

EDU 430

ICT in Education

Current questions of midterm

Q1: Define bookmark.

Bookmarks

- Book marks can be defined as, a collection of direct links to predefined web pages which are stored in your web browser.
- Bookmarks can be created and managed by the user themselves. Most browsers come packaged with several existing bookmarks.

Q2: Define distant learning.

Ans: a method of studying in which lectures are broadcast or lessons are conducted by correspondence, without the student needing to attend a school or college.

Q3: Define E-learning.

E-Learning

E-learning consists of all forms of learning and/or knowledge transfer that are based on electronic technologies. This term will mostly be used to describe learning and/or dissemination of knowledge without direct teacher-student contact, while using ICT technology.

Q4: Types of board in classroom.

Display Boards

- Display categorized into three 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.

Plasti graph Board

- Any smooth polished surface like rigid plastic sheet and serves as plastigraph 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.

Q5: Write 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

Q6: Write a note on Google.

Google

Google is a popular Search Engine. It is probably the most widely used search engine on the Web. You can also use Google to find definitions of words. Call up Google at <http://www.google.co.uk/> and in the search box: type define: immediately in front of the word you would like to be defined. Google will then locate definitions of that word on the Web, e.g. try defining: bandwidth or define: ADSL. If your term consists of two or more elements,

e.g. blended learning, encase it in inverted commas, thus: define: "blended learning". Blended Learning is also defined in this Glossary. "To Google" is even used as a verb in the sense "to carry out a search on the Web". As well as offering a search facility, Google offers much more: maps, news, shopping, translation services, document sharing, etc.

Q7: Write characteristics of good teaching aids.

Characteristics of Good Teaching Aids

- They should be meaningful and purposeful
- They should be accurate in every respect
- They should be simple
- They should be cheap
- As far as possible, they should be improvised.
- They should be large enough to be properly seen by the students for whom they are meant.
- They should be up to date
- They should be easily portable
- They should be according to the mental level of the student.
- They should be motivating the learner.

Q8: Difference between inkjet printer and thermal printer.

Inkjet Printers and Thermal Printer

- Inkjet printers have a high print quality (somewhat lower in comparison with laser printer), they are quiet while printing, and have low initial investment. Ink price, especially color ink, can cost as much as the printer itself. Printing technology is based on ink dispersion from container onto paper.
- Thermal printer, as its name states, leaves a print on the paper by utilizing heat. They use paper sensitive to heat, feature small dimensions; they are quiet while printing and relatively cheap. They are usually used for printing receipts, and owing to that they are called POS printer (printer of sale). Also, they are used as calculator printers and due to their small dimensions, as portable printers.

Q9: Touch pad and light pen:

Touch Pad and Light Pen

- Touchpad is used for transmission of hand movement, but unlike working with a mouse, the user is the one who determines the position of the cursor by touching the touchpad.
- Light pen enables handwriting on screen and can be used as a mouse. It requires an appropriate monitor type.

Q10: Desktop computers and laptop or tablet PC:

Desktop Computers and Laptop or 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.

Q11: Define intranet and its characteristics.

Intranet and its Characteristics

Intranet can be defined as collection of private computer networks within an organization.

- Internal or private network of an organization based on internet technology (such as hypertext and protocols) and accessed over the internet.
- An intranet is meant for the exclusive use of the organization and its associates (customers, employees, members, suppliers, etc.) and is protected from unauthorized access with security systems such as firewalls.
- An intranet should be closed off to the general public and require a login for authorized users.

Q12: What is chat room?

- Chat room is a webpage or part of a webpage which allows a real-time information exchange. Unlike the instant messaging writing software, it does not require computer installation, only a web browser and Internet connection.

Q13: Problems in use of audio visual aids:

Problems in the use of Audio Visual Aids

- Apathy of the teachers
 - Ineffectiveness of the aids
 - Financial restrictions
 - Absence of electricity/infrastructure
 - Lack of facilities for training
 - Activity Aids
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Q14: Importance of audio visual aids:

- 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

Q15: Problems or 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.

