused pieces together in one spot making a useable amount.

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### BACKUP PROGRAM

- It restores the backed up data.
- It compresses the data to take up the least space.

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### ANTI-VIRUS PROGRAM

- They are must have programs.
- They monitor the computer for the activity of viruses.
- Viruses are nasty little programs that copy themselves to other disks to spread to other computers.

## Chapter: Data Determination

### BASIC DATA STRUCTURES

The computer data is made up of certain components basically called 'bits' and 'bytes'.

**Bit:** A bit (sometimes abbreviated as b) is the most basic information unit used in computing and information theory. A single bit is a one or a zero, a true or a false, a 'flag' which is 'on' or 'off' or in general, the quantity of information required to distinguish two mutually exclusive states from each other.

**Byte:** A byte is a collection of bits variable in size but now almost always eight bits. Eight -bit bytes, also known as octets, can represent 256 values ( $2^8$  values, 0-255).

**Kilobyte:** It is a unit of information or computer storage equal to 1024 bytes. It is commonly abbreviated as KB, kB, Kbyte or kbyte.

The term 'kilobyte' was first loosely used for a value of 1024 bytes ( $2^{10}$ ), because  $2^{10}$  is roughly one thousand and powers of two are convenient for use with binary digital computers.

**Megabyte** A megabyte is a unit of information or computer storage equal to approximately one million bytes. It is commonly abbreviated as MB.

One Megabyte (MB) =  $2^{20}$  bytes  
= 1024 kilobytes

**Gigabyte** A gigabyte is a unit of information or computer storage equal to approximately one billion bytes. It is commonly abbreviated as GB in writing and gig in writing or speech.

One Gigabyte (GB) =  $2^{30}$  bytes  
= 1024 megabytes

**Terabyte** A terabyte is a unit of information or computer storage equal to approximately one trillion bytes. It is commonly abbreviated as TB.

One Terabyte (TB) =  $2^{40}$  bytes  
= 1024 gigabytes



**Note (1)** After terabytes, the counting doesn't stop there. It continues in following ways

- One Petabyte (PB) =  $2^{50}$  bytes = 1024 Terabytes
- One Exabyte (EB) =  $2^{60}$  bytes = 1024 Petabytes
- One Zettabyte (ZB) =  $2^{70}$  bytes = 1024 Exabytes
- One Yottabyte (YB) =  $2^{80}$  bytes = 1024 Zettabytes

Unit	Size	Description
<b>Bit</b>	One binary digit	Stores either a binary 0 or 1
<b>Byte</b>	Eight bits	One character
<b>Word</b>	16 to 64 bits	One character
<b>Kilobyte (KB)</b>	1 thousand bytes	About one page of double-spaced text
<b>Megabyte (MB)</b>	1 million bytes	About the size of a short book
<b>Gigabyte (GB)</b>	1 billion bytes	1000 short books
<b>Terabyte (TB)</b>	1 trillion bytes	An entire library
<b>Petabyte (PB)</b>	1 quadrillion bytes	Just about all the libraries in the US

**Relation between Decimal, Binary, Octal and Hexadecimal**

Decimal	Binary	Octal	Hexadecimal
0	0	0	0
1	1	1	1
2	10	2	2
3	11	3	3
4	100	4	4
5	101	5	5
6	110	6	6
7	111	7	7
8	1000	10	8
9	1001	11	9
10	1010	12	A
11	1011	13	B
12	1100	14	C
13	1101	15	D
14	1110	16	E
15	1111	17	F

## Chapter: Programming Languages

Programming Language is a machine language (sometimes called machine code). Originally all programmers worked out every detail of the machine code, but this is hardly ever done anymore.

### SOME IMPORTANT PROGRAMMING LANGUAGES

#### **FORTRAN**

In 1957, the first of the major languages appeared in the form of FORTRAN. Its name stands for '**FOR**mula **TRAN**slation' system. The language was designed at IBM for scientific computing. The components were very simple and provided the programmer with low level access to the computer's innards. Today, this language is considered restrictive as it only includes IF, DO and GOTO statements.

#### **COBOL**

Its name stands for '**Common Business Oriented Language**'. It was designed from the ground up as the language for businessmen. Its only data types were numbers and strings of text.

#### **LISP**

In 1958, John McCarthy of MIT created the LIST Processing (or LISP) language. It was designed for Artificial Intelligence (A I) research.

#### **ALGOL**

The ALGOL language was created by a committee for scientific use in 1958. It's major contribution is being the root of the tree that has led to such languages as Pascal, C, C++ and Java. It was also the first language with a formal grammar.

#### **Pascal**

Pascal was begun in 1968 by Niklaus Wirth. Its development was mainly out of necessity for a good teaching tool.

#### **C**

C was developed in 1972 by Dennis Ritchie while working at Bell Labs in New Jersey. The transition in usage from the first major languages to the major languages of today occurred with the transition between Pascal and C.

## C++

C++ was designed to organize the raw power of C using OOP, but maintain the speed of C and be able to run on many different types of computers. C++ is most often used in simulations, such as games. It is the language of choice in today's Computer Science courses.

**Java** In the early 1990's, interactive TV was the technology of the future. Sun Microsystems decided that interactive TV needed a special, portable (can run on many types of machines) language. This language eventually became Java. In 1994, the Java project team changed their focus to the web, which was becoming 'the cool thing' after interactive TV failed. The next year, Netscape licensed Java for use in their Internet browser, Navigator. At this point, Java became the language of the future and several companies announced applications which would be written in Java, none of which came into use.

**Visual Basic** Visual Basic is often taught as a first programming language today as it is based on the BASIC language developed in 1964 by John Kemeny and Thomas Kurtz. BASIC is a very limited scope language and was designed for non-computer science people.

## Full form of some Important Languages

ALGOL	ALGOrithmic Language
BASIC	Beginner's All Purpose Symbolic Instruction Code
HLL	High Level Language
COBOL	COMmon Business Oriented Language
LOGO	Logic Oriented Graphics Oriented
LLL	Low Level Language
FORTRAN	FORmula TRANslation
PROLOG	PROgramming in LOGic
SNOBOL	String Oriented Symbolic Language
COMAL	COMmon Algorithmic Language

### TYPES OF PROGRAMMING LANGUAGES

**First Generation Programming Languages:** A first generation programming language is a machine level programming language. It consists of 1's and 0's. Originally, no translator was used to compile or assemble the first generation language. The first generation programming instructions were entered through the front panel switches of the computer system.

**Second Generation Programming Languages:** A second generation programming language is a term usually used to refer to some form of assembly language. Unlike first generation programming languages, the code can be read and written fairly easily by a human, but it must be converted into a machine readable form in order to run on a computer.

**Third Generation Programming Languages** A third generation language (abbreviated as 3GL) is a programming language designed to be easier for a human to understand, including things like named variables.

FORTRAN, ALGOL and COBOL are early examples of this sort of language. Most 'modern' languages (BASIC, C, C++) are third generation. Most of the 3GLs support structured programming.

**Fourth Generation Programming Languages:** A fourth generation programming language (abbreviated as 4GL) is a programming language designed with a specific purpose in mind, such as the development of commercial business software. Such languages arose after the introduction of modern, block-structured third generation programming languages, which improved the process of software development.

**Fifth Generation Programming Languages:** A fifth generation programming language (abbreviated as 5GL) is a programming language based on solving problems using constraints given to the program, rather than using an algorithm written by a programmer. Most constraint-based and logic programming languages and some declarative languages are fifth generation languages.

**Low Level Programming Languages:** A low level programming language is a language that provides little or no abstraction from a computer's microprocessor. The word 'low' does not imply that the language is inferior to high level programming languages but rather refers to the reduced amount of abstraction between the language and itself; because of this, low level languages are sometimes described as being 'closer to the hardware'.

### **High Level Programming Languages**

A high level programming language is a programming language that is more user-friendly, to some extent platform-independent and abstract from low level computer processor operations such as memory accesses.

## Chapter: Application Software

### INTRODUCTION

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Application software are end user programs that performs the real work for users. The application software sits on top of systems software because it is unable to run without the operating system and the system utilities.

### SOME OF THE MOST IMPORTANT APPLICATION SOFTWARES ARE AS FOLLOWS

- MS Word
- MS Excel
- MS Power Point
- MS Access

These all are collectively known as the Microsoft Office package.

### MICROSOFT WORD

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MS Word is a word processing application and is one of the most important and widely used applications found on computer.

