**History of Computer(IT STD VI CH 1)**

**1.Answer the following questions in one or two sentences each:**

(1) What were Napier's bones?

Ans. Napier's Bone were square in cross sections and a set consisted of 9 rods numbered from 1 to 9.

(2) Which type of calculations could be done using Stepped Reckoner?

Ans. A Stepped Reckoner can add and subtract as well as multiply, divide and find square roots.

(3) In what respects was Babbage's designed Analytical Engine similar to that of a modern computer? OR Why Charles Babbage called the father of computer.

Ans. Charles Babbage designed a computer which has an input device, a control unit , a memory unit and an output device. So he is called as the father of computer.

(4) What is meant by computer generations?

Ans. A computer generation means the technology that are used to build the electronic circuit of the computer.

(5) Why were first generation computers were huge in size?

Ans. The first generation of computers were built by vacuum tube technology. And they released huge amount of heat. So they had to be cooled by big A/C.

(6) How did the invention of transistor benefit computers? OR What characteristics make a transistor better than vacuum tube?

Ans. Transistors were smaller, cheaper and more reliable.

**2. Name the following:**

(1) The first known calculating aid. Abacus.

(2) The inventor of Stepped Reckoner. Gottfried Leibniz.

(3) The programmable computing device designed by Babbage. Analytical Engine.

(4) A stiff card with holes punched to input data. Punched Card.

(5) The first programmable electronic computer. ENIAC

(6) The electronic device which replaced vacuum tubes. Transistor.

(7) The VLSI chip invented by ted Hoff. Microprocessor.

**3. State whether the following statements are true or false:**

(1) Charles Babbage is known as the father of computer because he designed the first digital computer. False.

(2) The invention of transistors made the computer smaller but slower. False.

(3) FORTAN and COBOL were used in first generation of computers. True.

(4) Keyboard and operating system were introduced in the third generation computers. True.

(5) The microprocessor uses VLSI technology. True.

(6) Fifth generation computers are being developed to have artificial intelligence. True.

**4. Fill in the blanks:**

(1) The **Abacus** was the earliest calculating aid.

(2) Napier's Bones consisted of a set of 9 rods.

(3) Before the invention of electronic calculator. Scientist used the slide Rule to carry out numerical calculations.

(4) The invention of vacuum tubes led the development of electronic computers.

(5) Programs for first generation computers were initially written in machine language.

(6) Integrated circuits were used to make third generation of computers.

(7) The graphical user interface and mouse was introduced in 4th generation computers.

**5. Math the following.**

|  |  |
| --- | --- |
| (1) column A | Column B |
| (1) Jhon Mauchly | ENIAC |
| (2) Herman Hollerith | IBM |
| (3) William Shockley | Transistor. |
| (4) Jack Kilby | Integrated Circuit. |
| (5) Ted Hoff | Microprocessor |

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|  |  |
| --- | --- |
| (2) column | Column B |
| (1) First generation | Vacuum tube |
| (2) Second generation | Transistors |
| (3) Third generation | Integrated Circuit |
| (4) Fourth generation | Micro processors |
| (5) Fifth generation | Artificial intelligence |

**Multimedia (IT STD VI CH 2)**

**1.Answer the following questions in one or two sentences each:**

(1) What is a multimedia computer?

Ans. A multimedia computer system integrates two or more types media such as text, images and video.

(2) State the hardware and software you need in you need in your computer to run multimedia applications.

Ans. Multimedia hardware’s are speaker, microphone, CD Drive m sound card, video or input card and camera.The multimedia software’s are sound recorder and media player.

(3) What is sound recording?

Ans. The process of recording sound in to a computer with the help of a microphone and sound record

(4) What is the use of a compact disc?

Ans . Compact disc help as to store and retrieve data.

(5) What is meant by scanning a picture?

Ans. The process of capturing a picture as a grid of small and converting the colour information of each dot in to the digital languages of a computer is called scanning.

(6) What are the advantages of a scanner ?

Ans. We can scan a picture to the computer . And we can edit the picture as we like. And we can send the picture via email. or we can or we can print the picture when we need.

(7) Write in brief the construction of a flat-bed scanner.

Ans. A flat-bed scanner is a rectangular box with a flat transparent glass top with scanning lamp and scanner strip. The top cover protected the scanner from dust and scratches.

(8) State the different types of scanners available.

Ans. Hand hold scanner- we can hold this scanner in our palm.A4 size scanner - it is a flatbed scanner like photo copies.Half imperial size scanner: - It can scan big posters and floor plans.

(9) What precautions will you take while using a scanner?

Ans. Keep scanner tree from dust. Don’t make scratches on the glass top.

When you scan close the top cover.