Q16: Define 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
- 90 % of what we SAY and DO

Q17: Differentiate 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.

Q18: Define computer networks.

Inter connected collection of autonomous computers.

Computer network is comprised of at least two, connected, by wire or wireless, computers that can exchange data i.e. communicate. There are many reasons for connecting computers into a network, and some of them are:

- Exchange of data between users that have network access,
- Access to shared devices, such as network printers, network disks, etc.,
- Enables user communication and socializing, etc.

Computer networking:

- Copper wire
- Microwaves
- Fiber optics
- Communication satellites

Q19: Videoconferencing:

Videoconferencing or Video Conferencing: A computer-based communications system that allows a group of computer users at different locations to conduct a "virtual conference" in which the participants can see and hear one another as if they were in the same room participating in a real conference.

Q20: Limitations of ICT:

- ICT supposedly endangers the child's social development.
- ICT is supposedly to endanger the child's intellectual development.
- Decreasing of child's emotional development
- Child's health is endangered.
- Misuse of ICT A
- Complete control over the child's usage of ICT is today
- Practically impossible
- Expensive

Q21: Write 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

Q22: 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).

Q23: Name and uses of different types of charts in classroom:

Charts

- A chart may be defined as a combination of graphics and pictorial media designed for the orderly and logical visualizing of relationship between key fact and ideas

Display/Pictorial Chart

The subject matter is illustrated through pictures, diagrams, graphs, sketches and language.

This is the most commonly used type of chart in classroom teaching

Flow/process chart

- Flow charts are also known as organizational charts.
- They usually represent a process or relationship.
- Functional relationships in such charts are usually shown through various symbols and forms like rectangles, circles, lines, arrows and colors.

Tabular Chart

- In table charts the data is presented in a tabular form.
- It can provide a quick comparison and contrast among various ideas and events.

Tree Chart

- The figures drawn in these charts resemble a tree.
- Generally used in showing development, growth

Time Chart

- Time charts are used to indicate the time sequence of a series of events.
- Arrange all the happenings important to the development of a process, organization or nation in a chronological order.

Flip Chart

- It consists of a pad of large paper sheets fixed to the upper edge of a board.
- Usually supported on a tripod or four legged stand.
- Commonly used for presentations.

Q24: Explain term interface:

An interface in computer jargon is a connection between two systems. It can be Hardware or Software. It may take the form of a plug, cable or socket, or all three, for example where a Printer or Scanner is connected to a computer, and then it's a hardware interface. There are also software interfaces that enable one program to link with another, passing across data and variables. The term interface, also known as user interface, also describes the software that is used to enable human beings to communicate with a computer, for example Microsoft Windows, which is a Graphical User Interface (GUI) in common use on personal computers.

Q25: Characteristics of ICT:

- ICT is the integration of Hardware and Software Technology.
- ICT fosters the dissemination of information and knowledge.
- The nature of ICT is digital and virtual.
- ICT is global, anywhere, any time.
- ICT is a key enabler in the creation of networks.

Q26: Three dimensional aids of classroom:

Three Dimensional Aids|

Models

- Models are concrete representations of objects.
- Objects may be defined as the real things from their natural settings. Eg. Rock, Coin, stamp etc. **Specimen**
- A specimen may be defined as a typical objects or part of an object which has been removed for convenient observation.
- It may be a representative of a class or group of similar objects.

Mockups

- A mockup is an operating model usually of a process, designed to be worked with directly by the learner for specific training or analysis.
- When direct firsthand experience is either impractical or impossible, mockup can be used.
- Mockups is an imitation of the real process. Eg. Mock Parliament **Diorama**

Puppets

- Different types of puppets are used to make the learning object more realistic.
- Most commonly used puppets are hand puppets, glove puppets, finger puppets, rod puppets, string puppets, and shadow puppets etc. **Globe**

Q27: Integration of subjects with ICT

Data is mixed on the impact of ICT use on student achievement. Even where emerging best practice points to what should be done, ICT-related interventions in education are typically only one factor (and typically only a minor one) in a complex mix of inputs into educational achievement. That said, while emerging best practice exists, there are presumably many examples of "worst practice" on interventions in education that do not positively impact student achievement.