### FEATURES OF WORD PROCESSOR

- Fast.
- Editing Features
- Permanent Storage
- Formatting Features
- Graphics
- OLE (Object Linking and Embedding)
- Alignment
- Deleting Mistakes
- Line Spacing
- Moving Cursor
- Naming a Document
- Page Breaks

- Find and Replace
- Thesaurus
- Indentation
- Header and Footer
- Page Orientation
- Spell Check
- Mail Merge
- Normal.dot
- Macros
- Layout issues
- Bullets and numbering
- Creating tables
- Auto Summarize
- Auto Correct
- Sub and superscript issues

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#### NEW FEATURES OF MICROSOFT WORD 2010

- Remove background of Images
- Integration of Screen shot feature
- New Art Effects in Word Art
- Ligatures

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#### MICROSOFT EXCEL

**Microsoft Excel** is a spreadsheet-application written and distributed by Microsoft for Microsoft Windows and Mac as X. It features calculation, graphing tools, pivot tables and a macro programming language called VBA (Visual Basic for Applications).

**Worksheet** Worksheet is a grid of cells made up of horizontal rows and vertical columns. Worksheet contains 65536 rows and 256 columns.

**Row Number** Each row is given a number that identifies it, starts from 1, 2, 3, 4, ... so on.

**Column Letter** Each column is given a letter that identifies it, starts from A ... Z, AA ... AZ, BA ... BZ, ... IA-IV.

**Cell** Cell is a basic unit of worksheet where numbers, text, formulas etc, can be placed.



**Cell Pointer** Cell Pointer is a cell-boundary that specifies which cell is active at that moment.

**Current Cell** Current Cell is a cell which is active.

**Range of Cell** It is a group of contiguous cells that forms a rectangular area in shape.

**Work Book** A worksheet is a grid of cells made up of rows and columns. Multiple worksheets can be combined under a file known as work book.

**Data in Worksheet** Three types of data can be entered, numbers/characters (012345678 + – (, 1 \$; %, E, e), text and formulas.

**Formula** Formula is a sequence of values, cell address, names functions or operators in a cell that produces a new value from existing values.

**Cell Referencing** Each cell in worksheet has a unique address, when cell address is referred in formulas, it is called cell referencing.

**Relative Referencing** Cell referencing in which the cells are referred by their relative position in the worksheet relative to a particular cell.

**Absolute referencing** The cell referencing in which the cells are referred by their fixed position (absolute position) in the worksheet.

**Mixed Referencing** Combination of relative and absolute referencing is called mixed referencing.

**Functions** Functions are predefined formulas that perform calculations by using specific values, called arguments.

**Arguments** Arguments are the-values passed to the functions, using which the function carries out some task. It can be numbers, text, logical values, constants, formulas or other functions.

**Structure** The structure of a function begins with the function name, followed by an opening parenthesis, the arguments for the function separated by commas and a closing parenthesis.

**Charts** Charts/Graphs are the pictorial representation of worksheet data.

**Area Chart** An area chart emphasizes the magnitude of change over time.

**Column Chart** A column chart shows data-changes over a period of time or illustrates comparisons among item.

**Bar Chart** Bar Chart illustrates comparisons among individual items. Categories are organized vertically and values horizontally.

**Line Chart** Line Chart shows trends in data at equal intervals. It is useful for depicting the change in a value over a period of time.

**Pie Chart** Pie Chart shows the proportional size of items that make up a data series to the sum of the items.

**XY (Scatter) Chart** XY Chart shows the relationships among the numeric values in several data series or plots two groups of numbers as series of XY coordinates.

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### NEW FEATURES OF MICROSOFT EXCEL 2010

- Quickly, intuitively filter large amounts of information using new slicer functionality and enhance your Pivot Table and Pivot Chart visual analysis.
- Easily customize the improved Ribbon to make the commands you need most accessible. Create custom tabs or even customize built-in tabs. With Excel 2010, you are in control.
- You can work with other people simultaneously on the same workbook in almost any web browser using Excel Web Application.
- Share Point Excel Services lets you share your easy-to-read workbooks in a web browser with your team while maintaining a single version of the workbook.
- It is much easier to create and manage your workbook- when you can work the way you want to work.

### Programming

Excel offers users the useful ability to write code using the programming language—Visual Basic for Application (VBA). Programmers write this code using an editor viewed separately from the spreadsheet.

## NEW EXCEL 2007 FORMATS

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Format	Extension
Excel Workbook	.xlsx
Excel Macro-enabled Workbook	.xlsm
Excel Binary Workbook	.xlsb
Excel Macro-enabled Template	.xltm
Excel Add-in	.xlam

## MICROSOFT POWERPOINT

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The application software that can create professional looking visual aids is called Presentation Graphics Software. The best form of visual images are graphics and pictures. A graphic object is any written or diagrammatic representation, like graphs, figures and diagrams.

## POWERPOINT IS THE PRESENTATION GRAPHICS PART OF MS-OFFICE SUITE

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- PowerPoint can create various presentations materials like; charts, graphics, slides, handouts, overheads etc.
- Power Point even creates slide shows, which are electronic presentations that you can run on your computer screen or a projection devices.

### POWERPOINT PROVIDES THREE TYPES OF MOVEMENTS

1. Entrance, emphasis and exit of elements on a slide itself are controlled by what PowerPoint calls Custom Animations.
2. Transitions, on the other hand are movements between slides. These can be animated in a variety of ways.
3. Custom animation can be used to create small storyboards by animating pictures to enter, exit or move.

### NEW FEATURES OF MICROSOFT POWERPOINT 2010

- Use new and improved picture editing tools-including versatile artistic effects and advanced correction, colour and cropping tools-to finetune every picture in your presentation to look its absolute best.
- Add dynamic 3-D slide transitions and more realistic animation effects to grab your audience attention.
- Use new co-authoring capabilities to edit the same presentation, at the same time, with people in different locations. You can even communicate as you work, directly from PowerPoint.
- Easily customize the improved Ribbon to make the commands you need most accessible. Create custom tabs or even customize built-in tabs. With PowerPoint 2010, you are in control.
- In addition, PowerPoint 2010 enables you to work simultaneously with other people or post your presentation online and access it from virtually anywhere using the web or your smart phone.

### PRESENTATION TIPS

- Knowing the level of knowledge of the audience towards the concept of presentation.
- To persuade the audience successfully, the user must not display more or less information than required.
- Using white spaces efficiently to set the things off.

- Not to including too much information on a slide or graphic.
- Using of text on a slide should be judiciously or self explanatory.
- Avoiding the colours that clash with each other.

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### COMPONENTS OF A SLIDE

- Title
- Subtitle
- Drawing Objects
- ClipArt and Pictures
- Slide Components Used for Reference
- Handouts
- Speaker Notes
- Outlines

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### MICROSOFT ACCESS

**Microsoft Office Access**, previously known as **Microsoft Access**, is a relational database management system from Microsoft that combines the relational Microsoft Jet Database Engine with a graphical user interface and software development tools. Access is a member of the Microsoft Office suite of applications and is included in the professional and higher versions for windows and also sold separately.

**Database Management System (DBMS):** A database is a collection of data of a particular type. A DBMS is an organized collection of data viewed as a whole, instead of a group of separate unrelated files.

## Chapter: Networking and Internet

### INTRODUCTION

Computer networking means communication between a group of two or more computer systems linked together. Networks are built with a mix of computer hardware and computer software.

#### THE MOST COMMONLY DISCUSSED CATEGORIES OF COMPUTER NETWORKS INCLUDE THE FOLLOWING

- Local Area Network (LAN)
- Wide Area Network (WAN)
- Metropolitan Area Network (MAN)
- Storage Area Network (SAN)
- System Area Network (SAN)
- Server Area Network (SAN)
- Small Area Network (SAN)
- Personal Area Network (PAN)
- Desk Area Network (DAN)
- Controller Area Network (CAN)
- Cluster Area Network (CAN)

LANs and WANs were the original flavours of network design.

#### LOCAL AREA NETWORK (LAN)

- A LAN connects network devices over a relatively short distance. It is a system in which computers are interconnected and the geographical spread may be within a building to 1 kilometer.

### TYPE OF LAN

- Star LAN
- Ring LAN
- Bus LAN

**Metropolitan Area Network (MAN):** It is a data network designed for a town or city. This type of network is spread over a city. It connects an area larger than a LAN but smaller than a WAN, such as a city, with dedicated or high performance hardware.

### Wide Area Network (WAN)

A WAN is a geographically dispersed collection of LANs. It is like the internet spans most of the world. In IP networking, the router maintains both a LAN address and a WAN address.

### TYPES OF WAN

- Public Networks
- Public Switched Telephone Networks (PSTN)
- Public Service Digital Network (PSDN)

### INTEGRATED SERVICES DIGITAL NETWORK (ISDN)

- ISDN is used for voice, video and data services.
- It uses digital transmission.
- It combines both circuit and packet switching.

### PRIVATE NETWORK

- Private Network provides services at various locations using private or leased circuits by using technology of its choice.
- It is mostly used to carry large volume of data at very high speed transmission.
- It uses Modem's multiplexes and other communication devices.

