SWAMI VIVEKANANDA YOUTH COMPUTER TRAINING CENTER

Father's of Computer "**Charles Babbage**" in 1846.

C : Commonly
O : Operating
M : Machine
P : Particularly
U : Used for
T : Trade
E : Education
R : Research

Definition of Computer :

Computer is a high speed, and data manipulation, electronic system that record, manipulate and retrieve data through out put. The sequence of instruction given to a computer to perform a particular task is called a program. Computer is actually a machine capable of carrying out a sequence of logical and arithmetical operations called for in a program.

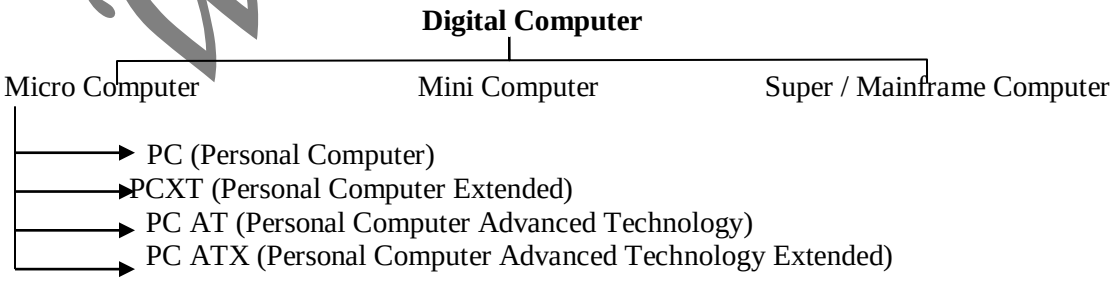
Advantage of a Computer :

A computer usually has **:**

1. Very high speed
2. Large storage and retrieval capacity
3. Accuracy in calculation
4. Versatility in application
5. Diligence

Type of Computer :

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



Also available **Hybrid Computer**.

Hardware and Software:

We come across two terms quite frequently in relation to computers. These are Hardware and Software. Let us define these terms.

Hardware:

Hardware refers to the physical components of a computer. The devices that physically ensure intake of data, storing them, processing them and displaying them are called Hardware.

Software:

Software consists of sequence of instructions, in the from of a program to perform a particular task on a computer. The two terms may be understood by drawing an analogy with television sets. A television produced by Phillips or Sony or any others manufacturer is capable of displaying television programs. Yet, unless there is a telecast of some program, these devices are of no use. The television set will be termed as hardware where as the program that gets displayed in the set is called the software.

Part of a Computer :

The main parts of a typical computer system are as follows:

i) System Unit or CPU (Central Processing Unit)
   a) Arithmetic and Logic Unit (ALU)
   b) Control Unit
ii) Display Unit or Monitor
iii) Input Unit (i.e. Key Board, Mouse)
iv) Memory Unit
v) Output Unit (i.e. Printer, Plotter etc.)

All the physical components of a computer come under Hardware. Broadly speaking all internal and external components like computer itself, the printer, the monitor, keyboard, mouse etc. comes under hardware.

System Components:

A modem PC is both simple and complicated. Here are the components and peripherals necessary to assemble a basic modern PC system:

- Motherboard.
- Processor.
- Memory (RAM).
- Case/ Chassis/ Cabinet (Power Supply).
- Monitor / VDU.
- Floppy Drive.
- Hard Disk.
- CD-ROM, CD-Writer, DVD-ROM Drive.
- Keyboard.
- Mouse.
- Video Card.
- NIC / LAN Card.
- Sound Card.
- Speakers.
- Modem.

Memory :

Memory Unit two types of memory Primary memory i.e. RAM, ROM and Secondary memory i.e. Floppy disk, Hard Disk, tape.

RAM (Random Access Memory) :

It consist of erasable Semi-conductor chip and is a temporary/volatile storage device, because their contents are lost if power is disrupted. This is also known as primary or main memory, which is used by a computer to read or write program or data. Information will remain in the memory so long power is present.

When you turn OFF power to your PC whatever you had stored in RAM is lost unless you have first saved it on disk.

Two types of RAM, they are **a) Static RAM (Permanent/Cache Memory)**
b) Dynamic RAM (Temporary)

ROM (Read Only Memory) :

It consists of non-erasable /non- volatile (i.e. Permanent) memory in nature and need not be loaded in a secondary storage device. It is a solid-state storage chip that is programmed at the time of its manufacturing and may not be reprogrammed by the user. ROMs are the memories on which it is not possible to write the data when they are on line to the computer. They can only be read. ROMs are fabricated in large number in a way where these is no room for even a single error.

