

Quadrant-I (e-Text)

Details of Module and its Structure

Module Detail	
Subject Name	Education
Course Name	ICT in Education
Course Code	EDU504
Module Name/Title	Historical account of the development of various educational media: audio, print, video, storage display, projection
Module Code	IIE004
Pre-requisites	10+2 or Graduation
Learning Outcomes	<p>The learners will be able to:</p> <ul style="list-style-type: none">• To understand the development of print media to be used for educational purpose.• To appreciate the historical account of the development of audio media to be used for educational purpose.• To distinguish the historical account of the development of Video media to be used for educational purpose.• To identify the back drop for projection usage in the educational setting.• To familiarise the rationale behind the development of storage display to be used for educational purpose.
Keywords	Print media, audio media , video, storage display, projection

1. Development Team

Role	Name	Affiliation
Principal Investigator (PI)	Dr. S. K. Bawa	Central University of Punjab
Subject Matter Expert (SME)	Dr. Savita Gupta	Lovely Professional University, Phagwara

Table of Contents

2.1. Educational Media.....	4
2.2. Classification of Educational Media.....	5
2.3. Print Media	6
2.3.1 Newspaper.....	7
2.3.2 Magazines.....	7
2.3.3 Books	8
2.3.4 Check Your Progress.....	Error! Bookmark not defined.
2.4. Audio Media.....	9
2.4.1 Instructional radio.....	10
2.4.2 Audio compact cassette	10
2.5. Projected Media	11
2.5.1 The Magic Lantern.....	11
2.5.2 The Filmstrip Projector.....	12
2.5.3 The Overhead Projector.....	12
2.5.4. The Data Projector.....	13
2.6 Video Media	13
2.6.1. Instructional television	13
2.6.2 Video cassette	14
2.6.3 The Interactive Whiteboard	15
2.6.4 You Tube.....	15
2.6.5 The Smartphone (iPad)	15
2.6.6 Virtual Reality	16
2.7. Storage Devices	16
3.0. SUMMARY	17

1.0 Introduction

The greatest potential is carried by Educational media to transform the progression of teaching and learning. Educational media are defined as modes of delivery systems or teaching and learning methods employed in an educational process with the view of facilitating the attainment of the set goals or objectives. According to Yoon and Hoon (2009), in order to have effective service delivery in teaching and learning the use of educational media is of paramount importance and has a dramatic impact on teaching and learning, especially with the ready access to new technologies. We may study the development of educational media in three different groups of events as follows:

- I. 14th Century. Instruction was restricted to mouth at the initial stage and then to manuscript. It is not that the teachers of this period failed to notice the importance of individual differences or motivation. But they put more emphasis on manuscript. In the 15th century the art of printing was developed. Books were printed. However, they were mostly on topics of religion and grammar. In the 16th century, Peter Ramus introduced text-books in higher education.
- II. 17th Century. In the second group, we peep into the 17th century and here we see John Comenius introducing text-books for children. He produced an illustrated book in 1657—"Orbus Pictures." He wrote about a hundred text-books. But the circulation was very much limited. J. Rosseau, H. Spencer, Froebel, Pestalozzi etc. helped in changing the concept of instruction and pupils. The child was put into the centre. Next came J. Dewey. He tried to introduce the scientific method in education. E. Thorndike conducted experiments and put forward the learning theories. Then came John Adam's concrete-abstract continuum, i.e, define the object—show a model—diagram and then come to the verbal description.

III. 20th Century, in this century, we, had other sciences like sound recording, photography etc. being developed and these added to the process of learning and teaching. Even electronic transmission was advancing. And all these aided the development of educational technology.

In this third group, we enter into the period of First and Second World Wars. During the First World War, the testing movement started. Binet was the forefather of this movement. During the Second World War, we could see the application of behavioural sciences to teaching and learning. In between, by 1925 Sidney L. experimented with programmed instruction. During 1938 and 1940, the concept of visual aids helped the process of learning. It thus paved the way for audio-visual education. In 1954 we got Edgar Dale's "Cone of Experience." Also during the same period, Weiner studied human engineering and also worked on the science of cybernetics. By 1950, the world had also got Instructional Theories by Bruno, Glasser etc. In 1953, Gordon Pask applied the principles of cybernetics to education. In 1970, different developments took place and the concept of Educational Technology took its shape more neatly. Pioneering work in CAI (Computerised Applied Instruction) was carried out by Pask.