**Network Topology :** Topology is the geometric arrangement of a computer system. Each computer system in a topology is known as a node. Network topology is determined only by the configuration of connections between nodes.

**Bus Topology:** A bus topology is such that there is a single line to which all nodes are connected and the nodes connect only to this bus.

**Mesh Topology :** This type of network topology contains at least two nodes with two or more paths between them.

**Ring Topology:** In this network topology, every node has exactly two branches connected to it. The ring is broken and cannot work if one of the nodes on the ring fails.

**Star Topology:** In this network topology, the peripheral nodes are connected to a central node, which rebroadcasts all transmissions received from any peripheral node to all peripheral nodes on the network, including the originating node.

**Tree Topology:** This is a network topology in which nodes' are arranged as a tree. The function of the central node in this topology may be distributed.

### CLIENT-SERVER NETWORKING

- It is a network application architecture which separates the client from the server.
- It is a scalable architecture, where each computer or process on the network is either a client or a server.

Features of Server	Features of Client
Passive (Slave)	Active (Master)
Waiting for requests	Sending request
On getting requests serves them and sends the reply	Waits until the response comes

- The interaction between client and server is often described using sequence diagrams.
- Sequence diagrams are standardized in the UML.



## PEER-TO-PEER NETWORKING

- It is also known as P2P networking.
- This computer network relies on computing power at the edges of a connection rather than in the network itself.
- It is used for sharing content like audio, video, data or anything in digital format.
- P2P network can also mean grid computing.

## INTERNET

The Internet is a global network of interconnected network, enabling users to share information along multiple channels. A computer that connects to the internet can access information from a vast array of available servers and other computers by moving information from them to the computer's local memory.

## SERVICES OF INTERNET

**E-mail:** The Internet enables user to exchange data/information and communicate *via* electronic media. E-mail messages are usually encoded in American Standard Code for Information Interchange (ASCII) text.

**Chat:** Chat is the exchange of typed message by people. It enables people to 'talk not vocal' by typing and sending the messages back and forth.

**Video Conferencing:** A service that allows a group of users to exchange video information over the Internet. It includes an audio teleconference facility.

## IMPORTANT POINTS REGARDING INTERNET

- **TCP/IP** (Transmission Control Protocol/Internet Protocol)
- **PPP** (Point to Point Protocol)
- **WWW** (World Wide Web)
- **CNEB**
- **Gopher**
- **WAIS**
- **Mosaic**
- **Archie**

- **Hypertext**

## **WIRELESS LAN**

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A Wireless LAN or WLAN is a Wireless Local Area Network that uses radio waves as its carrier - the last link with the users is wireless, to give a network connection to all users in the surrounding area. Areas may range from a single room to an entire office.

## **INTERNET PROTOCOL SUITE**

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The Internet protocol suite is the set of communications protocols that implement the protocol stack on which the Internet and most commercial networks run.

## **FILE TRANSFER PROTOCOL**

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FTP or File Transfer Protocol is a commonly used protocol for exchanging files over any network that supports the TCP/IP protocol (such as the Internet or an Intranet). There are two computers involved in an FTP transfer-a server and a client.

## **INTERNET SERVICE PROVIDER**

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An Internet Service Provider (ISP) is a business or organization that offers users access to the Internet and related services. Many but not all ISPs are telephone companies.

## **NETWORK SERVICE PROVIDER**

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A Network Service Provider (NSP) is a business or organization that sells bandwidth or network access by providing direct backbone access to the Internet and usually access to its Network Access Points (NAPs).

## **WEB SERVER**

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A web server is a program that using the client/server model and the World Wide Web's Hyper Text Transfer Protocol (HTTP). Serves the files that form Web Pages to Web users (whose computers contains HTTP clients that forward their requests).

### **Client Server**

Client Server is a network architecture which separates the client from the server.

## Proxy Server

A Proxy Server is a computer that offers a computer network service to allow clients to make indirect network connections to other network services.

## WEBSITE

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A Website is a collection of web pages, typically common to a particular domain name or sub-domain on the World Wide Web on the Internet.

- **Static Website**
- **Dynamic Website**

## WEB PAGE

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A Web Page is a resource on the World Wide Web, usually in HTML/XHTML format with hypertext links to enable navigation from one page or section to another.

A web page can contain content which is able to be seen or heard by the end user. These elements include, but are not limited to

- Text
- Graphics, typically GIF, JPEG or PNG formats
- Audio, typically MIDI or WAV formats
- Macromedia Flash
- Hyperlinks

**Dynamic Web Page:** Dynamic Web Pages can be defined as Web Pages containing dynamic content (example-images, text, form fields etc) that can change/move without the web page being reloaded.

## HOME PAGE

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- It is the first page that the link/site takes the user to.
- It most often refers to the initial or main web page of a website.

- It is a personal web page, for example at a web hosting service or a university website that typically is stored in the home directory of the user.

## UNIFORM RESOURCE LOCATOR

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A Uniform Resource Locator (URL) is another name for web address or website address. It is basically a string of characters which refers to a resource on the Internet. *e.g.*, the URL of 'Google' search engine is 'www.google.com'.

## ANDROID (OPERATING SYSTEM)

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Android is a mobile operating system initially developed by Android Inc. Android was purchased by Google in 2005. Android is based upon a modified version of the Linux Kernel. Android has a large community of developers writing application programs (Apps) that extend the functionality of the devices.

## WIRELESS APPLICATION PROTOCOL (WAP)

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Wireless Application Protocol (WAP) is an open international standard. A WAP browser is a commonly used Web browser for small mobile devices such as cell phones.

## WEB ADDRESSES

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Web addresses start with the name of a protocol, which is called a *HTTP* (Hyper Text Transfer Protocol). HTTP means that the resource in question will be found on a web server.

## Chapter: General Keyboard shortcut Keys

<b>Ctrl+C</b>	Copy
<b>Ctrl+x</b>	Cut
<b>Ctrl+V</b>	Paste
<b>Ctrl+z</b>	Undo
<b>Delete</b>	Delete
<b>Shift-Delete</b>	Delete the selected item permanently without placing the item in the Recycle Bin
<b>Ctrl while dragging an item</b>	Copy the selected item
<b>Ctrl+Shift while dragging an item</b>	Create a shortcut to the selected item
<b>F2 key</b>	Rename the selected item
<b>Ctrl+Right Arrow</b>	Move the insertion point to the beginning of the next word
<b>Ctrl+Left Arrow</b>	Move the insertion point to the beginning of the previous word
<b>Ctrl+Down Arrow</b>	Move the insertion point to the beginning of the next paragraph
<b>Ctrl+Up Arrow</b>	Move the insertion point to the beginning of the previous paragraph
<b>Ctrl+Shift with any of the arrow keys</b>	Highlight a block of text
<b>Shift with any of the arrow keys</b>	Select more than one item in a window or on the desktop

<b>Ctrl+A</b>	Select all
<b>F3 key</b>	Search for a file or a folder
<b>Alt+Enter</b>	View the properties for the selected item
<b>Alt+F4</b>	Close the active item, or quit the active program
<b>Alt-Enter</b>	Display the properties of the selected object
<b>Alt-Spacebar</b>	Open the shortcut menu for the active window
<b>Ctrl+F4</b>	Close the active document in programs
<b>Alt+Tab</b>	Switch between the open items
<b>Alt+Esc</b>	Cycle through items in the order that they had been opened
<b>F6 key</b>	Cycle through the screen elements in a window or on the desktop
<b>F4 key</b>	Display the Address bar list in My Computer or Windows Explorer
<b>Shift+F10</b>	Display the shortcut menu for the selected item
<b>Alt+Spacebar</b>	Display the System menu for the active window
<b>Ctrl+Esc</b>	Display the Start menu
<b>Alt+U</b>	Underlined letter in a menu name
<b>F10 key</b>	Activate the menu bar in the active program
<b>Right Arrow</b>	Open the next menu to the right, or open a submenu

<b>Left Arrow</b>	Open the next menu to the left, or close a submenu
<b>F5 key</b>	Update the active window
<b>Backspace</b>	View the folder one level up in My Computer or Windows Explorer
<b>Esc</b>	Cancel the current task
<b>Ctrl+Shift+Esc</b>	Open Task Manager
<b>Ctrl+Shift+Esc</b>	Open Task Manager

## Keyboard Shortcuts

<b>Ctrl+Tab</b>	Move forward through the tabs
<b>Ctrl+Shift+Tab</b>	Move backward through the tabs
<b>Tab</b>	Move forward through the options
<b>Shift+Tab</b>	Move backward through the options
<b>Alt+Underlined letter</b>	Perform the corresponding command or select the corresponding option
<b>Enter</b>	Perform the command for the active option or button
<b>Spacebar</b>	Select or clear the check box if the active option is a check box
<b>Arrow keys</b>	Select a button if the active option is a group of option buttons
<b>F1 key</b>	Display Help
<b>F4 key</b>	Display the items in the active list
<b>Backspace</b>	Open a folder one level up if a folder is selected in the Save As or Open dialog box