Four types of ROM, they are -----

a) ROM (True or Mask-ROM),
b) P ROM (Programmable ROM),
c) EP ROM (Erasable Programmable ROM),
d) EEP ROM (Electrically Erasable Programmable ROM),
e) Flash ROM / Memory.

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Unit of Memory :

Measurable unit of memory is Byte.

8 Bit=1 Byte =1 word or character.
1024 Byte = 2^{10} Byte = 1 KB
1024 KB = 2^{10} KB = 1 MB
1024 MB = 2^{10} MB = 1 GB
1024 GB = 2^{10} GB = 1 TB
1024 TB = 2^{10} TB = 1 PB
1024 PB = 2^{10} PB = 1 HB

(Full From)

ARLL : Advanced Run-Length Limited Encoding

AC : Alternating Current

ANSI : American National Standards Institute

ADC : Analog to Digital Converter

API : Application Program Interface

ASCII : American Standard Code for Information Interchange

ATA : Advanced Technology Attachment

AGP : Accelerated Graphics Port

BCD : Binary – Coded Decimal

BPS : Bits Per Second

BIOS : Basic Input Output System

PCMCIA : Personal Computer Memory Card International Association

CD : Compact Disk

CPU : Central Processing Unit

CGA : Color Graphics Adapter

CMOS : Complementary Metal Oxide Semi-conductor

CISC : Complex Instruction Set Computing

CAV : Constant Angular Velocity

CRT : Cathode Ray Tube

CLV : Constant Linear Velocity

DDR : Double Data Rate RAM

DWP : Daisy Wheel Printer

DCE : Data Communication Equipment

DCI : Display Control Interface

DEC : Digital Equipment Corporation

GUI : Graphical User Interface

DOS : Disk Operating System

DIMM : Dual In line Memory Module

DAT : Digital Audio Tap

DVD : Digital Versatile Disk

DVI : Digital Video Interactive

DC : Direct Current

DMA : Direct Memory Access

DMI : Desktop Management Interface

DNS : Domain Name Services

DPI : Dot Per Inch

DSP : Digital Signal Processor

DSR : Data Set Ready

DTR : Data Terminal Ready

DIP : Dual In line Pin Package

EP ROM : Erasable Programmable Read Only Memory

EPS : Encapsulated Post Script

EEPROM : Electrically Erasable Programmable Read Only Memory

EDO : Extended Data Out RAM

EGA : Enhanced Graphics Adapter

EISA : Extended Industry Standard Architecture

EMI : Electro Magnetic Interface

ESDI : Enhanced Small Device Interface

FDDI : Fiber Distributed Data Interface

FAT : File Allocation Table

FOC : Fiber Optical Cable

FIFO : First In First Out

GIF : Graphics Interchange Format

HPFS : High Performance File System

HTML : Hyper Text Markup Language

HTTP : Hyper Text Transfer Protocol

IBA : Internet Board of Architecture

IBM : International Business Machine

IDE : Integrated Drive Electronics

IRQ : Interrupt Request Line

ISO : International Standard Organization

IEEE : Institute of Electrical and Electronics Engineers

IP : Internet Protocol

IRC : Internet Relay Chat

ISA : Industry Standard Architecture

ISDN : Integrated Services Digital Network

ISO : International Standard Organization

OSI : Open System Interconnection

ITU : International Telecommunication Union

JPEG : Joint Photographic Expert Group

LAN : Local Area Network

LCD : Liquid Crystal Display

LED : Light Emitting Diode

MCA : Micro Channel Architecture

MCGA : Multi Color Graphics Adapter

MPEG : Motion / Moving Picture Expert Group

MDA : Monochrome Display Adapter

MTTR : Mean Time TO Repair

MB : Mega Byte

MHz : Mega Hertz

HMA : High Memory Area

MAN : Metropolitan Area Network

MIDI : Musical Instrument Digital Interface

MIPS : Million Instructions per Second

NIC : Network Interface Card

NTFS : New Technology File System

NFS : Network File System

NTSC : National Television System Committee

OEM : Original Equipment Manufacturer

PDA : Personal Digital Assistant

POST : Power On Self Test

PCB : Printed Circuit Board

PCI : Peripheral Component of Interface

RFI : Radio Frequency Interface

RISC : Reduced Instruction Set Computing

RAM : Random Access Memory

RAID : Redundant Array of Inexpensive Disk

ROM : Read Only Memory

RD RAM : Rambus Dynamic RAM

RIMM : Rambus In line Memory Module

SATA : Serial Advanced Technology Attachment

SMPS : Switch Mode Power Supply

SD RAM : Synchronous Dynamic RAM

SCSI : Small Computer System Interface

SIMM : Single In line Memory Module

SIPP : Single In line Pin Package

SLIP : Serial Line Internet Protocol

VGA : Video Graphics Adapter

TIFF : Tag Image File Format

TCP : Transmission Control Protocol

TFT : Thin Film Transistor

UPS : Uninterruptible Power Supply

URL : Uniform Resource Locator

USB : Universal Serial Bus

VGA : Video Graphics Adapter

WAN : Wide Area Network

WWW : World Wide Web

ZIF : Zero Insertion Force

PC KEY BOARD SHORTCUTS

ALT + ESC → CYCLES THROUGH OPEN PROGRAMS

ALT +TAB → CYCLES THROUGH OPEN APPLICATIONS.

ALT + SPACE BAR → CONTROL MENU

ALT + HYPHEN → OPEN THE WINDOW'S CONTROL MENU.

ALT + F4 → CLOSES OPEN WINDOW'S.

ALT + LEFT RIGHT ARROWS → BACK/FORWARD ON WEB.