2.1. Educational Media

Educational media refers to channels of communication that carry messages with an instructional purpose. They are usually utilised for the sole purpose of learning and teaching. The mass media are the most pervasive features of modern life. They inform, amuse, startle, anger, entertain, thrill, but very seldom leave anyone untouched. Newspapers, magazines, books, Internet, records, radio and television, are all powerful and endless sources of information that can be easily compared to a library or an encyclopaedia; primarily because they give to the reader the opportunity to extend knowledge and they facilitate self-education. Access to media is a crucial thing from a pedagogical point of view: the variety of subjects and topics that they cover make mass media interesting and motivating for the students to work with.

2.2. Classification of Educational Media

There are different ways to classify media. Print media, non-print media, and electronic media.

(1) *Print media:* These include: books, journals, magazines, newspapers, workbooks, and textbooks

(2) *Non-print media:* These include: projected and non-projected media.

(3) *Electronic media:* They include audio media, visual media and audio-visual, projected media and non-projected media

(i) Projected media: These require light source for projection, for example, film projector slides, and so on.

(ii) Non-projected media: These do not require light source. They include 3dimensional objects, 2dimensional objects, prints, charts, models and so on.

(4) Audio media, Visual media & Audio-visual

Audio media: This form of media carry sounds alone, for example audio tapes, record player,

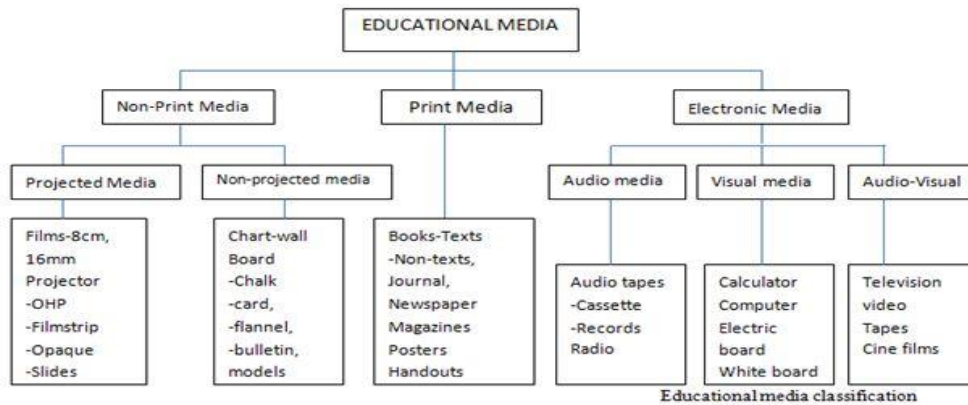
(i) Visual media: These are the ones that can be seen. For example, television, computer, white board

(ii) Audio-Visual: This term refers to those instructional materials which provide learners with audio and visual experiences by appearing to the hearing and seeing senses at the same time, for example television, video tapes, and closed circuit television (CCTV).

(5) Hardware and Software

(i) Hardware: This is the classification of machines or equipment utilised in the instructional process. It is upon these gadgets that the software is transmitted, for example television set, tape recorder and so on.

(ii) Software: this classification consists of all materials used with the machine. They are the real carrier of knowledge or information. They include, films, tapes transparencies.



2.3. Print Media

It is one of the oldest and basic forms of mass communication. It includes newspapers, weeklies, magazines, monthlies and other forms of printed journals. The contribution of print media in providing information and transfer of knowledge is remarkable. Even after the advent of electronic media, the print media has not lost its charm or relevance. Print media has the advantage of making a longer impact on the minds of the reader, with more in-depth reporting and analysis.



Fig: Old manuscript on palm leaves



Fig: Buddhist Text of 1377

Newspapers, magazines, books, journals and handouts comprise the representatives of the printed media. They are all widely used by teachers and students altogether in their daily activities, but when it comes to using

them within the classroom environment the situation becomes a bit complicated. This is mainly due to the amount of time teachers need to prepare and adapt articles taken from newspapers and magazines into their classrooms.

2.3.1 Newspaper

Newspapers bring to our students real life situations and can be easily used as authentic materials. Newspaper-based activities engage students in interesting and enjoyable activities and they also encourage them to further reading. They usually reflect the culture of a certain community through the language they contain. Newspapers also reflect the changes in the language as well, and in doing so, help students and teachers keep up pace with such changes. Most newspapers are linguistically up-to-date and provide valuable linguistic data (Tafari, 2004). styles, which are not always found in textbooks. This is one of the most important features of newspaper-based activities. This wide variety serves as an excellent tool in the hands of the teacher while organizing exercises dealing with phonology, morphology, lexicon, syntax or discourse.