## Chapter: Abbreviations Used in Computer World

A	
AAC	Advanced Audio Coding
ABC	Atanasoft Berry Computer
ABI	Application Binary Interface
ABR	Area Border Router
ABR	Available Bit Rate
AD	Active Directory
ADC	Analog-to-Digital Converter
ADC	Apple Display Connector
AGP	Accelerated Graphics Part
AH	Active Hub
AHA	Accelerated Hub Architecture
AI	Artificial Intelligence
AJAX	Asynchronous Java Script and XML
AL	Active Link
ALGOL	Algorithmic Language

<b>ALU</b>	<b>Arithmetic and Logical Unit</b>
<b>AM</b>	<b>Active Monitor</b>
<b>AMD</b>	<b>Advanced Micro Devices</b>
<b>AMR</b>	<b>Audio Modem Riser</b>
<b>ANSI</b>	<b>American National Standard Institute</b>
<b>ANOL</b>	<b>America On-Line</b>
<b>B</b>	
<b>BARC</b>	<b>Bhabha Atomic Research Centre</b>
<b>BASIC</b>	<b>Beginner's All purpose Symbolic Instruction Code</b>
<b>BBS</b>	<b>Bulletin Board Service</b>
<b>BCD</b>	<b>Binary Coded Decimal</b>
<b>BCR</b>	<b>Bar Code Reader</b>
<b>BEEP</b>	<b>Blocks Extensible Exchange Protocol</b>
<b>BEMA</b>	<b>Business Equipment Manufacturer Association</b>
<b>BER</b>	<b>Bit Error Rate</b>
<b>BFD</b>	<b>Binary File Descriptor</b>

<b>BGP</b>	<b>Border Gateway Protocol</b>
<b>BIN</b>	<b>Binary</b>
<b>BINAC</b>	<b>Binary Automatic Computer</b>
<b>BIOS</b>	<b>Basic Input Output System</b>
<b>BIT</b>	<b>Binary Digit</b>
<b>BOOTP</b>	<b>Bootstrap Protocol</b>
<b>BPEL</b>	<b>Business Process Execution Language</b>
<b>BPI</b>	<b>Bytes Per Inch</b>
<b>BPS</b>	<b>Bits Per Second</b>
<b>BSNL</b>	<b>Bharat Sanchar Nigam Limited</b>
<b>C</b>	
<b>CAD</b>	<b>Computer Aided Design</b>
<b>CAE</b>	<b>Computer Aided Engineering</b>
<b>CAI</b>	<b>Computer Aided Instruction</b>
<b>CAL</b>	<b>Computer Aided Learning</b>
<b>CAM</b>	<b>Computer Added Manufacturing</b>
<b>CAT</b>	<b>Computer Added Translation</b>

<b>CAQ</b>	<b>Computer Added Quality Assurance</b>
<b>CC</b>	<b>C-Compiler</b>
<b>CD</b>	<b>Compact Disc</b>
<b>CDAC</b>	<b>Centre for Development of Advanced parallel Computing</b>
<b>CDMA</b>	<b>Code Division Multiple Access</b>
<b>CDOT</b>	<b>Centre for Development of Telematics</b>
<b>CDR</b>	<b>Compact Disc Recordable</b>
<b>CDROM</b>	<b>Compact Disc Read Only Memory</b>
<b>CDRW</b>	<b>Compact Disc Rewritable</b>
<b>CDR/W</b>	<b>Compact Disc-Read/Write</b>
<b>CG</b>	<b>Computer Graphics</b>
<b>CGA</b>	<b>Colour Graphics Arraay</b>
<b>CGI</b>	<b>Common Gateway Interface</b>
<b>D</b>	
<b>DAC</b>	<b>Digital to Analog Converter</b>
<b>DAP</b>	<b>Directory Access Protocol</b>
<b>DB</b>	<b>Database</b>

<b>DBA</b>	<b>Database Administrator</b>
<b>DBMS</b>	<b>Database Management System</b>
<b>DCC</b>	<b>Direct Client-to-Client</b>
<b>DCL</b>	<b>Digital Command Language</b>
<b>DDR</b>	<b>Double Data Rate</b>
<b>DES</b>	<b>Date Encryption Standard</b>
<b>DFD</b>	<b>Data Flow Diagram</b>
<b>DFS</b>	<b>Distributed File System</b>
<b>DHTML</b>	<b>Dynamic HTML</b>
<b>DVD</b>	<b>Digital Versatil Disc</b>
<b>DVD</b>	<b>Digital Video Disc</b>
<b>DVDR</b>	<b>DVD-Recordable</b>
<b>DVDROM</b>	<b>DVD-Read Only Memory</b>
<b>DVD RW</b>	<b>DVD-Re Writable</b>
<b>DVI</b>	<b>Digital Visual Interface</b>
<b>DVR</b>	<b>Digital Video Recorder</b>

<b>E</b>	
<b>EVP</b>	<b>Extensible Authentication Protocol</b>
<b>EBCDIC</b>	<b>Extended Binary Coded Decimal Interchange Code</b>
<b>E-CL</b>	<b>Emitter-Coupled Logic</b>
<b>E-Commerce</b>	<b>Electronic Commerce</b>
<b>EDSAC</b>	<b>Electronic Delay Storage Automatic Calculator</b>
<b>EEPROM</b>	<b>Electrically Erasable Programmable Read only Memory</b>
<b>EFF</b>	<b>Electronic Frontier Foundation</b>
<b>EFI</b>	<b>Extensible Firmware Interface</b>
<b>EGA</b>	<b>Enhanced Graphics Array</b>
<b>EGA</b>	<b>Exterior Gateway Protocol</b>
<b>EIO</b>	<b>Electronic ID Card</b>
<b>ELM</b>	<b>Electronic Mail</b>
<b>E-Mail</b>	<b>Electronic Mail</b>
<b>ENIAC</b>	<b>Electronic Numerical Integrated And Computer</b>
<b>EOF</b>	<b>End Of File</b>
<b>EOL</b>	<b>End Of Line</b>

<b>EOM</b>	<b>End Of Message</b>
<b>EPROM</b>	<b>Erasable Programmable Read Only Memory</b>
<b>EXE</b>	<b>EXExecutable</b>
<b>F</b>	
<b>FAP</b>	<b>Forttan Assembly Program</b>
<b>FAT</b>	<b>File Allocation Table</b>
<b>FAQ</b>	<b>Frequently Asked Questions</b>
<b>FDD</b>	<b>Floppy Disk Drive</b>
<b>FIFO</b>	<b>First IN First Out</b>
<b>FHS</b>	<b>File System Hierarchy Standard</b>
<b>FORTRAN</b>	<b>Formula Translation</b>
<b>FSK</b>	<b>Frequency Shift Keying</b>
<b>FTP</b>	<b>File Transfer Protocol</b>
<b>G</b>	
<b>Cb</b>	<b>Gigabit</b>
<b>GB</b>	<b>Gigabyte</b>
<b>GCR</b>	<b>Group Code Recording</b>

<b>GDI</b>	<b>Graphics Device Interface</b>
<b>GIF</b>	<b>Graphics Interchange Format</b>
<b>GPU</b>	<b>Graphics Processing Unit</b>
<b>GUI</b>	<b>Graphical User Interface</b>
<b>H</b>	
<b>HAL</b>	<b>Hardware Abstraction Layer</b>
<b>HCI</b>	<b>Human Computer Interaction</b>
<b>HDD</b>	<b>Hard Disk Drive</b>
<b>HD DVD</b>	<b>High Definition DVD</b>
<b>HDL</b>	<b>Hardware Description Language</b>
<b>HHD</b>	<b>Hybrid Hard Drive</b>
<b>HID</b>	<b>Human Interface Device</b>
<b>HIG</b>	<b>Human Interface Guidelines</b>
<b>HLL</b>	<b>High Level Language</b>
<b>HPFS</b>	<b>High Performance File System</b>
<b>HSM</b>	<b>Hierarchical Storage Management</b>
<b>HTM</b>	<b>Hierarchical Temporal Memory</b>



