

Q. What do you mean by a computer? Discuss the role of computer in the field of education.

Ans: **Meaning of computer**

Computer is a miracle of human civilization. In the present era computer has touched almost all aspects of our life. It has explored more and more areas of human development in the field of information and communication of knowledge and experience. In the field of education too these are being used for managing its affairs including the actual teaching. In a general way computer may be said as an electronic device which assists in the simplification of computation or calculation work with greater speed and accuracy. It accepts data; perform operations on the set sequence, and outputs data. However modern computer is not confined only to the computation work. It is a electronic brain or thinking brain of human being. It can do many functions such as mathematical and scientific; it organizes and handles any type of information.

Role of computer in education

In advanced countries computers are increasingly used for classroom instruction and for individualised and distance education. In UK computer Based Instruction (CBI) is variously known as Computer Aided Learning (CAL) and in USA it is known as Computer Assisted Instruction (CAI), In instructional process direct interactive learning experience can be attained through

computer. There are mainly two domains of instruction where computer performs its efficient functioning. These are:

1. Computer Assisted Instruction (CAI),
2. Computer Managed Instruction (CMI)

1. **Computer Assisted Instruction (CAI):** While presenting the lesson to the learner through computer Assisted Instruction, the computer directly interacts with the learner. As the computer delivers information to the learner through instructional dialogue, it has the capacity of adaptability of any kind of instructional situations that may arise all the time of interaction. It can use various instructional modes suiting to the different situational needs. Some of these instructional modes are:

- i) Tutorial mode
- ii) Drill and practice mode
- iii) Discovery mode
- iv) Simulation mode, and
- v) Gaming mode

i) **Tutorial mode:** This mode of instruction is followed by a question presented to the learner. The learner reads the information and responds the question. The computer analyses the response of the learner and gives appropriate feedback.

ii) **Drill and practice mode:** This mode of instruction is based on the assumption that learner has clear understanding about the concept and principles of a particular task that he has already learned. The drill and practice mode of instruction provides a number of graded examples over that task to develop proficiency and fluency of the learner.

iii) **Discovery mode:** In the discovery method, the educative approach to learning is followed. This method gives a number

of problems to the learner. Here learners are given freedom to proceed through trial and error approach in solving these problems.

iv) **Simulation mode:** This mode provides the learner with scaled-down simulated situations corresponding to the real situation. Simulation is made to make the learner practically fit for the real life situation. Some of the good examples of simulation mode are—an aeroplane flight, an experiment on titration, a nuclear reaction, collision of two bodies etc.

v) **The Gaming mode:** This mode is mostly suitable for small children. Here the learner engages himself in playing opposite to the computer. The duration of playing games varies according to the type of games. The purpose of this mode is to provide recreation to the learner through teaching.

2. Computer Managed Instruction (CMI): In this mode of instruction computer acts as the manager. It has the capabilities of gathering, storing and managing information to facilitate self-learning. After the objectives have been formulated, it gives guidance to the learner to learn from different sources. The computer asks the learner to identify the objectives. How the computer organises itself to do the management are as follows:

a) The computer advises the students to study some particular pages from some particular books to attain the objectives.

b) After the completion of the study, the computer asks some test questions to the students to evaluate their learning.

c) Then the computer advises the students to perform a laboratory experiment to make knowledge permanent. After the completion of this task, the computer provides further instruction, and so on.

Q. Short note "application of computer in modern society."
Ans: Applications of Computer

Application of computer have been expanding day by day. Now a days, computer have been employed in almost all spheres of human activity. Below we are discussing the applicability of computer in various fields:

- 1. In Schools and Colleges:** In schools and colleges computers are used to keep student's records of attendance, performance in test, fees, scholarship etc. In some cases computers are being used for giving instruction to the pupils or students in some specific courses.
- 2. In Medicine and Health Care:** In the field of healthcare and medicine computer performs the function of maintaining records of patients and medicine. It is also applied to diaganise diseases. As a faster machine computer can give physiological tests report on all desired information within minutes.
- 3. In Science and Technology:** Applicability of computer in the field of science and technology is inevitable. Here computer are employed to analyse problems and also to design systems with any degree of complexity. In science and technology most systems are designed and simulation studies are conducted through computer.
- 4. In Bank and Post Office:** Computer performs various activities in banks and post-offices. These computers are employed to process cheques, count notes, handle bills and maintain records of all withdrawals, deposits, transfers etc. Automatic Teller Machine (ATM) is very common in bank.
- 5. Railway and Airways:** Computers are used in Railways and Airways to make seat reservations and also for cancellations,