Another great advantage of newspapers is that they can serve as a motivating medium in encouraging and stimulating students to read further and to engage themselves in the activities organized. They report real-life events that are of actual importance and emotional value to the students, and this arouses their curiosity. "People learn through reading, and reading about interesting new things in one's interest subject, undoubtedly helps motivation" (Sanderson, 2002).

2.3.2 Magazines

As a parallel line can easily be drawn between newspapers and magazines, the advantages and the kind of activities used with the newspapers can be easily applied, adapted and used with magazines as well. In general, the advantages of using magazines are:

- They provide a valuable source of authentic materials which can be easily adapted to classroom use. The wide range of topics they cover allows

teachers to use them in many different subjects and occasions. They provide facts, data and stories which can serve as supplements to subject content.

- Magazines are child friendly as they are full of pictures and colors. Young children especially are easily attracted by colourful magazines and this may serve as a tool to motivate the students' reading skills. Magazines offer to students a 'real' natural source of language comprised of words characterized by several connotational components pertaining to a wide variety of language styles, enriching this way the students' passive and active vocabulary.
- Magazines (similarly to newspapers) are the first to present to our students (and not only) the changes in which the language undergoes and they can do this much faster than textbooks as they are published daily, weekly or monthly.
- Magazines can also be used basically for the culture they transmit. Since they serve as a country's mirror, students are able to be in contact with the culture of the language they are studying through magazines in particular and printed media in general.

2.3.3 Books

Books are crucial in modern life as well, a driving force in education, business, law, science, medicine and entertainment (Tafari, 2004). Through books the students gain the legacy of knowledge earned by those who came before (Beckert, 1992). Without books (and textbooks are included here), no education could have been possible. They are the primary source of information used by all humanity. After the invention of the typewriter, the printing of the textbooks and books in general reached high peaks and expanded its readership.

Unfortunately, despite the worldwide known value of books, we hear students grumble each day and more about books assigned to be read by their instructors. This is a hotly debated topic in educational spheres. "Books of proven literary worth should be the backbone of the curriculum"

(Beckert, 1992). As such, teachers should intentionally make books part of their everyday teaching and learning experience and should always use them in the classroom together with the students so as to nurture them with the love for books. As the statistics showed, more than 68 % of the interviewed people, stated that they read less than two books a year, while 61% of the students interviewed stated that they read only because they were obliged to.

When textbooks are written in conversational style with activities, they serve as a basis of self-study as well. They, therefore, assist learners to acquire good reading skills and develop language comprehension. If textbooks are well illustrated and written in interesting style, they act as interesting individualized learning materials for the learners. Thus, the quality and utility of textbook depends on the author.

2.3.5 Activity:

Analyze the textbook of your class with respect to following points: -

- 1) Is it relevant to prescribed curriculum?
- 2) Is language suitable for the grade?
- 3) How many illustrations are there?
- 4) Do you find any difficulties using it in class?

Various researches have conducted studies in regard to the advantages that the use of print media in the classroom can bring to students and teachers. The benefits are numerous, but above all they make teaching and learning more exciting and fun. There is a concern in society that television has lured some young people away from school – one tool of bringing them closer to education and of motivating them is by using interesting elements such as the print media.

2.4. Audio Media

These are teaching-learning devices that appeal to the auditory sense. These aids depend on single sense that is hearing. An attentive and discipline listener is the key goal of success through this form of communication. Audio aids are very important in India because large percentage of population is illiterate and do not have access to books and

newspapers. Therefore, communication can be brought about by the sense of hearing. They consist of radio sets; audio recording machines such as audiotapes, disc machines, telephone and walkie-talkie, tape recorder, Gramophone, Linguaphone etc.

2.4.1 Instructional radio

In the early 1900s radio stations spread all over the world. From 1910 efforts were made to use this new medium within the classrooms. The potential advantages were obvious: just like film, radio would bring the world into the classroom, making available the finest teachers and the inspiration of the greatest leaders (Cuban, 1986; Darrow, 1932). Again there were high hopes: instructional radio was ascribed great innovative potential. The first radio station was established in India in 1927 at Mumbai.