**2. Name the following :**

(1) The language which is computer understands. DIGITAL

(2) An input device to record your voice. MICROPHONE

(3) The piece of hardware to which the loudspeakers or headphone must be connected. SOUND CARD

(4) The piece of hardware you will need to see television programs on your computer`s monitor.TV TUNER CARD

(5) The Windows software to play back sound. WINDOWS MEDIA PLAYER

**3. State whether the following statements are true or false :**

|  |  |
| --- | --- |
| Statements | Answer |
| (1) A motion picture cannot be viewed on a multimedia computer | False |
| (2) Many headphones have an attached microphone. | False |
| (3) A CD is a device to store information. | True |
| (4) Your cannot watch a movie using Media player. | False |
| (5) You cannot adjust the playback volume in Media player. | False |
| (6) A Low-power laser light is used to write on a writable compact disc. | True |
| (7) A microphone is used for listening to digitally recorded sound. | False |
| (8) A computer understands only the digital language. | True |
| (9) The device used to input a picture into a computer is called the paint. | False |
| (10) Scanner is an output device. | False |

**4. Fill in the blanks :**

(1)The WMP utility in Windows Accessories is used for running an audio CD.

(2)For recording sound, there must be SOUND CARD in the system units.

(3)The amount of the scanner light reflected from a picture is sent to the computer in a DIGITAL language.

(4)The resolution of a picture is measured in units of DPI

(5)Good scanning resolutions are obtained with a 300 DPI to a 8000 DPI scanner.

**5. State briefly the use of the following :**

(1) Sound card : Sound card is an electronic create required to input and output the sound in a computer.

(2) TV Tuner card : It is used to connect TV signals to a computer.

(3) Mute button in Media player : Mute button is used to stop the sound.

(4) Shuffle button in Media Player : It is used to re-order the play list of the media player.

**3. BINARY NUMBER SYSTEM.**

**1. Answer the following questions in one or two sentences each:**

(1)What is the decimal system?

Ans. The place-value system with base 10 is called the decimal system.

(2)What is the binary system?

Ans. The place-value system with base 2 is called the binary system.

(3)Write any two points of difference between the decimal and binary number system.

Ans. The base of decimal system is 10. There are 10 digits (0 to 9).The base of binary system is 2. There are 2 digits are available (0 to 1).

(4)What is the place value of each bit in the binary notation?

Ans. In the binary notation, the place-value of each successive bit to the left of the unit position indicates a multiple of successive power of 2.

(5)What is a byte?

Ans. A group of 8 bit treated as a unit in computer hardware is called byte.

(6)What is a word to microprocessor?

Ans. A word is a larger unit, long enough to contain an instruction or an integer, It may be 2-byte, 4-byte or 8 byte.

(7)What is meant by ASCII code?

Ans. American National Standard Institute (ANSI) develop a table of 7-bit binary code to represent a text. It was called American Standard Code for Information Interchange.(ASCII).

**2. Name the following:**

(1)The smallest unit of digital storage and information – Bit.

(2)A group of 8 bits treated as a unit – Byte.

(3)A group of 2,4, or 8 bytes treated as a unit – Word.

**3. State the following statements are true or false.**

(1) The term bit coined from binary information technique. True

(2) In binary number, the place-value of the bit to the left of the unit position is 10. False

(3) The 8-bit byte can represent only 128 numbers. False

(4) The abbreviation for bit is the lower case letter b. True

(5) 1 kilobyte = 8192 bits. True

(6) Computer store text documents in RAM and on hard disk using ASCII codes. True.

(7) The ASCII code was developed by American National Standard Institute. True

**4.Fill in the blanks:**

(1)Binary have only possible values, 0 and 1.

(2)There are 8 bits in a byte.

(3)1 kilobyte of memory space can store 8192 bits.

(4)1 gigabyte= 1024 megabytes.

(5)Using only 7 bits initially, the number of printing and non- printing characters that ASCII code could represent was 128 numbers

(6)The decimal value of the space character in the ASCII code is 32.

(7)In the ASCII code, the decimal values of the capital letters of English alphabet rage from 65 to 90.

5. Convert the following binary numbers to decimal:

(1) (1001)2 : 9

(2) (100000)2 : 32

(3) (100001)2 : 33

(4) (10001)2 : 17

6. Convert the following decimal numbers to binary:

(1) (87)10 : 110111

(2) (127)10 : 1111111

(3) (245)10 : 11110101

(4) (363)10 : 1011010101

**4.COMPUTER NETWORKING**

**1.Answer the following questions in one or two sentences each:**

(1) What is a computer network?

Ans. Computer network refers to two or more computers connected or linked each other.

(2)What are the hardware and software components of a computer network?

Ans. Server computer, Network interface card (INC) and Network cables are the hardware components and Network operating system, Communication protocol and network driver are the software components for a network.

(3)Name different type of networking cables.

Ans. Twisted pair, coax and Optical fibre.

(4)What is a network operating system?

Ans. An operating system which enables and controls the operation of the network is known as network operating system. Eg. M/S Windows.

(5) What is the use of a network interface card?

Ans. Network Interface card (NIC) help us to connect computers. NIC is an add on card.