- alternations etc. Up-to-date status of reservation is also displayed through computer.
6. **Traffic Control:** For controlling traffic lights, traffic signals and timings computers are largely used.
 7. **Trade:** In trade markets computers are employed for Stock Exchanges to control stocks and accounts,
 8. **Clerical Job Works:** Computer performs the routine clerical jobs such as preparing bills, salary statements, pay-slips, storing and handling of office data, tax return, updating stock data, reservation record and information etc.
 9. **Publication:** The composing and designing works of printing and publication can be speedily and economically done with the help of computer.
 10. **Film Industry:** In film industry many activities like animation, titling etc. are mostly performed by computer. Computer helps in using multi-media approach in film productions.
 11. **Electronic Communication:** All types of information can be stored, utilized and manipulated through computer. It also helps as a media for communication. Business communication, import and export can also be done in internet through computer.

Q. **Mention the characteristics of a computer. Highlight the advantages and disadvantages of computer.(CAI).**

Ans: **CHARACTERISTICS OF COMPUTER**

Following are the characteristics possessed by the computer system:

1. **Date Storage:** It can store tremendous amount of information, *i.e.*, text numerical tables, graphs etc.

2. **High speed:** High speed is another characteristic of computer. It can perform thousands of operations in a fraction of a second and can produce 100% accurate results.
3. **Little space:** it can store data in minimum space than any other medium and can retrieval them according to the necessity of the user.
4. **Versatility:** In computer numbers are used in binary form rather than decimal. Everything can be stored and expressed by means of only two characters 0 and 1 instead of decimal system. These are binary numbers. Their advantages is that they can be easily represented by electronic circuits.
5. **Diligence:** Computer being a machine uses constant and unrest effort to accomplish what is undertaken without feeling tired.
6. **Consistency and accuracy:** Computer can compute and display the same information with 100% accuracy without bordering about the amount of data given to it. It can perform the activities a number of times and anywhere.
7. **Accessibility:** The data stored in the computer are accessible by the users according to their needs and for transmission.

Advantages and Disadvantages of Computer Assisted Instruction

The computer assisted instruction offer the following advantages:

1. Student can receive instruction at his own place without being hurry.
2. Each student can respond continuously as he receives instruction.
3. Student can get feedback immediately for his response.
4. As it breaks the elements of learning into steps learning becomes easy for all types of learners.

5. Students get reinforcement in learning through personal messages, i.e. through personal talking procedure. For example, reinforcement is given to the student by the CAL/CAL for right answer as "Yes Ruma, You are right", etc. It stimulates learner for better response.
6. Accessibility of computer to any place or to any compartment of a floor or to any place or to any place in the country makes the system comfortable for the learner.
7. Student can choose their own style of learning, i.e., they can learn through examples, through studies or through problem solving.
8. Student can test their own progress at any time when they feel during the process of learning. Completion of the unit can be time framed depending on the learners pace.
9. It relieve teaches from routine bound activity as the computer itself performs this job and the teachers can invest their time in other innovative instruction design and student guidance etc.

Disadvantages

1. Student cannot express their ideas clearly.
2. Student cannot be trained to press something in precise form.
3. Confidence to explain something cannot be acquired through this system.
4. Analytical description cannot be given by these learners on the topics they learn through CAL/CAL.
5. Creative ability of the learner does not get scope to develop.

Explain the concept of internet. Write in brief the uses/role of internet in education.

Ans: Concept of Internet

The internet is the worldwide international network of interlinked computers and other electronic devices. It is not one single network but complex groups of smaller networks joined together. It consists of thousands of computer networks interconnected by dedicated special purpose computers called routers. Internet is the short name or abbreviation for internet system. Networking refers to a system consisting of computers linked together so that they can share databases, programs, printers and other devices. LAN is the abbreviating of Local Area Network. When a network connects two or more computers within a small geographical area, that system of network is called Local Area Network (LAN). WAN is the short term used for Wide Area Network. This type of network covers a relatively large geographical areas even the different nations of the world. One can pertain to the whole world in the matter of sharing information through Wide Area Network (WAN). Interconnecting LAN and WAN is known as internet work. Internet is popularly known as net. It is a global digital library j with remarkably flexible communication technology

Uses of internet in the modern education

Explosion of human knowledge, information and education through internet is undoubtedly the greatest and most exciting contribution of modem communication technology to mankind.