Nevertheless, its use in the classroom remained quite limited. First of all, a main disadvantage of radio was that content was predefined and fixed for large target groups of listeners without the opportunity to adapt it to specific needs or local differences. Practical barriers were raised by the fixed timeslots of the broadcasts that not necessarily matched the daily classroom schedules and routines. But the main problem was associated with the supposed infringements on the teachers' status and autonomous role as the leading professional and omniscient expert. Radio broadcasts were easily perceived as unwanted intruders that overtook the teaching role, compelling the real teacher to become a listener instead. As a consequence, the use of radio broadcasts in classrooms remained quite limited. Alternatively, instructional radio offered a new avenue for distance education which in those days was largely based on written correspondence via postal services. Radio broadcasts could provide real-time lectures at people's homes. But over the years instructional radio failed to attract large audiences.

2.4.2 Audio compact cassette

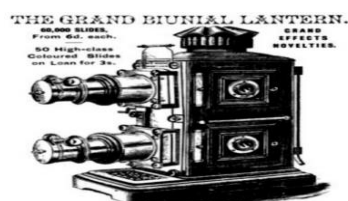
The audio compact cassette has been one of the very few successful educational media. In the late 1960s it became available as a portable

alternative for the vinyl gramophone record. Its educational use started in distance education. The audio cassettes were mainly used as a lead-in medium for providing guidance through the written course materials (Laaser, 1986). It made a perfect match with the required flexibility because individual students could use it anytime. It was used for teaching scientific concepts, guiding experiments, analysis of source material, and counselling of students. So-called audio books were known already from the 1930s as a means of government communication for blind people, but the audiocassette greatly extended this idea in distance education, where it also served the motivation of distance learners by establishing a more personal and intense emotional relationship between the teacher or speaker and the student (Laaser, 1986). Because of its good sound quality and flexibility the audio cassette persisted quite some time in car radio systems and cassette walkmans, until in the 1990s it was gradually replaced by audio compact disk and MP3 downloads.

2.5. Projected Media

Projected media belong to a group of instructional resources which can only be accessed by means of projecting their content on the screen/wall using designed a projector machine specifically for the purpose. Therefore, projected media are usually a combination of software and the corresponding hardware. What we need to know is that all projected media are designed to be transmitted on the screen through the use of projectors. Projectors have evolved significantly in weight, technology and dimension since they were first introduced into classrooms.

2.5.1 The Magic Lantern Late 1800s: The Magic Lantern: Favored by lecturers, teachers and magicians in the 1800s, this early projector used glass slides to project images.



The magic lantern was first introduced in 1646 and was also known as the Magin Catacoprica which meant “magic lantern.” Although the device was used in homes and theaters, magic lanterns were deployed in the classroom to enhance learning and student engagement. The photographic slides were inserted one at a time for viewing of specific images or subject matter. Those who were proficient at using a magic lantern could rapidly change the slides to make it appear as if the image was moving.

2.5.2 The Filmstrip Projector



Photo: American Planning Association

By 1925, the film projector was making its way into classroom environments. The projector displayed still images from a film strip accompanied by an audio recording. The images had to be manually changed as you advanced through the film strip. This type of technology remained in the classroom until the early 1980s and was used to study a particular topic or timeline of events.

2.5.3 The Overhead Projector



During the 1930s, the first overhead projector was introduced to the classroom prior to being widely used by the military during World War II. After its introduction, the overhead projector became widely used in the classroom which provided teachers with a more **convenient alternative to**

the blackboard. An overhead projector used transparent sheets which could be written on with an erasable marker. The teacher could write on the reusable transparency while facing the class. The notes were reflected on a screen during the classroom presentation.

2.5.4. The Data Projector



A data projector takes signals from a video source, such as a computer or television, and projects an image on a projection screen. Early data projectors used a single cathode ray tube (CRT) to project a monochrome image, according to *PC Magazine*. CRT projection systems have since given way to lighter and more convenient projection technologies, such as liquid crystal display panels (LCD) and digital light processing (DLP).

2.6 Video Media

Video is defined here as digitally recorded content that has sound and motion that can be stored or delivered live, and can be streamed to a variety of devices. It may or may not have the lecturer visible and can include an animated film, or a demonstration.