CTRL + A → SELECT ALL

CTRL + B → BOLD FONT

CTRL + C → COPY

CTRL + D → CHANGE FONT

CTRL + E → CENTER ALIGNMENT

CTRL + F → FIND

CTRL + G → GO TO

CTRL + H → REPLACE

CTRL + I → ITALIC FONT

CTRL + J → JUSTIFY

CTRL + K → INSERT HYPERLINK

CTRL + L → LEFT ALIGNMENT

CTRL + M → TABS FIVE SPACES

CTRL + N → NEW DOCUMENT

CTRL + O → OPEN FILE

CTRL + P → PRINT

CTRL + Q → RESETS TAB ON RULER

CTRL + R → RIGHT ALIGNMENT

CTRL + S → SAVE

CTRL + S / → SAVE AS

CTRL + T → HANGING INDEX

CTRL + U → UNDERLINE

CTRL + V → PASTE

CTRL + W → CLOSES FILE

CTRL + X → CUT

CTRL + Y → RE DO

CTRL + Z → UN DO

CTRL + 1 → SINGLE SPACE

CTRL + 2 → DOUBLE SPACE

CTRL + 5 → 1.5 LINE SPACE

CTRL + [→ DECRESE FONT

CTRL +] → INCRESE FONT

CTRL + ESC → WINDOWS MENU

CTRL + ENTER → PAGE BREAK

CTRL + SPACE BAR → SELECT ON EXCEL COLUMN

CTRL + HOME → TOP

CTRL + END → BOTTOM