The various uses can be summarized below

1. A person can communicate with millions of people through internet via e-mails or social media.
2. Internet is the reservoir of various reading materials. One can search for any information, read journals, books; retrieve any data stored through internet.

3. Internet is very useful in business purposes too. Business houses make advertisements and publications of their goods in the world market through the internet. Online shopping is a very profitable business now days.
4. Any type of data can be searched in the internet on various topics for the research. purposes.
5. Inter university connection via internet can help the universities of the different parts of the world.
6. Internet is very helpful in distance education. Various online courses are developed today which has benefited millions of people.
7. The learning process on internet I-learning is interesting and interactive.
8. Through internet both video and audio communication facility at a time can be made which is very necessary in today's world of education.
9. Internet provides the opportunity for recreation and entertainment too. It provides, the facility to see videos, films, pictures of different parts of the world. International games and sports held at any part of the country also can be seen through internet.
10. It enables and propagates the unique output of artists, students, educationists of any talented individuals to showcase their talents in various platforms.
11. Internet also can remove the barrier of fixed timing of the school, class size and learner's individual pace of learning.

Q. Discuss the role of CAI in the field of education.

Ans: When a computer is used as a teaching aid it is called as **Computer Assisted Instruction (CAI)**. According to Hilgard

and Bower (1977) "Computer Assisted Instruction has now taken as so many dimensions that it can no longer be considered as simple derivative of the teaching machine or the kind of Programme learning that Skinner introduced." Computer assisted instruction is an interaction between a student, a computer controlled display and a response entry device for the purpose of achieving educational outcomes. The CAI can deal with the problem of quality in education more effectively and more flexible kind of branching is possible on the part of the computer according to the students' performance.

There are certain methods of instruction which are used to apply a CAI programme in the learning process

1. **Tutorial method**- As in the programmed instruction in tutorial method the information is presented in small units followed by a question. The computer evaluates the responses of students and provides them appropriate feedback. Branches or pathways can be programmed to allow students to work on their own pace. This is simple method which allows the students to learn at their respective abilities.
2. **Drill or Practice method**: This type of programme provides the students some drill or practices covering the specific topic or the subject matter. This method is to make sure that concept, rule and procedure have already been learned by the learner. Computer provides some examples so that the students can learn the concepts and retain them. But if the students fail to learn the concept by one example then they are given another example and this drilling continues till the students acquire full knowledge over the concept or the problem. All correct responses are reinforced by the computer.

3. Discovery method: In this method induction approach is used, where the problems are presented and the learner solves those problems through trial and error. It provides the sense of laboratory learning and real life learning.
4. Play method: In this type of method students are provided with a variety of well designed computer games. These types of games provide intellectual challenge, stimulation of curiosity and serve as a source of motivation to the individual learner.
5. Problem solving method: In this type of method focus is given on the process of finding an answer to a problem rather than the answer itself. Students are provided with a problem and they have to find the ways and means to solve the problem systematically. Students are compelled to reflect on the problem till they arrived. It the solution after applying reflective thinking.
6. Simulation method: Here simulation is used as a technique for providing training to the students. With the planned programmed students are made to face the real or idealized situations.

For these methods to be programmed experts from three discrete fields are needed

- A Computer engineer who knows the physical principles and procedure of programming.
- A teacher or a educator who can prepare the lesson logically on psychological grounds.
- For a CAI programme to be successful the student should be well acquainted with the computer and knows to operate it.

Q. Short note uses of internet in the field of education.

Ans: Use of Internet in the Field of Education

1. **The internet offers an interconnecting mode between Universities and Research Laboratories:** The National Science Foundation (NSF) of the American Government set up five super computer centers, nearly at the end of 1980 which started its function as the main interconnecting mode of connection between University and Research Laboratory Network.