(6)State the benefit of networking computers?

Ans. Connectivity - Network enables efficient communication among co-workers. Sharing – Network is useful to share information, software resources and hardware recourses.

(7)State the disadvantages of networking computers?

Ans. A server – centric network fails when the server is down. Virus can spread easily through the network. And unauthorized user may steal or destroy the important data.

(8)What is the different type of network?

Ans. Local area network (LAN), Metropolitan area network (MAN) and Wide area network (WAN).

(9)What is local area network?

Ans. In local area network connects the computers that are relatively close to each other. Such as a room or a single building.

(10)What is a metropolitan area network?

Ans. Metropolitan area network is a network that connects two or more LANs with in the boundaries of a town or city.

(11)What is a server? Name different types of servers.

Ans. A computer system on the network that provides a service to other computers connected to the network is called a server. Different types of servers are Database server, Application server, Web server and Mail Server.

(12) What is a database server?

Ans. A database server centrally stores and manages large database file so that other computer on the same network can access the files.

(13) What is a mail server?

Ans. Mail server is an internet based computer which holds mailbox accounts of a large number of clients. Clients send message to Mail server and Mail server relays that message to its destination. If the client accesses their mailbox from Mail server they can receive email.

(14) What is meant by network topology? Name the different type of topologies?

Ans. Topology of a network refers to the layout or map of connected devices on a local area network. The basic types of network are bus, ring and star topologies. Hybrid and mesh topologies employ two or all of these basic types.

**2. Name the following**:

(1)The central cable in the bus topology. Bus or Back bone

(2)The central unit through which all nodes in star topology are connected to the server. Hub

(3)A network topology which uses both bus and ring topologies. Hybrid Topology.

(4)A computer on a network which requests services from server. Client

(5)A server which provides front end to the database server backend. Application server

**3. State the following statements are true or false:**

(1) Information can be efficiently shared by network computers. True.

(2) Sharing of peripheral devices both on office space and cost. True.

(3) NIC is also called a network adapter. True.

(4) A fibre optic cable has the lowest message carrying capacity. False.

(5) NOS is also called a network driver. False.

(6) A wide area network remains only a dream concept. False.

(7) A database server also called a front end. False.

(8) A combination of star and ring topologies is called a mesh topology. True.

**4. Fill in the blanks:**

(1) The major benefits of networking are Connectivity and sharing.

(2) A Coaxial cable has higher capacity that UTP or STP but lower than that fibre optic cable

(3) For two devices on a network to communicate, they must follow the same Protocol.

(4) WAN create nation wide and world wide data communication network.

(5) A client is a computer on a network that requests services from the server.

(6) An Application server is called front end.

**5. Sate any two points of differences between:**

***1.***

|  |  |
| --- | --- |
| ***Local area network*** | ***Metropolitan area network*** |
| Connects computers in small geographical area. | Connects computers in a large geographical area. |
| Connects two or more computers in a building or room. | Connects two or more network inside the boundary of a city. |

***2.***

|  |  |
| --- | --- |
| ***Bus topology*** | ***Ring topology*** |
| Computers and peripherals are connected to the same parallel central cable. | Computers and peripherals are connected in the shape of a ring. |
| Requires less cable. | Requires more cable than bus topology. |

**5. INTRODUCTION TO LOGO.**

**1. Answer the following questions in one or two sentences each:**

(1) What is turtle in logo?

Ans. The triangular cursor at the centre of M/S logo screen is known as Logo turtle.

(2)What are Logo primitives?

Ans. English like keywords in M/S logo is called primitives.

(3) Name any four high-level languages other than Logo.

Ans. FORTAN, APL, BASIC and Pascal.

(4) Describe briefly the parts of a the Commander window of Logo.

Ans. There are 3 parts. They are 1. Input Box – The box to enter logo commands, 2. Output / Command –Recall List Box –This box records all the executed commands and 3. Control Menu – All other button in the commander window like Reset, Pause.

**2. State the following statements are true or false:**

(1) Logo is a machine level language. False.

(2) Symour Papert developed the Windows version of Logo language. True.

(3) The graphic area of the Logo window is also called the Output Box. False.

(4) You can edit the Logo commands in the Output/Command –Recall List Box of the commander window. False.

(5) You may type on one line several Logo commands separated by spaces. True.

(6) In logo, the CLEAN command erases all line in the graphics area and restores the turtle to its home position. False.

(7) Logo programs and bitmaps are saved with .LOG as the extension. True.

**3. Fill in the blanks:**

(1) MSW Logo was developed by George Mills.

(2) A keyword of Logo is also called primitives.

(3) The primitive PENDOWN can operate in three modes namely, PEN ERASE and REVERSE.

(4) The primitive ST is used to show a hidden turtle.

(5) To draw a nonagon, the turtle must be rotated through an angle of 40 at every turn.

(6) The command REPEAT 180 [FD 1 RT 1] will draw a Half Circle.