CTRL + SHIFT + ARROW → SELECT WORD

CTRL + F2 → PRINT PREVIEW

SHIFT + TAB → MOVES CURSOR BACK WORD

SHIFT + PAGE UP → HIGHT LIGHTS CURSOR POSITION TO THE BEGINNING OF THE LINE

SHIFT + PAGE DOWN → HIGHT LIGHTS CURSOR POSITION TO THE END OF THE LINE

SHIFT + F7 → THESAURUS

OTHERS KEY --------

F1 → HELP

F5 → FIND AND REPLACE

F7 → SPELL / GRAMMAR CHECK

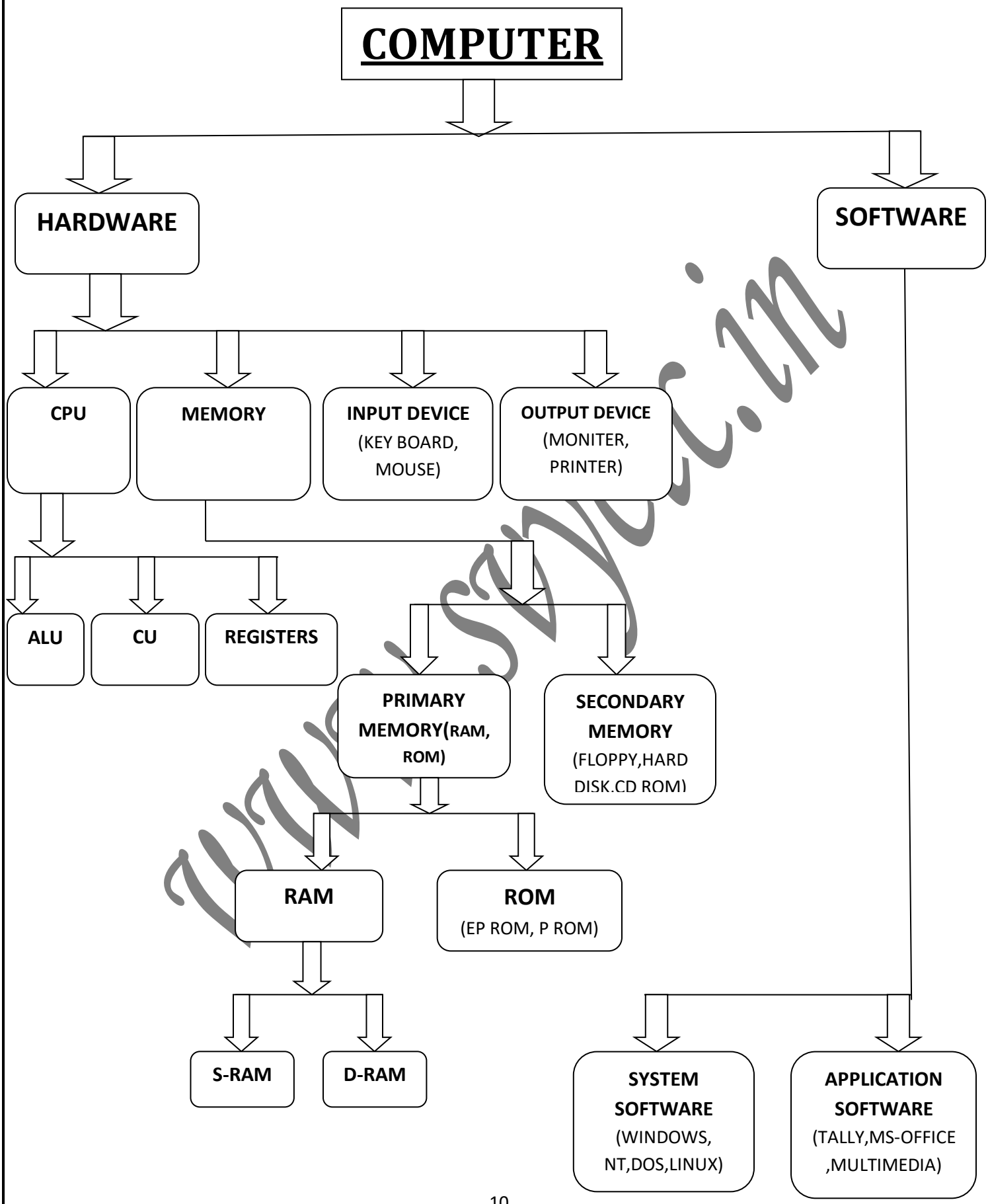
WINDOWS KEY → START MENU

WINDOWS KEY + D → GO TO DESK TOP

SHORTCUT KEY → SHORTCUT MENU

ALT + CTRL + DELETE → LOG OFF / ON

DESK TOP ROATED → ALT + CTRL + ARROW


COMPUTER
HARDWARE
SOFTWARE
CPU
MEMORY
INPUT DEVICE (KEY BOARD, MOUSE)
OUTPUT DEVICE (MONITER, PRINTER)
ALU
CU
REGISTERS
PRIMARY MEMORY(RAM, ROM)
SECONDARY MEMORY (FLOPPY,HARD DISK,CD ROM)
RAM
ROM (EP ROM, P ROM)
S-RAM
D-RAM
SYSTEM SOFTWARE (WINDOWS, NT,DOS,LINUX)
APPLICATION SOFTWARE (TALLY,MS-OFFICE ,MULTIMEDIA)