In 1990, the Department of Electronic (DoE) of the government of India in collaboration with the United Nations Development Programme established the internet of India, which is popularly known as ERNTE. ERNTE is the abbreviation of Educational Research network, which opened the internet communication to India in the field of education.

2. **Application of the Internet in the Library System:** Application of the Internet in the servicing system of the library makes it a global digital library. The common meaning of a digital library is a large store house of digital information accessible through the computer. There are various index mechanisms in the digital library system.

To get information from the digital library the user has to proceed through these mechanism. A digital library can contain text, sounds, graphic images, still and moving pictures and conferences which are very much essential for students who use it.

3. **Electronic Bulletin Board Service:** This is a well-known service of the internet.

It allows an individual to take part in one or more discussion group of his internet. It allows the participant to post a message

for other members of the group to see. It can propagate messages quickly among the subscribers. The usability of the electronic bulletin board permits an individual.

- to listen to a conversation.
- to ask questions.
- to interject a clarification of a previous statement, occasionally.
- to contribute some statement.

These procedures are very much effective for researchers or for the workers of group project work.

4. **E-mail:** A computer can transfer small notes or large documents across a network instantaneously. This new form of communication is known as electronic-mail or e-mail. The E-mail can be used as an accessor to a variety of remote services. A computer cannot receive an e-mail unless it has an e-mail service program running. E-mail or electronic mail proves itself to be the biggest asset in sending and receiving messages instantly from one computer to another. As the e-mail includes text, graphics, and voice for transferring documents, it can provide immense help in the field of education.
5. **Online education:** On line instruction is a technological development in the field of education. It is also known as the distance education mode of technology. It includes satellite courses, computer-based program, video-instructions, educational television, correspondence or home study courses. It lays emphasis on providing educational opportunities to those students, who are unable to get their desired courses of education for some personal or social problems or due to the unavailability of desired courses nearby. On line education makes use of available media.

Q. Short note "organizational structure of a computer."

Ans: Computer is the organization of various mechanical parts that work together. The physical parts are called hardware and the programme or the instruction part software. Computer is the organization of both hardware and software. So the hardware parts of the computers are

a. Input Devices:

Key board: keyboard is the most important input device through which important data can be entered. The keyboard contains the keys with the help of which the user can accomplish all the works in computer. Three categories of keys are available in a computer- Alphanumeric keys. Special keys and function keys. Though several types of keyboards are available yet three portions are present in all types of keyboards

Main portion- This resembles type-writer keyboard.

Keys: Keys are used to do special functions.

Numeric cum cursor keypad: it is used for data entry and helps in moving the cursor in different direction.

Mouse: The mouse is the hand held device of the computer. The mouse can be roll or move to select specific item or perform some functions. When we move the mouse the mouse pointer on the screen moves in the same direction. The mouse is connected with the computer by a cable.

Joystick: It is an input device that reports or directs the screen figures. It is also known as control column.

Scanner: It is a flat external device with which we can take the image of any document which can be inserted in the computer.

b. Output Devices:

Monitor: Monitor is the display unit which displays information in a visual form. It is like the portable television. The specific part of the computer which displays information is called screen which can show still and moving pictures too.

Printer: It is an external device connected to the computer for printing purposes. Printers produce text, graphics and other materials on physical medium that is on papers. The physical copies are termed as hard copy.

Speaker: Speakers are the output device which produces sounds and can be connected with the computers.

c. Central Processing Unit (CPU):

CPU is considered as the brain of the computer, it is that part of the computer through which the computer performs the mathematical, logical operations. It is an internal part which is not directly accessible to the users.

d) Storage devices:

Floppy Disc: Floppy disc is a main storage device used on personal computers which is made of Mylar plastic coated with a thin film of an easily magnetizable substance.

Hard Disc: The hard disc is coated with a special lubricant which reduces the friction when the heads land. It has the maximum capacity to store.

Optical Disc: tiny pits, visible only under a microscope, are burned or processed into a thin coating of metal- or other material deposited on a compact disc. This disc has enormous storage capacity.

