Define BIOS?

BIOS (Basic Input/output System), can be defined as a program which is located in a separate ROM on the motherboard, and defines, as the name suggests, basic input/output system, is a good example

What is attachment?

A term used in connection with Email. An attachment can be a File of almost any kind - a document file, an image file, a sound file or a video clip - that you can add, i.e. attach, to an email.

Define Inline image?

A term used in connection with Email. An attachment can be a File of almost any kind - a document file, an image file, a sound file or a video clip - that you can add, i.e. attach, to an email.

Define Drum scanner?

These types of scanners are used mainly for capturing a picture and producing at a very high-resolution rate. There are only a few companies that make these scanners, considering the high cost of producing a scanner such as this. It is considered as a tremendous upgrade to a regular flatbed scanner. Early drum scanners separated scans into CMYK data, recording these directly onto film held on a second rotating drum

What is Dotted decimal notation?

Dot-decimal notation is a presentation format for numerical data. It consists of a string of decimal numbers, each pair separated by a full stop. It is the convention for writing 32-bit IP Addresses as a set of four 8-bit numbers written in base 10 with periods separating them.

What is external viewer?

Program used for presenting graphics, audio and movies while browsing World Wide Web pages via a Web client program. Helper applications are another term for these external programs

Difference b/w virtual reality and virtual world?

A virtual world is a fake place you can visit. Virtual reality is an immersive way of experiencing virtual worlds.

The difference between virtual worlds vs virtual reality is kind of like the difference between a web page and colour monitors. A virtual world, like a web page, is a container of content. A VR headset, like a colour monitor, is a way of looking at content.

Differential impact of ICT on subgroups of boys and girls?

It is well established that ICTs used in education can have differential impact on boys and girls. However, such research has neglected to explore the possible impact of ICTs on certain subgroups of girls (and boys), and the resulting implications for impact of ICT in education on different types of girls and boys

Describe How Handheld devices effective in education (especially for the teacher professional development and administration)?

Handheld devices have one great advantage over many other types of ICTs – they are mobile – and anecdotal evidence suggests that this mobility could provide help meet certain needs of schools and educational systems.

What is cache memory?

Cache is a small capacity memory which allows quick access to data. By storing data from working memory in cache, the speed of communication between processor and RAM is increased. Microprocessors use three levels of fast cache, L1, L2 and L3, used to store often used data.

What is Cache?

The cache contains information stored by a Web Browser on your hard disc, so that you don't have to download the same material repeatedly from a remote computer. Browsers keep copies of all the Web pages that you view so that the pages can be redisplayed quickly when you go back to them. The cache is normally stored under Windows in a folder called Temporary Internet Files. This folder can become enormous over time and can cause your hard disc to become overloaded and then your computer may lock up. The cache needs to be emptied at regular intervals which you can do manually or using utility software such as Window Washer. You can set the maximum size of the Temporary Internet Files folder, using the Tools menu in your browser.

What is Byte?

It can be defined as, a measurement of computer memory or disc capacity. A byte comprises 8 bits.

What is the function of recognition of speed of window?

Windows Speech Recognition enables speech recognition, i.e. recognizes spoken word, transfers it to text and enters it into a document; therefore it enables you to dictate a text to a computer, to browse the web using your voice etc.

What is file?

A **file** is an object on a computer that stores data, information, settings, or commands used with a computer program. In a GUI, such as Microsoft Windows, files display as icons that relate to the program that opens the file. For example, the picture is an icon associated with Adobe Acrobat PDF files. If this file was on your computer, double-clicking the icon in Windows would open that file in Adobe Acrobat or the PDF reader installed on the computer.

What is HTML? Its history? What point should be in mind while coding HTML?

History of HTML: In 1980, a markup language, i.e., Standard Generalized Markup Language or SGML was developed. • HTML was evolved from SGML. • Presently, HTML is advanced to DHTML and then to XML (Extensible Markup Language) and now to VRML (Virtual Reality Modeling Language).

HTML: HTML stands for Hyper Text Markup Language. HTML describes the structure of Web pages using markup. HTML elements are the building blocks of HTML pages.