<b>HTML</b>	<b>Hypertext Markup Language</b>
<b>HTTP</b>	<b>Hypertext Transfer Protocol</b>
<b>I</b>	
<b>IBM</b>	<b>International Business Machines</b>
<b>ICMP</b>	<b>Internet Control Message Protocol</b>
<b>ICP</b>	<b>Internet Cache Protocol</b>
<b>IDL</b>	<b>Interface Definition Language</b>
<b>IE</b>	<b>Internet Explorer</b>
<b>IGMP</b>	<b>Internet Group Management Protocol</b>
<b>IGRP</b>	<b>Interior Gateway Routing Protocol</b>
<b>IHV</b>	<b>Independent Hardware Vendor</b>
<b>IIOB</b>	<b>Internet Inter-Orb Protocol</b>
<b>IIS</b>	<b>Internet information Services</b>
<b>IM</b>	<b>Instant Messaging</b>
<b>IMAP</b>	<b>Internet Message Access Protocol</b>
<b>I/O</b>	<b>Input/Output</b>
<b>IP</b>	<b>Internet Protocol</b>

<b>IPC</b>	<b>Inter-Process Communication</b>
<b>IPP</b>	<b>Internet Printing Protocol</b>
<b>IP Sec</b>	<b>Internet Protocol Security</b>
<b>IPTV</b>	<b>Internet protocol Television</b>
<b>IPX</b>	<b>Internet work Packet Exchange</b>
<b>IRC</b>	<b>Internet Relay Chat</b>
<b>IRP</b>	<b>I/O Request Packet</b>
<b>IRQ</b>	<b>Interrupt Request</b>
<b>IS</b>	<b>Information System</b>
<b>ISC</b>	<b>Internet Storm Centre</b>
<b>J</b>	
<b>J2CE</b>	<b>Java 2 Cryptographic Edition</b>
<b>JDS</b>	<b>Java Desktop System</b>
<b>JNI</b>	<b>Java Native Interface</b>
<b>JPEG</b>	<b>Joint Photographic Experts Group</b>
<b>K</b>	
<b>KB</b>	<b>Kilobit</b>

<b>KB</b>	<b>Kilobyte</b>
<b>KBPs</b>	<b>Kilobit Per Second</b>
<b>KBPS</b>	<b>Kilo Byte per Second</b>
<b>KHz</b>	<b>Kilohertz</b>
<b>L</b>	
<b>LAN</b>	<b>Local Area Network</b>
<b>LCD</b>	<b>Liquid Crystal Display</b>
<b>LIFO</b>	<b>Last In First Out</b>
<b>LSB</b>	<b>Least Significant Bit</b>
<b>LSI</b>	<b>Large Scale Integration</b>
<b>M</b>	
<b>MAN</b>	<b>Metropolitan Area Network</b>
<b>MANET</b>	<b>Mobile Ad-Hoc Network</b>
<b>Mb</b>	<b>Megabit</b>
<b>MB</b>	<b>Megabyte</b>
<b>MBCS</b>	<b>Multi Byte Character Set</b>
<b>MBR</b>	<b>Master Boot Record</b>

<b>MDI</b>	<b>Multiple Document Interface</b>
<b>MICR</b>	<b>Magnetic Ink Character Recognition</b>
<b>MIDI</b>	<b>Music Instrument Digital Interface</b>
<b>MIMO</b>	<b>Multiple-Input Multiple-Output</b>
<b>MIPS</b>	<b>Million Instructions Per Second</b>
<b>MIME</b>	<b>Multipurpose Internet Mail Extensions</b>
<b>MMX</b>	<b>Multi-Media Extensions</b>
<b>MNG</b>	<b>Multiple-image Network Graphics</b>
<b>MPEG</b>	<b>Motion Pictures (Coding) Experts Group</b>
<b>MPL</b>	<b>Mozilla Public License</b>
<b>N</b>	
<b>NACS</b>	<b>Netware Asynchronous Communication Services</b>
<b>NAL</b>	<b>National Aerospace Laboratories</b>
<b>NEXT</b>	<b>Near End Cross Talk</b>
<b>NFS</b>	<b>Network File System</b>
<b>NIC</b>	<b>Network Interface Card</b>
<b>NNTP</b>	<b>News Transfer Protocol</b>

<b>NOp</b>	<b>No Operation</b>
<b>NT (Windows)</b>	<b>New Technology</b>
<b>NTP</b>	<b>Network Time Protocol</b>
<b>O</b>	
<b>OCR</b>	<b>Optical Character Reader</b>
<b>OMR</b>	<b>Optical Mark Reader</b>
<b>OOP</b>	<b>Object Oriented Programming</b>
<b>OPML</b>	<b>Outline Processor Markup Language</b>
<b>OS</b>	<b>Operating System</b>
<b>OOS</b>	<b>Open Source Software</b>
<b>P</b>	
<b>P2P</b>	<b>Peer-to-Peer</b>
<b>PAN</b>	<b>Personal Area Network</b>
<b>PAP</b>	<b>Password Authentication Protocol</b>
<b>PATA</b>	<b>Parallel ATA</b>
<b>PC</b>	<b>Personal Computer</b>
<b>PCI</b>	<b>Peripheral Component Interconnect</b>

<b>PCIE</b>	<b>PCI Express</b>
<b>PCL</b>	<b>Printer Command Language</b>
<b>PCMCIA</b>	<b>Personal Computer Memory Card 'International Association</b>
<b>PDA</b>	<b>Personal Digital Assistant</b>
<b>PDF</b>	<b>Portable Document Format</b>
<b>POL</b>	<b>Program Design Language</b>
<b>PGA</b>	<b>Pin Grid Array</b>
<b>PIC</b>	<b>Peripheral Interface Controller</b>
<b>PIC</b>	<b>Programmable Interrupt Controller</b>
<b>POP</b>	<b>Post Office protocol</b>
<b>POP</b>	<b>Point Of Presence</b>
<b>POS</b>	<b>Point Of Sales</b>
<b>PPC</b>	<b>Power PC</b>
<b>PPI</b>	<b>Pixels Per Inch</b>
<b>PROM</b>	<b>Programmable Read Only Memory</b>
<b>PSTN</b>	<b>Public Switched Telephone Network</b>
<b>PSU</b>	<b>Power Supple Unit</b>

**Q**

**QDR**                      **Quad Data Rate**

**QFP**                      **Quoted For Permanence**

**QoS**                      **Quality of Service**

**R**

**RADIUS**                      **Remote Authentication Dial In user Service**

**RAID**                      **Redundant Array of Independent Disks**

**RAM**                      **Random Access Memory**

**RARP**                      **Reverse Address Resolution protocol**

**RDSMS**                      **Relational Database Management System**

**RDF**                      **Resource Description Framework**

**REFAL**                      **REcursive Function Algorithmic Language**

**RIP**                      **Routing Information protocol**

**ROM**                      **Read Only Memory**

**ROMS**                      **Read-Out Mother Board**

**RPG**                      **Report Program Generator**

<b>RTOS</b>	<b>Real Time Operating System</b>
<b>S</b>	
<b>SaaS</b>	<b>Software as a Service</b>
<b>SAN</b>	<b>Storage Area Network</b>
<b>SATA</b>	<b>Serial ATA</b>
<b>SAX</b>	<b>Simple API For XML</b>
<b>SBP-2</b>	<b>Serial Bus Protocol-2</b>
<b>SBU</b>	<b>Standard Build Unit</b>
<b>SCSI</b>	<b>Small Computer System Interface</b>
<b>SOL</b>	<b>Simple Direct Media Layer</b>
<b>SON</b>	<b>Service Delivery Network</b>
<b>SOR</b>	<b>Software-Defined Radio</b>
<b>SORAM</b>	<b>Synchronous Dynamic Random Access Memory</b>
<b>SLIP</b>	<b>Serial Line Internet Protocol</b>
<b>SQL</b>	<b>Structured Query Language</b>
<b>T</b>	
<b>TCP</b>	<b>Transmission Control Protocol</b>



<b>TCP/IPP</b>	<b>Transmission Control Protocol /Internet Protocol</b>
<b>TTA</b>	<b>True Tap Audio</b>
<b>TTF</b>	<b>True Type Font</b>
<b>TTL</b>	<b>Transistor- Transistor Logic</b>
<b>TTS</b>	<b>Text-To-Speech</b>
<b>TTY</b>	<b>Teletype</b>
<b>U</b>	
<b>UAC</b>	<b>User Account Control</b>
<b>UART</b>	<b>Universal Asynchronous Receiver Transmitter</b>
<b>UEFI</b>	<b>Unified Extensible Firmware Interface</b>
<b>UI</b>	<b>User Interface</b>
<b>UL</b>	<b>Upload</b>
<b>UPS</b>	<b>Uninterruptible Power Supply</b>
<b>URI</b>	<b>Unifrom Resource Identifier</b>
<b>URL</b>	<b>Uniform Resource Locater</b>
<b>URN</b>	<b>Uniform Resource Name</b>
<b>USB</b>	<b>Uniform Serial Bus</b>