Q. What is team teaching? Explain the procedure to be followed to organize team teaching.

Ans: MEANING OF TEAM TEACHER

Team Teaching is not a method of teaching but an organizational device to plan, execute and evaluate the teaching work in a cooperative way. It represents an arrangement or teaching-learning situation where two or more teachers with other non teaching staffs like the laboratory assistant, librarian, clerk, expert from relevant field, researcher etc., joint hands, it is called cooperative teaching, calling for the fully willingly cooperation of the team members. A team or group of teachers of the same subject work together to deal a significant content to same group of students. Every individual teacher gets an appropriate instruction space and length of time so as to use special competencies of teaching content to a group of students. The group of teachers has a shared responsibility in planning, organizing, leading, controlling and evaluating the teaching considering the needs of their students.

Procedure to be followed to organise team-teaching

Team-teaching procedure proceeds through the following three stages—Planning, Execution and Evaluation are the three stages through which team-teaching proceeds.

1. Planning: Planning is necessary for conducting any activity smoothly. Planning requires the following —

a. Select topic to be taught.

- b. Determine the teaching objectives.
- c. Writing objectives in behavioural terms.
- d. Testing the entry behaviour of the learner.
- e. Selecting the available resources to be used.
- f. Sharing the responsibilities among the members of the team on the basis of their capabilities.
- g. Preparing flowchart to conduct teaching.
- h. Determining the evaluative devices.

2. **Execution:** In the Execution stage following sequence must be maintained.

- A. The starting point of instruction must be decided by the teacher by testing the background of the students through asking questions to them.
- B. Proper communication must be maintained by the teachers with their students.
- C. One teacher of the team should deliver the lead lecture to the students grouped for the purpose.
- D. The other teachers of the team cooperatively maintain the continuity of the lead-lecture and try to explain the elements of the topic in an interesting way by remembering the intellectual level and the base of knowledge of the learner.
- E. Teacher has to supervise the activities of the students team in the team-teaching group.
- F. Students are given reinforcement by the teacher on their quality performance to motivate them for learning.

3. **Evaluation:** At the evaluation stage team-teachers measure the performance of the students to know whether their objectives have been achieved by the learner or not. Evaluation starts as follows —

- a. Assignment is given to the students according to the objectives of instruction.
- b. Performance of the students is evaluated by the team-teachers.
- c. Analysis of the cause and nature of difficulties of the learner is made to provide necessary remedial measures by the teachers.

Q. What principles to be followed to make team teaching? Mention the objectives of team teaching.

Ans: Principles of Team-Teaching

Following are some of the basic principles which are to be followed to make team teaching effective.

1. **Principle of appropriate selection of teacher to assign responsibilities:** Before allotting any duties and responsibilities to the teacher, their interest, willingness, qualifications and their personality and character must be taken into account. Teachers without these qualities cannot compete in team-teaching,
2. **Flexibility of size of the group:** There should not be any rigidity in the formation of the group of students meant for team-teaching. According to the purpose of the team and the necessity demanded by the subject the number of students in the group may be more or less.
3. **Determination of time:** Time for the team-teaching should be allotted according to the importance of the subject.
4. **Appropriate learning environment:** Necessary facilities like library, workshop etc. must be provided in the institution while conducting team-teaching for improving the quality of

instruction. Without proper material arrangement teaching may remain unproductive.

5. **Principle of grouping:** To make team-teaching successful, children are to be grouped on the basis of their interest and aptitude for the subject concern.
6. **Principle of Supervision and evaluation:** Another principle of team-teaching is its constant supervision and evaluation of the activities of the students by the members of the team or by an appointed member. The supervision must be done on constructive basis so that better guidance can be added, if necessary.
7. **Keeping the level of the team-teaching considering the level of the learner:**

The level of team-teaching should be in accordance with the learning abilities of the learner, their intellectual level and age level etc.

Objective of Team-Teaching

Team-teaching is innovated keeping the following objectives in view—

1. To improve the quality of instruction.
2. To make excellence use of talent and interest of expert teachers.
3. To provide opportunities to the talented teachers to use their special knowledge.
4. To develop team spirit among the teachers for innovating effective way of teaching, for sharing responsibility of student's out comes after teaching.
5. To make maximum use of resources available in the school to make learning effective.

6. To provide maximum scope to the student to meet their needs, clarify their difficulties in the consulting areas.
7. To ensure the feeling of cooperation among the teachers for solving any problem arises in their way of better teaching.
8. Flexibility in grouping facilitates the students to enjoy learning in combination with students of same level in accordance with their interest and aptitudes.