Points in mind: Each tag is enclosed within a '' (right bracket). This differentiates them from text. • An opened tag must be closed • Opening tag is denoted by <> • Closing tag is denoted by • Generally the HTML tags are written in upper case • It is not a case sensitive language. • Coding can be done in any text Editor (Windows notepad, Ubuntu –G-Edit). • When we save HTML file, we should add .html or .HTM after the file name

Merits and demerits of HTML?

Merits of HTML:

HTML is simple but powerful formatting language to use.

The simplicity allows anyone to create web pages.

HTML documents are device independent (works on any platform)

The web pages can be linked together using links

The pages can be updated at any time.

Demerits of HTML:

HTML does not have any programming capabilities.

Require expertise knowledge.

Time consuming.

Difficult to remember coding

What is map? Types of maps.

A map is an accurate representation of the boundaries and other details of continents, countries etc. on a plane, in the form of a diagram drawn to scale. • A variety of geographical details like location of mountains and rivers, altitude of places, important cities and other places etc. can be represented accurately with reference to a convenient scale and following suitable color scheme.

Types of map

Road map

Geographical

Industrial

Historical

Political

Define WWW in detail.

World Wide Web is a vast collection of documents stored on internet computers. It was invented by Tim Berner Lee. It provides easy access to information. It is a system of media rich documents spread across the internet, linked with each other. WWW documents contain texts, pictures, sound, video,etc.

Define E-Government.

E-Government In E-Government, information technology is used to provide better public access to government information, therefore providing citizens with their human right to information.

Describe the term database.

Database is a structured collection of data that can be used for a variety of purposes. Databases are usually stored on a Hard Disc inside your computer, on a CD-ROM, or at a website. A database

may contain data relating to staff employed by a company or to students at an educational institution. Databases can also contain bibliographies, glossaries, vocab lists, etc. In order to set up and manage a database you need a database program such as Microsoft Access. write about software for presentation.

What is software for presentation?

Software for presentations is used to create professional presentations that consist of slides with graphical and textual elements. Such a presentation can afterwards be displayed as a "slide show" by using a projector. Examples of such programs are OpenOffice.org Impress (open source software) and Microsoft PowerPoint (proprietary software).

Explain firewall.

A firewall is a software package that sits between your computer and your Internet connection, keeping an eye on the traffic going to and for. If anything, suspicious appears, such as an unauthorized attempt from a remote computer to write information to your hard disc or to send information from your computer to a remote computer, it will block it and warn you.

Define Wide Area Network and its characteristics.

It is defined as networking in a large geographical area, often a country or continent. Characteristics of WAN

- •WAN uses telephone lines or satellite links as a medium.
- •LAN may be connected to WAN.
- •It covers different cities or countries.
- •WANs are not owned by anyone organization but are under collective ownership and management.
- •Complex network design
- Error rate is large.
- Speed is less compared to LAN

Explain the importance of audio-visual aids briefly.

•They are best motivators

- •Reduce verbalism
- •Gives clear images
- •Vicarious experience
- •Provide variety in methods of teaching and learning
- •Freedom to child
- •Opportunities to handle and manipulate
- •Contributes to increased retentively
- •Based on maxims of teaching
- •Helpful in attracting attention
- •Helpful in fixing up new learning
- •Saving energy and time
- •Gives reality and vividness to learning situations
- •Meeting individual differences
- •Encouragement to healthy classroom interaction
- •Spread of education on a mass scale

How do the exposure and use of ICT in school affects future employment?

The impact of ICT use in school and student exposure to ICTs, and the nature of use and exposure, on student employability in developing has not been well documented. Tracer studies of the impact of ICTs on further study and employment would be useful, as this could be a useful additional measure of educational quality, beyond standardized testing results.

Define hard disk.

Hard Disk Drive (HDD) is a place for permanent data storage (it does not delete/clear when computer shuts down). Its features are: large capacity, faster performance in comparison to optical devices but slower in comparison to RAM and are used for permanent data storage. We can distinguish between internal and external hard drives.

Define email

It is the messages distributed by electronic means from one computer user to one or more recipients via a network.

What is Fire Wire.

A fire wire is in essence a facility that allows you to transfer video recordings very quickly from one device to another, e.g. from a Camcorder to a computer, using a special cable that connects to the computer's fire wire socket. Many modern computers already have a fire wire socket built in. If your computer does not have a fire wire socket then you have to buy a fire wire card and slot it in.