**V**

<b>VAR</b>	<b>Variable</b>
<b>VB</b>	<b>Visual Basic</b>
<b>VBA</b>	<b>Visual Basic for Applications</b>
<b>VBS</b>	<b>Visual Basic Script</b>
<b>VDD</b>	<b>Virtual Device Driver</b>
<b>VFAT</b>	<b>Virtual FAT</b>
<b>VFS</b>	<b>Virtual File System</b>
<b>VGA</b>	<b>Video Graphic Array</b>
<b>VGCT</b>	<b>Video Graphics Character Table</b>
<b>VLAN</b>	<b>Virtual Local Area Network</b>
<b>VM</b>	<b>Virtual Memory</b>
<b>VMS</b>	<b>Video Memory System</b>
<b>VOD</b>	<b>Video On Demand</b>
<b>VOIP</b>	<b>Voice Over IP</b>
<b>VPN</b>	<b>Virtual Private Network</b>

<b>VRML</b>	<b>Virtual Reality Modelling Language</b>
<b>VT</b>	<b>Video Terminal</b>
<b>W</b>	
<b>WAFS</b>	<b>Wide Area File Services</b>
<b>WAIS</b>	<b>Wide Area Information Server</b>
<b>WAN</b>	<b>Wide Area Network</b>
<b>WAP</b>	<b>Wireless Application Protocol</b>
<b>Wi-Fi</b>	<b>Wireless Fidelity</b>
<b>WiMAX</b>	<b>Worldwide interoperability for Microwave Access</b>
<b>WinFS</b>	<b>Windows future Storage</b>
<b>WINS</b>	<b>Windows Internet Naming Service</b>
<b>WLAN</b>	<b>Wireless Local Area Network</b>
<b>WMA</b>	<b>Windows Media Audio</b>
<b>WWID</b>	<b>World Wide Identifier</b>
<b>WWW</b>	<b>World Wide Web</b>
<b>X</b>	
<b>XAML</b>	<b>eXtensible Application Markup Language</b>

<b>XHTML</b>	<b>eXtensible Hypertext Markup Language</b>
<b>XML</b>	<b>eXtensible Markup Language</b>
<b>XMMS</b>	<b>X Multimedia System</b>
<b>XNS</b>	<b>Xerox Network Services</b>
<b>XUL</b>	<b>XML User Interface Language</b>
<b>Y</b>	
<b>Y2K</b>	<b>Yeah Two Thousand</b>
<b>Z</b>	
<b>ZIFS</b>	<b>Zero Insertion Force Socket</b>
<b>ZIP</b>	<b>Zone Information Protocol</b>
<b>ZISC</b>	<b>Zone Instruction Set Computer</b>
<b>ZMA</b>	<b>Zone Multicast Address</b>

## IBPS PO Exam 2012: Computer Knowledge: Question Paper

1. \_\_\_\_\_ allows users to upload files to an online site so they can be viewed and edited from another location?

- (1) General-purpose applications
- (2) Microsoft Outlook
- (3) Web-hosted technology
- (4) Office Live
- (5) None of these

2. What feature adjusts the top and bottom margins so that the text is centered vertically on the printed page?

- (1) Vertical justifying
- (2) Vertical adjusting
- (3) Dual centering
- (4) Horizontal centering
- (5) Vertical centering

3. Which of these is not a means of personal communication on the internet?

- (1) Chat
- (2) Instant messaging
- (3) Instant's
- (4) Electronic mail
- (5) None of these

4. What is the overall term for creating? Editing Formatting Storing Retrieving and printing a text document?

- (1) Word processing
- (2) Spreadsheet design
- (3) Web design
- (4) Database management
- (5) Presentation generation

5. Fourth-generation mobile technology provides enhanced capabilities allowing the transfer of both \_\_\_\_\_ data including full-motion video, high-speed Internet access, and videoconferencing?

- (1) Video data and information
- (2) Voice and no voice
- (3) Music and video
- (4) Video and audio
- (5) None of these

6. \_\_\_\_\_ is a form of denial of service attack in which a hostile client repeatedly sends SYN packets to every port on the server using fake IP addresses?

- (1) Cyber gaming crime
- (2) Memory shaving
- (3) Syn flooding
- (4) Software piracy
- (5) None of these

7. Which of these is a point-and-draw device?

- (1) Mouse
- (2) Scanner
- (3) Printer
- (4) CD-ROM

8. The letter and number of the intersecting column and row is the \_\_\_\_\_?

- (1) Cell location
- (2) Cell position
- (3) Cell address
- (4) Cell coordinates
- (5) Cell contents

9. A set of rules for telling the computer what operations to perform is called a \_\_\_\_\_?

- (1) Procedural language
- (2) Structures
- (3) Natural language
- (4) Command language
- (5) Programming language

10. A detailed written description of the programming cycle and the program along with the test results and a printout of the program is called \_\_\_\_\_?

- (1) Documentation
- (2) Output
- (3) Reporting
- (4) Spec sheets
- (5) Directory

11. Forms that are used to organize business data into rows and columns are called \_\_\_\_\_?

- (1) Transaction sheets
- (2) Registers
- (3) Business forms
- (4) sheet-spreads
- (5) Spreadsheets

12. In Power Point, the Header & Footer button can be found on the Insert tab in what group?

- (1) Illustrations group
- (2) Object group
- (3) Text group
- (4) Tables group
- (5) None of these

13. A(n) \_\_\_\_\_ is a set of programs designed to manage the resources of a computer, including starting the computer managing programs, managing memory and coordinating tasks between input and output devices?

- (1) Application suite
- (2) Compiler
- (3) Input/output system
- (4) Interface
- (5) Operating system (OS)

14. A typical slide in a slide presentation would not include \_\_\_\_\_?

- (1) Photo images charts, and graphs
- (2) Graphs and clip art.
- (3) Clip art and audio clips

- (4) full-motion video
- (5) Content templates,

15. The PC productivity tool that manipulates data organized in rows and columns is called a \_\_\_\_\_?

- (1) Spreadsheet
- (2) Word processing document
- (3) Presentation mechanism
- (4) Database record manager
- (5) EDI creator

16. In the absence of parentheses, the order of operation is \_\_\_\_\_?

- (1) Exponentiation, addition or subtraction, multiplication or division
- (2) Addition or subtraction, multiplication or division, exponentiation
- (3) Multiplication or division, exponentiation, addition or subtraction
- (4) Exponentiation, multiplication or division, addition or subtraction
- (5) Addition or subtraction, exponentiation, Multiplication or division

17. To find the Paste Special option, you use the Clipboard group on the tab of Power Point?

- (1) Design
- (2) Slide Show
- (3) Page Layout
- (4) Insert
- (5) Home

18. A(n) \_\_\_\_\_ program is one that is ready to run and does not need to be altered in any way?

- (1) Interpreter
- (2) High-level
- (3) Compiler
- (4) COBOL
- (5) Executable

19. Usually downloaded into folders that hold temporary Internet files, \_\_\_\_\_ are written to your computer's hard disk by some of the Web sites you visit?

- (1) Anonymous files



- (2) Behavior files
- (3) Banner ads
- (4) Large files
- (5) Cookies

20. What is the easiest way to change the phrase, revenues, profits, gross margin, to read revenues, profits, and gross margin?

- (1) Use the insert mode, position the cursor before the g in gross, then type the word and followed by space
- (2) Use the insert mode, position the cursor after the g in gross, then type the word and followed by a space
- (3) Use the overtype mode, position the cursor before the g in gross, then type the word and followed by a space
- (4) Use the overtype mode, position the cursor after the g in gross, then type the word and followed by a space
- (5) None of these

21. A program, either talk or music that is made available in digital format for automatic download over the Internet is called a \_\_\_\_\_?

- (1) Wiki
- (2) Broadcast
- (3) vodcast
- (4) Blog
- (5) Podcast

22. Which PowerPoint view displays each slide of the presentation as a thumbnail and is useful rearranging slides?

- (1) Slide Sorter
- (2) Slide Show
- (3) Slide Master
- (4) Notes Page
- (5) Slide Design

23. Different components on the motherboard of a PC unit are linked together by sets of parallel electrical conducting lines. What are these lines called?

- (1) Conductors
- (2) Buses
- (3) Connectors

- (4) Consecutives
- (5) None of these

24. What is the name given to those applications that combine text, sound, graphics, motion video, and/or animation?

- (1) Motion ware
- (2) An graphics
- (3) Videos capes
- (4) Multimedia
- (5) maxomedia

25. A USB communication device that supports data encryption for secure wireless communication for notebook users is called a \_\_\_\_\_?