2.6.1. Instructional television

In 1928 the first television sets became available. But large scale market adoption of television didn't occur until the 1950s. Very similar to radio and film the expectations for instructional television were high: television, as a new mass medium was imputed a bright future. The combined power of words and pictures featuring outdoor scenes, important phenomena and inspiring people created great new opportunities for teaching. Compared with film, the distribution of content was much easier because of wireless transmission. New research was undertaken about how instructional television affected classroom learning. It also raised a broader interest in understanding and generating theory on how these new media could

support instruction and learning (Reiser, 1987). Although quite some investments were made to establish instructional television channels offering high quality learning content, these had only very little impact on formal education. Paradoxically, the wide and successful adoption of television as a commodity conflicted with the instructional role it was supposed to play in education, because more and more television was associated with superficial entertainment. Also, technical and organisational inconveniences hampered its wide adoption in the classroom. Regarding the small screens at the time and the poor sound quality it wasn't easy to successfully arrange instructional television sessions in a classroom with 50 or more pupils.

So, once again teachers exerted their resistance to a new technology entering their classrooms. But at a more principle level it was very difficult to meet the various conditions for student learning while using a fixed television format (Reiser, 1987). The very idea of broadcasting implied a one-to-many, one-way communication model addressing a wide audience with general purpose content. Hence, television was assumed to trigger receptive viewer modes rather than active learning modes. In one of his studies Childs (in: Almenda, 1988) found no positive contributions of using television in classrooms.

2.6.2 Video cassette

Very similar to the cases of instructional film and instructional television, video cassettes were envisioned as the next moving image revolution for education. Indeed, they could extend the printed learning materials with sounds and moving images so that the outside world could be represented in a more direct way. Video recorders also allowed for capturing relevant television programmes which could be viewed later on without the restrictions of broadcasting schemes. But still some barriers remained. Video production was much more expensive than producing audio. There was a general lack of appropriate content that was affordable for teachers and that matched the specific requirements of individual teachers (and

learners). The main problem was technical in kind though. In contrast with audio compact cassettes there was no agreement on a common technical standard for video cassettes. The interest in classroom video was fading already, while new media became available like the microcomputer, multimedia CD-ROM, DVD-Video and streaming video. The video cassette never redeemed its promise.

2.6.3 The Interactive Whiteboard

By the late 1990s, the blackboard was gradually getting replaced with an interactive whiteboard. When first introduced, the whiteboard consisted of a white screen, computer, and projector. It was not yet being widely used since many were unfamiliar with how to use it for classroom learning. But nevertheless, it was gradually starting to make its way into classrooms around the world.



2.6.4 You Tube



At the start of the 21st century, more classroom and educational institutions were becoming connected. In 2004, YouTube was discovered as being an effective tool for classroom learning. This allowed teachers to easily share free instructional videos and share videos associated with classroom projects

2.6.5 The Smartphone (iPad)

Between 2007 and 2010, smartphones were beginning to increase in popularity and were widely used by students. At this time, they were still not accepted as a classroom learning device until **the inception of the iPad in 2010** which brought Wi-Fi enabled mobile devices to the forefront as a learning tool in the classroom.



2.6.6 Virtual Reality

As recently as last year and into 2017, many educators have been enhancing the classroom learning experience using virtual or augmented reality. Modern devices such as **Google Cardboard** VR allow students to study locations and objects in 3D in addition to exploring current events.



2.7. Storage Devices

Earliest computers used paper for their information storage. An archaeological study showed that modern-style paper was already used in China around the 2nd century B.C. After the pulp papermaking process was invented by Cai Lun, a Chinese official, around A.D. 100, paper became widely used all around the world. Compared with earlier media, such as clay tablets and wood strips, paper dramatically facilitated reading and writing and improved information density. Due to these beneficial properties, paper is the standard storage media for most societies today. The idea of using paper as information storage media for computers can be traced back to Charles Babbage an English mathematician, who invented a mechanical calculator called the Difference Engine designated for tabulating polynomial functions in the 1820s. After this successful invention, he began to work on a design to realize more generic calculation. At that time, automatic loom technology had already been established after a series of technical innovations mainly in France since the beginning of the 18th century.

One noted example was the Jacquard loom, which could draw a weave pattern by reading punched holes in a given roll sheet and controlling the

position of warp threads. Inspired by the loom technology, Babbage came to the idea of providing a calculation program and data using a punched card. Until the 1950s, punched cards were the most popular media both for data porting and information storage. Shortly after the electronic computer was invented and became popular, punched cards were replaced with magnetic tape for persistent information storage, whereas due to their easy manageability and the legacy compatibility, punched cards still continued to be widely used for porting data and programs to/from computer systems until the mid-1980s.