QUESTION & ANSWER

1. The improvement of computer hardware theory is summarized by which law.?
   → Moore's First Law.
2. The most widely used computer device is → Internal hard disk.
3. _____are software which is used to do particular task. → Program.
4. Who is father of modern computers? → Charles Babbage.
5. How many generations of computers we have? → 5.
6. _____controls the way in which the computer system functions & provides a means by which users can interact with the computer.
   → The operating system.
7. The difference between people with access to computers & the Internet & those without this access is known as the:
   → Digital divide.
8. All of the following are examples of real security & privacy risks EXCEPT → Spam.
9. The term 'Pentlum' is related to → Microprocessor.
10. HTTP stands for → Hypertext Transfer Protocol.
11. _____is the process of dividing the disk into tracks & sectors. → Formatting.
12. Which computer memory is used for storing programs & data currently being processed by the CPU?
    → Internal memory.
13. What type of software creates a smaller file that is faster to transfer over the Internet?
    → Compression.
14. Which of the following is used for close a tab on a browser?
    → Ctrl + W.
15. Which of the following is NOT a component of the Central Processing Unit of the computer?
    → Both A & B.
16. When cutting & pasting, cutting section is temporarily stored in
    → Clipboard.
17. You can move between two or more Excel files opened by using the → Ctrl + tab.
18. To open find window → F5.
19. _____ Is the execution of at least two different programs simultaneously,
    → Multiprocessing.
20. _____Is a mechanism by which all the content in a specified storage areas are written as output.
    → Dumping.
21. He First generation computers used _____ for circuitry. → Vacuum tube.
22. He period of First generation computer is → 1940-1956.
23. He period of Second generation computer is → 1956-1963.
24. He period of Third generation computer is → 1964-1975.
25. E period of Fourth generation computer is →1975-1989.
26. Which of the following is a correct format of Email address?
    → care@website.com.
27. Which of the following is an example of a binary number? → 100101.
28. The basic unit of a worksheet into which you enter data in Excel is called a → Cell.
29. What is e-commerce? → Buying & selling products & services over the Internet.
30. The process of transferring files from a computer on the Internet to your computer is called
    → Downloading.
31. VLSI technology is used in _____ generation computers. → Fourth.
32. Different types of modern digital computers come under which generation. → Fifth.
33. What computers are used for fastest type of computer that can perform complex operations at very high speed?

→ Super.

34. One of the Input device in computer are → Keyboard.
35. The main working memory used by the computer are → RAM.
36. 'Blue tooth' technology allows → Wireless communication between equipments.
37. All of the following statements concerning files are true EXCEPT → Files are stored in RAM.
38. The operating system does all of the following EXCEPT
    → enable users to perform a specific task such as document editing.
39. Verification of a login name & password is known as → Configuration.
40. All of the following statements concerning windows are true EXCEPT
    → Windows are an example of a command-driven environment.
41. RAM stands for → Random Access Memory.
42. A special type of memory chip that holds software that can be read but not written to → ROM.
43. A byte consist of how many bits → 8.
44. Special type of program that loads automatically when you start your computer → OS.
45. Finite number of sequential instructions are called → Algorithm.
46. What is the commonly used unit for measuring the sped of data transmission?
    → Bits per second.
47. The base of the hexadecimal number system is → 16.
48. The Operating System Manages - A) Processes B)Memory C)Disk & I/O devices D) All of the above.
    → D) All of the above.
49. Data that are accumulated & processed in group called → Batch Processing.
50. Which of the following are true about firewalls? --- A) Follows a set of rules B) Filters network traffic C) Can be either a hardware or software device D) All of the above.
    → D) All of the above.
51. Artificial intelligence is used in which computer knowledge? → PROLOG.
52. Memory are how many types? → 2.
53. Primary memory is available in form of _____ chips. → Silicon.
54. Ram is considered which memory? → Primary.
55. Ram are divided into how many types? → 2.
56. What are the four things needed to connect to the Internet?
    → Telephone line, modem, computer, & an ISP.
57. 1024 bytes equals to → 1KB.
58. Computer software includes --- A) Packaged programs B) Operating system programs C) Application programs D) All of these.
    → D) All of these.
59. Which of the following is an input device? ---A) Mouse B) Keyboard C) Scanner D) All of the above.
    → D) All of the above.
60. The set of instructions that tells the computer what to do is → Hardware.
61. Rom can only perform _____operations. → Read.
62. Rom is a _____ type of memory. → Non-volatile.
63. Which memory is also called auxiliary memory? → Secondary.
64. MS-DOS is a _____ type of operating system. → Text based.
65. _____ is the first widely installed operating system used in the personal computers. → Pc-Dos.
66. Assembly language is → A low level programming language.
67. Which part of the computer helps to store information? → Disk drive.
68. Which keys enable the input of numbers quickly? → The numeric keypad.
69. What happen when we try to delete the files on the floppy?
    → The files get deleted & cannot be restored again.
70. The following computer's memory is characterized by low cost per bit stored → Secondary.
71. Mainframe computer is used to store → Large volumes of data.
72. FORTRON is used for _____ type of work. → Organization.