The identification of activities that have been demonstrated to have no positive impact on student achievement, as well as those that have a negative impact on student achievement, could help donors as they advise education (and other) policymakers on what not to do.

An analysis of where ICTs are inappropriate tools to help meet EFA challenges should include an examination of the necessary enabling environments that must exist if ICTs are to be used effectively.

Q28: Differentiate video disc, video player, and video memory.

Video Disc

A technically obsolete Storage Medium, an Optical Disc, 12 inches in diameter, used mainly to store still images or video clips. Now, these are replaced by CD-ROMs and DVDs.

Videodisc Player

Equipment used for accessing information - usually still images or video clips - stored on videodiscs. Now technically obsolete.

Video Memory

The dynamic memory available for the computer's Display Screen. The greater the amount of memory, the greater the possible color depth and resolution of the display.

Q29: Difference between Uploads and Downloads

Both upload and download refer to the process of transferring a file.

Uploading

- Upload means to transfer a file or files from your own computer to another computer.
- Uploading is the process of copying files from your computer to a remote location. For example, you might transfer a file from your home PC to the Yahoo! computer that stores your Web Hosting files.

Downloading

- Download means to transfer a file from another computer to your own computer.
- Downloading is the process of copying files to your computer from a remote location. For example, you might download a file from your Web Hosting account to your home PC.

Q30: Describe JPEG or JPG.

JPEG or JPG is an abbreviation for Joint Photographic Expert Group. It is pronounced "JAYPEG". It is referred as a file format used for storing images. The JPEG/JPG format uses a palette of millions of colors and is primarily intended for photographic images. The internal compression algorithm of the JPEG/JPG format, unlike the GIF format, actually throws out superfluous information, which is why JPEG/JPG files containing photographic images end up smaller than GIF files containing photographic images.

Q31: Briefly explain Adware:

Adware is a program that uses collected data about a user in order to display advertisements in a way regarded as intrusive. It usually manifests itself in the form of many pop-up windows that display ads.

Adware is software that may have been installed on your computer by a remote computer, i.e. via the Web. Many free utilities that you download from the Internet will install hidden software that sends details of the websites you visit and other information from your computer (which can include your email address) to advertisers so they can target you with popup ads and spam.

Q32: Differentiate between teaching, training and instruction.

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.”
- The aim of teaching is to transform a total man and his personality

Training

- In training the various kinds of skill are taught.
- Training has specific goals of improving one's capacity, and performance.
- The trainees are taught to perform skills which they attain during training and practice.
- There is mental and physical activity in training, but more and more of the activity is physical.

Instruction

- Instruction is at the higher level of training.
- Instructions tell people how to perform a process.
- In instruction there is better level of the use of intellectual powers of the trainee.
- The aim of teaching is to transform a total man and his personality, but the aim of instruction is to develop the intellectual powers in a given direction.

Q33: Define 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 fro. 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. Firewalls have become essential these days because of the frequent attempts being made by hackers to grab confidential information from computers all around the world, e.g. your bank or credit card details, which may be stored in a file somewhere on your computer. Any computer is vulnerable while it is connected to the Internet.

Q34: Differentiate between website and webpage.

Website

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.

Q35: Describe computer conferences in detail.

Computer conferencing is a development of Email designed to support many to many communication, whereby computer users in different locations can take part in a "virtual conference". A conference usually consists of a group of participants who have a common interest in the conference subject matter. Computer conferencing software enables the organization, storage, structuring and retrieval of messages. Messages may be organized under different topics, by author or by date of posting. Asynchronous conferencing may take place via a Blog, Discussion List, Forum or Wiki, blogs, social networking. Computer conferencing takes place in "real time", e.g. within a Chat Room.

Q36: Describe different types of maps used in classroom.

- Geographical Maps
- Historical Maps
- Industrial Maps
- Political Maps