Define freeware.

Freeware is software that can be copied and used without payment to the author(s), although there may be some restrictions on distribution.

Difference b/w Processing Software and Spread Sheet Calculation Software.

Text processing software is used for creating and forming text documents and nowadays, they can contain images, charts and tables. Examples of such programs are OpenOffice.org Writer (open source software) and Microsoft Word (proprietary software). • Spreadsheet calculations software is used for performing various calculations and presentation of results in charts. Examples of such programs are Open Office, Writer (open source software) and Microsoft Excel (proprietary software).

Describe teaching learning aids.

Learning Aids Learning aids can be defined as any device/Aids which help self-learning/group learning.

Teaching Aids

- •Teaching aids are the physical tools used to convey information in the classroom.
- •Teaching Aids are any device which can be used to make the communication more effective.
- •Teaching Aids are any device which can be used to make the learning experience more concrete, more realistic and more dynamic.
- •50 % of what we HEAR and SEE
- •70 % of what we SAY

What is the impact of computer literature in schools

In most circumstances in schools, ICTs are used almost exclusively to provide instruction in "computer literacy'. Emerging research from OECD experience suggests such instruction may not be a productive use of time or resources

What is IP address.

IP Address is short abbreviation for Internet Protocol Address. The unique numerical address of a computer on the Internet, expressed as four sets of numbers (maximum 3 digits each) separated by dots: e.g. 150.237.176.24 for one of the computers at the University of Hull - where the ICT4LT website is located. Computers on the Internet are nearly always referred to by more memorable domain names, which are mapped onto their IP address by special Internet computer known as name servers.

What is Dot printer and laser printer.

Dot matrix printers are the oldest, with the lowest price of print per paper, they are slow, make a lot of noise while printing, and are mostly appropriate for printing text. Laser printers are similar to photocopy devices when it comes to technology. They have exceptional print quality, speed and are quiet. Downsides of laser printers are their high price and high price of toners.

What are advantages of ICT in education.

Advantages of ICT in Education

- Quick access to information
- Easy availability of updated data
- Connecting Geographically dispersed regions
- Catering to the Individual differences
- Wider range of communication media
- Wider learning opportunities for pupils

Define FTP?

It is abbreviation of File Transfer Protocol. The Internet standard high-level protocol for transferring files from one computer to another across the network.

What is Compatibility?

Compatibility is referred to pieces of hardware and/or software which is capable of being used together is described as compatible.

What is BSD?

This is abbreviation of Berkeley Software Distribution. Implementation of the UNIX operating system and its utilities developed and distributed by the University of California at Berkeley. BSD is usually preceded by the version number of the distribution, e.g., 4.3 BSD is version 4.3 of the Berkeley UNIX distribution. Many Internet hosts run BSD software, and it is the ancestor of many commercial UNIX implementations

What is BGI?

This is an abbreviation of Binary Gateway Interface. It provides a method of running a program from a Web server. Similar to a Common Gateway Interface (CGI). The BGI uses a binary DLL which is loaded into memory when the server starts. While more efficient and a CGI, the BGI must be compiled and is not easily portable to other environments.

What is workstation?

a computer (also known as a workstation) connected to a Local Area Network (LAN) is a client that can receive information from and send information to the server that controls the LAN.

Define DCS?

This is abbreviation of Desktop Color Separation. It is an image format consisting of four separate CMYK PostScript files at full resolution, together with a fifth EPS master for placement in documents.

Define Hotlist?

This is a file containing lists of Internet Web pages, enabling you to easily access your favorite Web pages.

Define High key?

It is a light image that is intentionally lacking in shadow detail.

How ICT can be used for illiterate youth?

Issues of equity are central to the discussion of the education-related Millennium Development Goals. For a variety of reasons and in a variety of ways, the introduction of ICTs to benefit education can have profound impact on issues related to Education For All. While for many ICTs offer a promise at greater inclusion of previously marginalized groups (whether marginalized by gender, disability, distance, language, culture, race, age or economic status), their use also brings with it very real dangers of increasing the marginalization of such groups inside the education system.

Define information technology.

It includes matters concerned with the furtherance of computer science and technology, design, development, installation and implementation of information systems and applications.

What is virtual learning environment?