73. The main work done by parallel computing is → Many calculations done simultaneously.
74. Excess of internal storage is defined by the term called A) Overflow B) Underflow.
    → A) Overflow.
75. For commercial applications we used _____ language. → PASCAL.
76. Assembly language is __ A) Low level programming language B) High level programming language.
    → A) Low level programming language.
77. The ALU performs _____ operations. → Logic.
78. What does an electronic spread sheet consist of? (choose the best answer) --- A) Rows B) Columns C) Cells D) All of these.
    → D) All of these.
79. Which part of the computer can display the user's work? → Monitor.
80. Which of the following options is used to display information such as title, page number of the document?
    → Header & Footer.
81. For real time applications which operating system we use? → Real time operating system.
82. The fundamental purpose of BIOS are → Initialize & test system hardware components.
83. The term BIOS was invented by → Gary Kildall.
84. The system analyst can do → Design structure of program.
85. Debugging is the process of → Checking errors in the program.
86. _____ is a printed circuit card inside the computer. → Mother Board.
87. The mother board contains various → Integrated Circuits.
88. Integrated Circuits is also known as → Chips.
89. The mother board also holds the _____ of the computer. → Both 1& 2.
90. I/O slot connects these connectors connect the motherboard with the I/O device such as _____. --- A) The keyboard B) Printer C) Monitor D) All of these.
    → D) All of these.
91. BASIC is family of ----A) General purpose & high-level programming B) Operating system & programming language.
    → A) General purpose & high-level programming.
92. The original basic language was designed in the year → 1964.
93. ROM is a → Static & non-volatile.
94. Who sets the task to be done, what does the customer wanted to do? → End user.
95. ____ is a diagrammatic representation illustrates a solution to a given. → Flow chart.
96. Floppy disk drive cables – as the name suggests this cable connects the motherboard with the _____.
    → Floppy disk drive.
97. Cache – the cache memory is also logically connected to the _____. → Motherboard.
98. The motherboard also contains special chips called as → Both 1 & 2.
99. The central processing unit is also known simply as the → Processor.
100. MMU stands for → Main Memory Unit.
101. BASIC language is used as a → Interpreter.
102. EEPROM is a _____ type of memory. → Non-volatile.
103. _____ is a computer code for representing alphanumeric characters. → Ebcdic.
104. On which database model the structure allows representing information using parent/child relationship.
    → Hierarchical.
105. _____ refers to the physical devices used to store programs or data on a temporary or permanent basic for use in a computer or other digital electronic device.
    → Memory.
106. MBR stands for --- A) Management Box Register B) Memory Buffer Register.
    → B) Memory Buffer Register.

107. MMU location to auxiliary device, we need to copy the data to special register called as _____. --- A) Memory Buffer Register B) Memory Data Register C) Memory Box Register D) Both 1 & 2.
→ D) Both 1 & 2.
108. We can imagine the various arithmetic & logical operations that can be performed by --
→ Hardware.
109. C.U. Stands for → Control Unit.
110. An assembly language programmer is allowed to write instruction such as _____.
A) Add B) Sub C) Both 1& 2 D) None of these.
→ C) Both 1 & 2.
111. _____ is computer software designed to translate image of type written test.
→ Optical character recognition.
112. _____ Program can harmful to computer operation. → Virus.
113. The following software is comes under graphics use --- A) Adobe reader B) Ms power point C) Adobe photo shop D) Ms-dos.
→ C) Adobe photo shop.
114. _____ technological barrier designed to prevent unauthorized or unwanted communications between computer networks or hosts. :--- A) Virus B) Software C) Programs D) Firewall.
→ D) Firewall.
115. Printers are measured in --- A) Dpi B) Degrees C) Inches D) Scaling.
→ A) Dpi.
116. What keyboard shortcut is used to move the cursor to the beginning or end of a document? A) Ctrl +Tab or Ctrl + Shift B) Ctrl + S or Ctrl + Z C) Ctrl + D or Ctrl + V D) Ctrl + Home or Ctrl + End.
→ D) Ctrl + Home or Ctrl + End.
117. Object program means --- A) program written in machine language B) Program written in programming language C) Program written in computer system D) Program written in super computers.
→ Program written in machine language.
118. Software can be classified into how many types? --- A) 1 B) 3 C) 2 D) 4.
→ C) 2
119. Megabytes is approximately equal to --- A) 8 bytes B) 2 million bytes C) 8 million bytes D) 1 million bytes
→ D) 1 million bytes.
120. _____ gives battery backup for a limited time --- A) Adapter B) BIOS C) UPS D) None.
→ C) UPS.