Today, other media such as cheap magnetic disks and broadband networks have become much more popular and punched cards are only used in limited cases. Some of the storage devices used nowadays are:

CD-ROM: compact disc read-only memory: a CD that stores large amounts of information for use by a computer

Disk: a flat circular object such as a hard disk, DVD etc. on which information from a computer can be stored.

Floppy Disk: a small square plastic object used in the past for copying information from a computer. A floppy disk was often simply called a floppy.

3.0. SUMMARY

In this Module we have studied about Educational Media i.e. communication that carry messages with an instructional purpose. They are usually utilised for the sole purpose of learning and teaching. Classification of Educational Media There are different ways to classify media. Print media, non-print media, and electronic media.

(1)Print media: These include: books, journals, magazines, newspapers, workbooks, and textbooks

(2)Non-print media: These include: projected and non-projected media.

(3)Electronic media: They include audio media, visual media and audio-visual, projected media and non-projected media

(i)Projected media: These require light source for projection, for example, film projector slides, and so on.

(ii) Non-projected media: These do not require light source. They include 3-dimensional objects, 2-dimensional objects, prints, charts, models and so on. A historical prospective of storage devices was also explored.

References:

A Study on the Direction of Education to Prevent Multimedia Illiteracy. Korea. Yoon J.S. & Hoon S.S. (2009). Retrieved from <http://www.images.adobe.com> August 1, 2013.

Beckert, Ch. (1992). *Getting started in mass media*. National Textbook Company, Chicago, IL

Biagi, Sh. (1996). *Media reader*. Wadsworth. New York.

Carrol, L. (2007). *Alice in Wonderland*. Digital Scanning Inc.

Cuban, L. (1986). Teachers and machines. The classroom use of technology since 1920. *New York: Teachers College Press*.

Cuban, L (2001). Oversold and underused, computers in the classroom. *Harvard University Press. Cambridge, MA*.

Darrow, B. (1932). *Radio: the assistant teacher*. Columbus.

Multimedia: Making It Work. Berkeley. R.G. Adams Vaughan, T. (1993). Retrieved from, <http://en.wikipedia.org/wiki/Multimedia>

Reiser, R.A. (1987). *Instructional technology: A history*. In R.M. Gagne (Ed.), *Instructional technology*.

Sanderson, P. (2002). *Using newspapers in the classroom*. CUP.

Tafari, V. (2004). *Teaching through media*. Onufri, Tirana.

Kulsum Umme –Information communication Technology in Education| 2008,

H. P. Bhargave Book House, Agra

Rao Usha –Educational Technology| 2005, Himalaya Publishing House Delhi.

Links to web sites giving additional readings, Wikipedia, blogs, open source content etc.:

1. <http://www.faena.com/aleph/articles/the-history-of-the-magic-mirrors-of-china-and-japan/>

2. http://www.dbnl.org/tekst/huyg003oeuv22_01/huyg003oeuv22_01_0093.php
3. <http://www.magiclantern.org.uk/history/history04.php>
4. http://www.historiccamera.com/cgi-bin/librarium/pm.cgi?action=display&login=projector_history
5. <http://www.funfotos.com/charlesfrancisjenkins.html>
6. <https://www.ethos3.com/2014/03/a-brief-history-of-the-projector/>
7. <https://edtechmagazine.com/k12/article/2013/02/vision-learning-history-classroom-projectors>
8. <https://www.eiki.com/about-us/>
9. https://www.youtube.com/watch?v=UFwWWsz_X9s

GLOSSARY:

1. **Cybernetics**- The science of communications and automatic control systems in both machines and living things.
2. **CD-ROM (Compact Disc-Read Only Memory)**: An optical disk capable of storing large amounts of embedded electronic programs or files that can only be read from the disk (i.e., data cannot be written to the disk after it has been produced). Unlike diskettes, CD-ROMs can be read by any type of computer with a CD-ROM disk drive. See also CD-RW, Compact disk and Diskette.
3. **Digital data**-The subset of Data (as defined above) that is transmitted by, maintained, or made available in electronic media.
4. **Educational technology**—the practice of using technology in instructional settings in support of teaching, learning and academic achievement. Information – Messages used as the basis for decision-making.
5. **Hardware**: The computer equipment used to do the work (i.e., operate software programs). It consists of the items that can be touched, such as the computer case and peripherals (e.g., monitor, keyboard, and mouse) that are attached to the computer. Internet – A network of computer networks that operates worldwide using a

common set of rules that govern the format of the information that is exchanged between computers

6. **Media** – Vehicles that carry messages. Common media channels are televisions, radios, telephones and newspapers.
7. **Multimedia** – A medium that uses different forms of content (eg., text, audio, graphics, video) to relay information or to entertain.
8. **Software:** Programs that tell a computer what to do. See also administrative software, Antivirus software, Application software, Hardware, Instructional software, and Operating system.
9. **Virtual** – accessed, stored, or carried out by means of a computer, especially over a network; not physically existing.