A VLE is a Web-based package designed to help teachers create online courses, together with facilities for teacher-learner communication and peer-to-peer communication. VLEs can be used to deliver learning materials within an institution or within a local education authority. They may even address a wider constituency, and can even be used on a worldwide basis. VLEs have certain advantages in terms of ease of delivery and management of learning materials. They may, however, be restrictive in that the underlying pedagogy attempts to address a very wide range of subjects, and thus does not necessarily fit in with established practice in language learning and teaching. For this reason some critics argue in favor of a less restrictive Personal Learning Environment (PLE). The two most widely used VLEs in language teaching and learning are Blackboard and Moodle. VLEs may also be referred to as Course Management System (CMS), Learning Management System (LMS), Learning Platform and Learning Support System (LSS).

What is learning platform?

Learning Platform is a term used to describe the software and systems that are used to deliver E-learning. Some confusion surrounds this term: sometimes it is used synonymously with Virtual Learning Environment (VLE) and sometimes with Managed Learning Environment (MLE). Many people use it as a catch-all term to describe software and systems designed to manage, deliver and provide access to E-learning materials.

Differentiate b/w desktop computer and Laptop/tablet PC.

Laptop or tablet PC is used by individuals who have the need to travel with a computer or simply use them for aesthetic reasons when computing power is not an issue. Laptop computers, as opposed to tablet PCs, more closely resemble a personal computer when it comes to data input. Data entry is done via keyboard and mouse, while the tablet PC data entry is done via touch screen.

• Unlike desktop computers, notebooks and tablet PCs are optimized for portability, low power requirements at the expense of performance and can be used (for a limited period of time-i.e. until the batteries are depleted) without connection to the power grid. In order to prepare a laptop or a tablet computer for use without a power connection, it is necessary to recharge the batteries.

Define Web2.0.

Web 2.0: Contrary to what many people think, Web 2.0 is not a new version of the World Wide Web. The term arose as the name of a series of conferences, the first of which was held in 2004: http://www.web2summit.com. Essentially, Web 2.0 is an attempt to redefine what the Web is all about and how it is used, for example new Web-Based communities using Blogs, Podcasts, Wikis and Social Networking websites that promote collaboration and sharing between users - in other words, a more democratic approach to the use of the Web. In order to achieve this, Web-based applications have to work more like applications on your computer's hard disc, allowing you to use the Web in much the same way as you would use applications such as Word or PowerPoint. To what extent the concept of Web 2.0 is truly innovative is a matter of debate, as it is broadly in line with the concept of the Web as defined by its inventor.

Describe advantages of Projected Aids.

- •Teacher can prepare material in advance.
- •Saves time in classroom.
- •Provides greater enjoyment in learning
- •Stimulates more effective learning
- Increases retention
- •Increases attention
- •Enlarges or reduces actual size of objects.
- •Can provide multi-sensory/multimedia approach.
- •Brings distant past and the present into the classroom.

•Can make class/presentation more effective.

Define teaching with different definitions, the meaning of teaching and the functions of teaching?

Definitions of Teaching

- "Teaching is an intimate contact between a more mature personality and less mature one which is designed to further the education of the latter." H.C.Morrison (1934)
- "Teaching means many different things, that teaching act varies from person to person and from situation to situation." (Bar, 1961)
- The behavior or activities of persons as they go about doing whatever is required of teachers, particularly those activities which are concerned with the guidance or direction of learning of others." (Ryan, 1965)
- Teaching is the arrangement of contingencies of reinforcement under which students learn. They learn without teaching in their natural environment, but teachers arrange special contingencies which expedite learning and hastening the appearance of behavior which would otherwise be acquired slowly or making scene of the appearance of behavior which might otherwise never occur." (B.F. Skinner. 1968)
- "Teaching is an act of interpersonal influence aimed at changing the ways in which other persons can or will behave." (N.L. Gage, 1963)

Functions of Teaching

Preservative Function of Teaching

- The main function of TEACHING is to preserve and protect the old values, customs, beliefs, traditions, etc.
- Teaching must help in preserving the vital elements of our heritage.

Transmitive Function of Teaching

- Teaching transfers knowledge, ideologies, theories, principles and attributes from one generation to another. Thus, it contributes greatly to the general progress of society. Progressive Function of Teaching
- Teaching provides opportunities to recognize and restructure human experiences and as a result of this, there is development of human civilization and culture.