- (1) USB wireless network adapter
- (2) Wireless switch
- (3) Wireless hub
- (4) Router
- (5) None of these

26. An \_\_\_\_\_ language reflects the way people think mathematically?

- (1) Cross-platform programming
- (2) 3GL business programming
- (3) Event-driven programming
- (4) Functional
- (5) None of these

27. When entering text within a document the Enter key is normally pressed at the end of every \_\_\_\_\_?

- (1) Line
- (2) Heritance
- (3) Paragraph
- (4) Word
- (5) File

28. When a real-time telephone call between people is made over the Internet using computers, it is called \_\_\_\_\_?

- (1) A chat session
- (2) An e-rmail
- (3) An instant message
- (4) Internet telephony
- (5) None of these.

29. Which of the following is the first step in sizing a window?

- (1) Point to the title bar
- (2) Pull down the View menu to display the toolbar
- (3) Point to any corner or border
- (4) Pull down the View menu and change to large icons
- (5) None of these

30. Which of the following software could assist someone who cannot use their hands for computer input?

- (1) Video conferencing
- (2) Speech recognition
- (3) Audio digitizer
- (4) Synthesizer
- (5) None of these

31. \_\_\_\_\_ a document means the file is transferred from another computer to your computer?

- (1) Uploading
- (2) Really Simple Syndication (RSS)
- (3) Accessing
- (4) Downloading
- (5) Upgrading

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

- (1) Mass memory
- (2) Internal memory
- (3) Non-volatile memory
- (4) PROM
- (5) None of these

33. Computers that control processes accept data in a continuous \_\_\_\_\_?

- (1) Data traffic pattern
- (2) Data highway
- (3) Infinite loop
- (4) Feedback loop
- (5) Slot

34. What refers to a set of characters of a particular design?

- (1) Key face
- (2) Formation
- (3) Allograph
- (4) Stencil
- (5) Typeface

35. \_\_\_\_\_ is used by public and private enterprises to publish and share financial information with each other and industry analysts across all computer platforms and the Internet

- (1) Extensible Markup Language (EML)
- (2) Extensible Business Reporting Language (XBRL)
- (3) Enterprise Application Integration (EAI)
- (4) Sales Force Automation (SFA) software
- (5) None of these

36. Which part of the computer is used for calculating and comparing?

- (1) ALU
- (2) Control unit
- (3) Disk unit
- (4) Modem
- (5) None of these

37. The method of Internet access that requires a phone line, but offers faster access speeds than dial-up is the \_\_\_\_\_ connection?

- (1) Cable access
- (2) Satellite access
- (3) fiber-optic service
- (4) Digital Subscriber Line (DSI)
- (5) Modem

38. \_\_\_\_\_ software creates a mirror image of the entire hard disk, including the operating system, applications, files, and data?

- (1) Operating system
- (2) Backup software
- (3) Utility programs
- (4) Driver imaging
- (5) None of these

39. What is a URL?

- (1) A computer software program
- (2) A type of programming object
- (3) Address of a document or "page" on the World Wide Web
- (4) An acronym for Unlimited Resources for Learning
- (5) a piece of hardware

40. What is the significance of a faded (dimmed) command in a pull-down menu?

- (1) The command is not currently accessible
- (2) A dialog box appears if the command is selected
- (3) A Help window appears if the command is selected
- (4) There are no equivalent keystrokes for the particular command
- (5) None of these

41. Your business has contracted with another company to have them host and run an application for your company over the Internet. The company providing this service to your business is called a \_\_\_\_\_?

- (1) Internet service provider
- (2) Internet access provider
- (3) Application service provider
- (4) Application access provider
- (5) Outsource agency

42. An \_\_\_\_\_ allows you to access your e-mail from anywhere?

- (1) Forum
- (2) Webmail interface
- (3) Message Board
- (4) Weblog
- (5) None of these

43. Which of the following would you find on LinkedIn?

- (1) Games
- (2) Connections
- (3) Chat
- (4) Applications
- (5) None of these

44. \_\_\_\_\_ is a technique that is used to send more than one call over a single line?

- (1) Digital transmission
- (2) Infrared transmission
- (3) Digitizing
- (4) Streaming
- (5) Multiplexing

45. The Search Companion can \_\_\_\_\_?

- (1) Locate all files containing a specified phrase
- (2) Restrict its search to a specified set of folders
- (3) Locate all files containing a specified phrase and restrict its search to a specified set of folders
- (4) Cannot locate all files containing a specified phrase or restrict its search to a specified set of folders
- (5) None of these

46. Which of the following cannot be part of an e-mail address?

- (1) Period (.)
- (2) At sign (@)
- (3) Space ( )
- (4) Underscore ( \_ )
- (5) None of these

47. Which of the following must be contained in a URL?

- (1) A protocol identifier
- (2) The letters, www.
- (3) The unique registered domain name
- (4) www. and the unique registered domain name
- (5) A protocol identifier, www. and the unique registered domain name

48. Which of the following information systems focuses on making manufacturing processes more efficient and of higher quality?

- (1) Computer-aided manufacturing
- (2) Computer-integrated manufacturing
- (3) Computer-aided software engineering
- (4) Computer-aided system engineering
- (5) None of these

49. A mistake in an algorithm that causes incorrect results is called a \_\_\_\_\_?

- (1) Logical error
- (2) Syntax error
- (3) Procedural error
- (4) Compiler error
- (5) Machine error

50. A device for changing the connection on a connector to a different configuration is \_\_\_\_\_?

- (1) A converter
- (2) A component
- (3) An attachment adapter
- (4) An adepter
- (5) Voltmeter

## IBPS PO Exam 2012: Computer Knowledge: Question Paper (Answers)

Question	Answer	Question	Answer
1	3	26	4
2	5	27	3
3	3	28	4
4	1	29	3
5	2	30	2
6	3	31	4
7	1	32	2
8	3	33	3
9	5	34	5
10	1	35	2
11	5	36	1
12	3	37	4
13	5	38	4
14	5	39	3
15	1	40	1
16	4	41	4
17	5	42	2
18	5	43	2
19	5	44	5
20	1	45	3
21	5	46	3
22	1	47	4
23	2	48	2
24	4	49	1
25	1	50	4



**IBPS PO Exam 2011: Computer Knowledge: Question Paper**

1. To change selected text to all capital letters, click the change case button, then click\_\_\_\_.
  - (1) UPPERCASE
  - (2) UPPER ALL
  - (3) CAPS LOCK
  - (4) Lock Upper
  - (5) Large Size
  
2. A person who used his or her expertise to gain access to other people's computers to get information illegally or do damage is a\_\_\_\_\_.
  - (1) Hacker
  - (2) Analyst
  - (3) instant messenger
  - (4) programmer
  - (5) spammer
  
3. A device that connects to a network without the use of cables is said to be\_\_\_\_\_.
  - (1) distributed
  - (2) free
  - (3) centralized
  - (4) open source
  - (5) None of these
  
4. Reusable optical storage will typically have the acronym\_\_\_\_\_.
  - (1) CD

- (2) DVD
  - (3) ROM
  - (4) RW
  - (5) ROS
5. The most common type of storage devices are\_\_\_\_\_.
- (1) persistent
  - (2) optical
  - (3) magnetic
  - (4) flash
  - (5) steel
6. Codes consisting of lines of varying widths or lengths that are computer-readable are known as\_\_\_\_\_.
- (1) an ASCII code
  - (2) a magnetic tape
  - (3) an OCR scanner
  - (4) a bar code
  - (5) None of these
7. A Web site's main page is called its\_\_\_\_\_.
- (1) Home Page
  - (2) Browser page
  - (3) Search Page
  - (4) Bookmark
  - (5) None of these

8. Part number, part description, and number of parts ordered are examples of \_\_\_\_\_.
- (1) control
  - (2) output
  - (3) processing
  - (4) feedback
  - (5) input
9. To access properties of an object, the mouse technique to use is \_\_\_\_\_.
- (1) dragging
  - (2) dropping
  - (3) right-clicking
  - (4) shift-clicking
  - (5) None of these
10. Computers use the \_\_\_\_\_ number system to store data and perform calculations.
- (1) binary
  - (2) octal
  - (3) decimal
  - (4) hexadecimal
  - (5) None of these
11. \_\_\_\_\_ are attempts by individuals to obtain confidential information from you by falsifying their identity.
- (1) Phishing trips
  - (2) Computer viruses
  - (3) Spyware scams

- (4) Viruses
  - (5) Phishing scams
12. Why is it unethical to share copyrighted files with your friends?
- (1) It is not unethical, because it is legal.
  - (2) It is unethical because the files are being given for free.
  - (3) Sharing copyrighted files without permission breaks copyright laws.
  - (4) It is not unethical because the files are being given for free.
  - (5) It is not unethical - anyone can access a computer
13. Which of the following can be used to select the entire document?
- (1) CTRL+A
  - (2) ALT+F5
  - (3) SHIFT+A
  - (4) CTRL+K
  - (5) CTRL+H
14. To instruct Word to fit the width of a column to the contents of a table automatically, click the \_\_\_\_\_ button and then point to AutoFit Contents.
- (1) Fit to Form
  - (2) Format
  - (3) Autosize
  - (4) Contents
  - (5) AutoFit
15. The simultaneous processing of two or more programs by multiple processors is \_\_\_\_\_.
- (1) multiprogramming