Quadrant-IV

(Self- Assessment/ Evaluation

Q1. In which century the art of printing was developed.

A. 14th Century B. 15th Century C. 16th Century D. 16th Century

Q2. What are Educational media?

A. All the materials in the classroom B. All the tools a teacher uses to teach a lesson C. Supplies, like paper and pencils D. Textbooks only

Q3. Disc machines, telephone and walkie-talkie, are the examples of which type of media.

A. Audio B. Print C. Visual D. Both audio visual

Q4. Which are traditional Educational media?

A. Literature textbooks B. Spelling workbooks C. Textbooks D. All the above

Q5. Which are traditional Educational media?

A. Literature textbooks B. Spelling workbooks C. Textbooks D. All the above

Q6. Maximum participation of students is possible in teaching through.

Lecture method B. Audio Visual Method C. Textbook method D. All the above

Q7. Use of TV in the classroom is difficult because:

A. Speed of TV is not in our control. (B) A television programme cannot be adjusted to teaching and vice-versa will have to be done (C) Both of these (D) None of these

Q8. Radio is similar to tape recorder for its case in classroom in which of the following ways?

(A). It can develop listening comprehension (B). It can help the pupils to acquire correct pronunciation. (C) It can improve word power of pupils (D). All of the above

Q9. Radio is similar to tape recorder for its case in classroom in which of the following ways?

(A). It can develop listening comprehension (B). It can help the pupils to acquire correct pronunciation (C). It can improve word power of pupils (D). All of the above

Q10. The first radio station was established in India in 1927 at

(A). Kolkata (B). New Delhi (C). Mumbai (D). Chennai

Q11. The major advantage of OHP using as material aid is that

(A). it is cheap, handy and portable (B). the image formed by OPH is very clear (C). blackboard can be used as screen. (D) All of the above

Q12. In which of the following ways, TV is more beneficial than audio equipment in the class?

(A). It heightens reality more than the physical presence due to close up action replay (B) Large number of pupils representing wide range of area can be covered here. (C) It widens the horizon of pupils experiences by giving them live and up-to-date knowledge. (D) All of the above

Q13. TV is superior to motion pictures in which of the following ways?

(A) It does not require darkening of the room. (B) Action replay is possible for clarifying a situation. (C) Its maintenance and running cost is almost negligible. (D) All of the above

Q14. All of the following are the demerits of radio programmes except:

(A) Immediate feedback cannot be received due to one way communication. (B) it is unisensory in nature. (C) Recorded radio programmes are generally not available in the market. (D) All categories of pupils cannot be equally benefited by such programmes.

Q15. Which of the following does not have any implication in classroom situations?

(A) Gramophone (B) Public Address System (C) Linguaphone (D) Walkman

Q16. The major limitation of audio aids is that

(A) Psychomotor objective cannot be achieved by them. (B) Higher levels of cognitive and affective objectives cannot be achieved by them. (C) Both of these (D) None of the above

Q17. Epidiascope is rarely used in the classroom because

(A). Its quality of image is very poor (B). Poor range and need of high energy (C). It requires total room darkness (D). All of the above

Q18. Modern devices such as Google Cardboard VR allow students to study locations and objects in 3D are named as:

A). Virtual reality (B). Internet (C). Projection (D) Audio Visuals

Q19. A flat circular object on which information from a computer can be stored is called

(A). Disk (B). ROM (C). RAM (D) Flash Drive

Q 20. Which one of the following would not be considered as a form of secondary storage?

(A). Floppy Disk (B). Optical Disk (C). RAM (D) Flash Drive

Answers: 1. A, 2.B, 3. A, 4.D, 5. D, 6.B, 7.C, 8.D, 9. D, 10.C, 11.D, 12.D, 13. D, 14.C, 15. B, 16. C, 17. D, 18.A, 19. A, 20.C,