Different types of board in classroom?

Display Boards: Display categorized into tree main types according to the function to the functions they perform

- Motivational Display: Display that attracts and appeal pupils and stimulates their curiosity is called motivational displays.
- Developmental Displays: Displays that ass information and ensure active involvement of pupils in the development of lesson is called developmental displays.
- Summery Display: Displays that are used for review and consolidation of a lesson are called summary display.

Black Board: Most basic, widely used tool for display. Teaching cannot be successful without proper use of a Black Board. Black Board planning is a precious skill to be developed by a teacher.

Roll Up Board: It is that which can be conveniently rolled up. These are usually made of thick rexin cloth. The charts and pictures can be drawn on it advance and presents as and when required.

Peg Board: To display flat and three-dimensional materials. Use hooks and clips to display materials.

Hook and Loop Board: Intended to suspend heavy 3D objects as well as flat materials. Objects can be easily fixed and removed.

Flannel Board: Flannel cloth used to make this board.

Magnetic Board: A sheet of iron that attracts a piece of magnet can be used for magnetic board.

Plastic graph Board: Any smooth polished surface like rigid plastic sheet and serves as plastic graph board.

Bulletin Board: Used to display bulletin, News items, announcement etc.

Marker Board: Large plastic board suitable for writing or drawing with markers. This can be used the same way as chalk boards. It can be sometimes used as a projection screen also.

Difference b/w ROM and RAM?

ROM (**Read Only Memory**) is a type of permanent, internal memory that is used solely for reading. All BIOS programs are stored in ROM.

RAM (Random Access Memory) is a working memory in which analyzed data and programs are stored, while computer runs. It allows reading and writing data, and it is deleted/cleared when the computer shuts down.

Difference b/w Social Networks and Forum?

Social Networks These are free online services that provide users with various forms of presentation and communication. Some of the more popular social networks are: MySpace, Facebook, Twitter, and Google+.

Forum It is defined as a service that allows users to exchange opinions. It can be compared to bulletin boards on which participants leave their messages, while others leave their comments. Examples of forums are: Reddit, TED Conversations.

Define Virtual Community?

The term "virtual community" encompasses a group of people who communicate via social networks, forums, IM service, blogs. We call it a community, since they are a collection of people who participate in a group of their interests, thus forming a virtual community, because it does not involve physical contact, but is carried out by means of ICT technologies

Write down the Disadvantages of Project Aids?

Disadvantages of Projected Aids

- Expensive.
- Teacher must know to use (Technical knowledge)
- Requires electricity and other infrastructure.
- Requires a darkroom.
- Requires smart room facilities.
- Chance for diverting from study.
- Require maintenance.
- Require techno friendly (ICT enabled) teaching materials

What is PC?

Personal computer (PC), as the name suggests, is intended for personal use, as opposed to the server, which is used by a larger number of people simultaneously, from different locations, often via terminals. If you do not intend to move your computer frequently from one place to another, and at the same time you want maximal price/performance ratio, then you should use a desktop computer. In comparison to laptops or tablet computers, it is much larger in size, inconvenient to carry/move, consumes more electricity but has a much better price/performance ratio. Also, they are much easier to upgrade.

What is Disk?

Disc is often spelt "disk", the alternative (mainly American) spelling. A disc may take several different forms and is used for the permanent or temporary storage of data that can be read by a computer.

What is Compression?

Compression is a technique which reduces the amount of space required to store data, e.g. as used to reduce the amount of space needed to store an image, an audio recording, or a video recording.

What is Web Site & Webpage?

Website is defined as a collection of related pages on particular information.

Web Page It is a file of information stored on a web server.

What is A/D Converter?

A device used to convert analog data to digital data. Analog data is continuously variable, while digital data contains discrete steps.

Define Client and Server.

Relationship client - server is defined in the following manner: client sends requests and server responds to those requests. We can use Internet as the best-known example. User's computer, connected to the Internet, sends requests to a certain web page (by entering page address into the Internet browser Address bar), and the server responds. Web page is loaded into the user's computer Internet browser as a result of server response. From this example, we can see that communication between client and server depends on connection speed (bandwidth).

What are types of internet connection.