- (2) multitasking
  - (3) time-sharing
  - (4) multiprocessing
  - (5) None of these
16. A disk's content that is recorded at the time of manufacture and that cannot be changed or erased by the user is\_\_\_\_\_.
- (1) memory-only
  - (2) write-only
  - (3) once-only
  - (4) run-only
  - (5) read-only
17. What is the permanent memory built into your computer called?
- (1) RAM
  - (2) Floppy
  - (3) CPU
  - (4) CD-ROM
  - (5) ROM
18. The default view in Excel is \_\_\_\_\_view.
- (1) Work
  - (2) Auto
  - (3) Normal
  - (4) Roman
  - (5) None of these

19. What displays the contents of the active cell in Excel?
- (1) Namebox
  - (2) Row Headings
  - (3) Formulabar
  - (4) Taskpane
  - (5) None of these
20. In Word you can force a page break\_\_\_\_\_.
- (1) by positioning your cursor at the appropriate place and pressing the F1 key
  - (2) by positioning your cursor at the appropriate place and pressing Ctrl+Enter
  - (3) by using the Insert/Section Break
  - (4) by changing the font size of your document
  - (5) None of these
21. Grouping and processing all of a firm's transactions at one time is called\_\_\_\_\_.
- (1) a database management system
  - (2) batch processing
  - (3) a real-time system
  - (4) an on-line system
  - (5) None of these
22. Help Menu is available at which button?
- (1) End
  - (2) Start
  - (3) Turnoff
  - (4) Restart

- (5) Reboot
23. You can keep your personal files/folders in \_\_\_\_.
- (1) My folder
  - (2) My Documents
  - (3) My Files
  - (4) My Text
  - (5) None of these
24. A central computer that holds collections of data and programs for many PCs, workstations, and other computers is a(n) \_\_\_\_.
- (1) supercomputer
  - (2) minicomputer
  - (3) laptop
  - (4) server
  - (5) None of these
25. When you save to this, your data will remain intact even when the computer is turned off.
- (1) RAM
  - (2) motherboard
  - (3) secondary storage device
  - (4) primary storage device
  - (5) None of these
26. The \_\_\_\_ folder retains copies of messages that you have started but are not yet ready to send.
- (1) Drafts

- (2) Outbox
  - (3) Address Book
  - (4) Sent Items
  - (5) Inbox
27. You can \_\_\_\_\_ a search by providing more information the search engine can use to select a smaller, more useful set of results.
- (1) refine
  - (2) expand
  - (3) load
  - (4) query
  - (5) slowdown
28. The contents of \_\_\_\_\_ are lost when the computer turns off.
- (1) storage
  - (2) input
  - (3) output
  - (4) memory
  - (5) None of these
29. The \_\_\_\_\_ enables you to simultaneously keep multiple Web pages open in one browser window.
- (1) tab box
  - (2) pop-up helper
  - (3) tab row
  - (4) address bar
  - (5) Esc key



30. A DVD is an example of a(n)\_\_\_\_\_.

- (1) hard disk
- (2) optical disc
- (3) output device
- (4) solid-state storage device
- (5) None of these

31. The basic unit of a worksheet into which you enter data in Excel is called a\_\_\_\_\_.

- (1) tab
- (2) cell
- (3) box
- (4) range
- (5) None of these

32. \_\_\_\_\_is the process of dividing the disk into tracks and sectors.

- (1) Tracking
- (2) Formatting
- (3) Crashing
- (4) Allotting
- (5) None of these

33. Which ports connect special types of music instruments to sound cards?

- (1) BUS
- (2) CPU
- (3) USB
- (4) MIDI

- (5) MINI
34. The process of transferring files from a computer on the Internet to your computer is called\_\_\_\_\_.
- (1) Downloading
  - (2) Uploading
  - (3) FTP
  - (4) JPEG
  - (5) Downsizing
35. In Excel,\_\_\_\_\_allows users to bring together copies of workbooks that other users have worked on independently.
- (1) Copying
  - (2) Merging
  - (3) Pasting
  - (4) Compiling
  - (5) None of these
36. If you want to connect to your own computer through the Internet from another location, you can use\_\_\_\_\_.
- (1) e-mail
  - (2) FTP
  - (3) instant message
  - (4) Telnet
  - (5) None of these
37. To reload a Web page, press the \_\_\_\_\_button.
- (1) Redo

- (2) Reload
- (3) Restore
- (4) Ctrl
- (5) Refresh

38. Mobile Commerce is best described as\_\_\_\_\_.

- (1) The use of Kiosks in marketing
- (2) Transporting products
- (3) Buying and selling goods/services through wireless handheld devices
- (4) Using notebook PC's in marketing
- (5) None of the above

39. Video processors consist of\_\_\_\_\_ and \_\_\_\_\_, which store and process images.

- (1) CPU and VGA
- (2) CPU and memory
- (3) VGA and memory
- (4) VGI and DVI
- (5) None of these

40. \_\_\_\_\_are words that a programming language has set aside for its own use.

- (1) Control words
- (2) Control structures
- (3) Reserved words
- (4) Reserved keys
- (5) None of these

41. What is the process of copying software programs from secondary storage media to the hard disk called?
- (1) configuration
  - (2) download
  - (3) storage
  - (4) upload
  - (5) installation
42. This first step in the transaction processing cycle captures business data through various modes such as optical scanning or at an electronic commerce website.
- (1) Document and report generation
  - (2) Database maintenance
  - (3) Transaction processing start-up
  - (4) Data Entry
  - (5) None of these
43. When the pointer is positioned on a \_\_\_\_\_, it is shaped like a hand.
- (1) Grammar error
  - (2) Formatting error
  - (3) ScreenTip
  - (4) Spelling error
  - (5) Hyperlink
44. The computer abbreviation KB usually means\_\_\_\_\_.
- (1) Key Block
  - (2) Kernel Boot
  - (3) Key Byte

- (4) Kit Bit
- (5) Kilo Byte
45. Which of the following are advantages of CD-ROM as a storage media?
- (1) CO-ROM is an inexpensive way to store large amount of data and information
  - (2) CD-ROM disks retrieve data and information more quickly than magnetic disks do
  - (3) CO-ROMs make less errors than magnetic media
  - (4) All of the above
  - (5) None of these
46. A(n)\_\_\_\_\_is a special visual and audio effect applied in PowerPoint to text or content.
- (1) animation
  - (2) flash
  - (3) wipe
  - (4) dissolve
  - (5) None of these
47. Which of the following is a storage device that uses rigid, permanently installed magnetic disks to store data/information\_\_\_\_\_.
- (1) floppy diskette
  - (2) hard disk
  - (3) permanent disk
  - (4) optical disk
  - (5) None of these
48. The piece of hardware that converts your computer's digital signal to an analog signal that can travel over telephone lines is called a\_\_\_\_\_.
- (1) red wire

- (2) blue cord
- (3) tower
- (4) modem
- (5) None of these

49. Personal computers can be connected together to form a\_\_\_\_\_.

- (1) server
- (2) supercomputer
- (3) network
- (4) enterprise
- (5) None of these

50. A \_\_\_\_\_ is the term used when a search engine returns a Web page that matches the search criteria.

- (1) blog
- (2) hit
- (3) link
- (4) view
- (5) success

**IBPS PO Exam 2011: Computer Knowledge: Question Paper  
(ANSWERS)**

- |       |       |       |
|-------|-------|-------|
| 1) 1  | 21) 3 | 41) 5 |
| 2) 1  | 22) 2 | 42) 4 |
| 3) 3  | 23) 2 | 43) 5 |
| 4) 4  | 24) 4 | 44) 5 |
| 5) 2  | 25) 3 | 45) 1 |
| 6) 4  | 26) 1 | 46) 1 |
| 7) 1  | 27) 1 | 47) 2 |
| 8) 5  | 28) 3 | 48) 4 |
| 9) 3  | 29) 3 | 49) 3 |
| 10) 1 | 30) 2 | 50) 2 |
| 11) 5 | 31) 2 |       |
| 12) 3 | 32) 2 |       |
| 13) 1 | 33) 4 |       |
| 14) 5 | 34) 1 |       |
| 15) 4 | 35) 2 |       |
| 16) 5 | 36) 4 |       |
| 17) 5 | 37) 5 |       |
| 18) 3 | 38) 3 |       |
| 19) 3 | 39) 2 |       |
| 20) 3 | 40) 3 |       |

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