Mobile Internet is connected using a mobile network (GPRS, EDGE, UMTS, HSPA)

Satellite These are commonly used in parts of the world where there is no proper infrastructure and there is no other way of accessing the Internet

Wireless (Wi-Fi) Data is transferred between computers by using radio frequencies (2. 4 GHz) and the corresponding antennas.

Cable Internet It is used in connecting to the Internet through television cable network using a cable modem

Broadband It is characterized by a high-speed data transfer, permanent access to the Internet, and thus the risk of unauthorized access to the network or your personal computer.

What are Field trip types.

Field Trip and Excursions

Excursions usually involve a tour by a person or a group of persons to some selected lace. An excursion undertaken for gathering objective based learning experience is study tour. The tour made by a group is often known as Field Trip. It provides direct experience leading to effective understanding.

Exhibition

In exhibition variety of items exhibits related to teaching and learning. Exhibitions are effective modes of mass communication and instruction. Special talents of the pupil get revealed and creativity can be fostered. It helps to communicate novel ideas to children, their parents and the general public.

Demonstration

It is a technique which is often used by all teachers. • Ideas, skills, attitudes and process can be demonstrated. Demonstration should be purposeful, simple, specific and effective. Demonstration should be planned and rehearsed well in advance. If demonstration designed by the cooperative activity of pupil and teaches, it will be more effective.

Dramatization

Dramatization gives a reality and concreteness to learning experience. • Gives opportunity for self-expression. It is very useful for the subject like social science and languages. Since emotional content is strong, it helps in the development of interest, attitude and values.

Museum

Museum is powerful medium for public education. Museums are repositories with an array of educational materials including rare specimens a variety of objects arranged in a logical order.

Planetarium

A planetarium consists of essentially of a dome usually mounted on the ceiling of a hall to represents the sky. A special projector is used to display images of the celestial bodies on the dome. The viewers who are seated below can see the projected images that can be appear to be realistic. The projector consists of various individual units for projecting the sun, the moon, the planets and the stars. Taped narration and sound effects add to the effectiveness of the presentation.

Aquarium

Aquarium consists of glass tanks filled with water in which aquatic creatures are kept in naturally. Pupils can observe the natural behavior of the creatures. If a school aquarium is constructed and maintained by the pupils they get very valuable learning experience related to various aspects of life science.

Terrarium

Terrarium is an arrangement for presenting the creatures living on the surface and below the surface of the earth for study purpose. It is an enclosure, usually a tank. Used for rearing plants or animals under natural conditions. Vivarium • It is live corner arranged in school or at home where creatures living in the air are grown and reared.

What is download accelerator?

Download Accelerator is used in downloading large files from the Web. If you connect to the Internet using a slow Dial up Modem then you might as well make yourself a cup of coffee or take the dog for a walk while you are waiting. You may, however, find that the download process has been timed out or crashed before it has been completed. A download accelerator is therefore essential if you use a dial-up modem, and it can help manage and speed up the process of downloading if you have a Broadband connection to the Internet.

Define Aliasing?

These are visibly jagged steps along angled or object edges, due to sharp tonal contrasts between pixels.

Define Internet, intranet and extranet?

Internet (network of all networks) is a global system comprised of interconnected computers and computer networks, which communicate by means of using TCP/IP protocols. Although, in its beginnings, it emerged from the need for simple data exchange, today it affects all domains of society.

Intranet is a private network of an organization to which only authorized employees have access (login and password).

Extranet is part of Intranet, to which independent collaborators have access.

Write a uses of computer network?

• For sharing resources

- For high reliability
- For saving money
- For using as communication medium
- For accessing remote information
- For person to person communication
- For interactive entertainment

Write a brief note on technology integration?

Technology integration is the use of technology tools in general content areas in education in order to allow students to apply computer and technology skills to learning and problem-solving. Technology integration is defined as the use of technology to enhance and support the educational environment. Technology integration in the classroom can also support classroom instruction by creating opportunities for students to complete assignments on the computer rather than with normal pencil and paper. Integrating technology with standard curriculum can not only give students a sense of power, but also allows for more advanced learning among broad topics. Examples of the infrastructure required to operate and support technology integration in schools include at the basic level electricity, Internet service providers, routers, modems, and personnel to maintain the network, beyond the initial cost of the hardware and software.