Q. Discuss the advantages and disadvantages of team teaching.

Ans: **ADVANTAGES OF TEAM TEACHING**

Team teaching is a device of teaching that caters to the need of students. Some of the advantages of team teaching are as follows

1. Team teaching provides the opportunity for best utilization of the available resources.
2. The best teachers may be efficiently used for quality education.
3. The professional efficiency and competency of the teacher can be developed in a more effective manner.
4. Social environment can be developed between the teachers and learners in school environment.
5. It gives the opportunity to the learners to be specialist of the subject and is benefited by the special knowledge of various teachers.
6. It caters to the needs and difficulties of the students. As the specialist of subject involved in the teaching process teaching difficulties can be easily solved.
7. Behavioral problems can be easily resolved in team teaching
8. The plan of team teaching facilitates a more effective use of teaching aids and equipments and in an appropriate manner.

9. It is an economical teaching device. Teacher's time and energy can be saved through this method.

DISADVANTAGES OF TEAM TEACHING

Team teaching suffers from some serious drawbacks also, which are discussed below—

1. Team teaching requires sharing of responsibilities among the teachers. But not all teachers willingly come forward to share the responsibility or they hesitate to do so, for which the entire responsibility of choosing the person for particular task rests upon the leader.
2. It may be time consuming as the members of the team have to spend much time on planning for group activities and for individual projects.
3. Team teaching requires understanding among the members of the team and positive attitude towards the work assigned; sometimes they have to do away with their ego, hesitation and inferiority complex. But it is difficult to make team of such members.
4. The selection of team leader is a difficult task. Successful teachers may experience some difficulty when entrusted with semi administrative tasks while serving as team leaders.
5. The entire process of team teaching is dominated by the team of teachers. All the activities including planning, organization, and evaluation are planned according the convenience of the teachers. So basically in team teaching learners are given insignificant role.

Q. Short note “E-Learning”

Ans: E-LEARNING :

A learning system based on formalised teaching, but with the help of electronic resources is known as E-learning. E-learning represents a wide range of methods for the electronic delivery of information in order to provide education or online training.

The term e-learning is really just an umbrella term which covers a wide set of electronic educational applications and processes such as web-based learning, computer based teaching, virtual classrooms and digital collaboration etc. It includes the delivery of content via network, audio and video recordings, satellite broadcast, interactive T.V and CD-ROM as well as many, many others.

Some of the characteristics of e-learning can be stated as under :

NATURE AND CHARACTERISTICS OF E-LEARNING

- **Empowered by digital technology :** E-learning is pedagogy empowered by digital technology.
- **Computer enhanced learning :** E-learning is a term which is used to refer computer enhanced learning.

- **Technology enhanced learning :** E-learning includes all types of technology enhanced learning (TEL), where technology is used to support the learning process.
- **Online learning:** Use of E-learning is generally confined to “online learning” carried out through the Internet or Web-based technology, with no face-to-face interaction.
- **Confined to Web-based and Internet-based learning :** The use of the term e- learning should be confined to the type of learning carried out, supported or facilitated through Web enhanced instruction and the Internet based communications like e- mail, audio and video conferencing, mail list, live chats and telephony.
- **Exclusion of non-Internet and non-Web technology:** All types of non-Internet and non-Web technology are not included in E-learning. Taking a clear stand
- **More than CBL and CAI:** E-learning conveys broader meaning than the terms CBL (Computer Based Learning) and CAI (Computer Assisted Instruction.)
- **More than on-line learning:** E-learning is broader in its meaning than they conveyed through the simple terms like “online learning” or “on-line education”.
- **Not synonymous to audio-visual and multimedia learning:** E-learning should not be considered as synonymous to audio-visual learning, distance education or distance learning. Although the audio-visual and multimedia technology and distance education programmes are based on the Internet and Web services provided through the computers, yet these are not identical but complementary.

- **Blended learning:** In this mode, attempts are made for making use of a combination of traditional and ICT enhanced e-learning practices. The programmes and activities are so planned and executed so as to present a happy combination of both the traditional class room teaching practices and e-learning based instructions. Thus, one can reap the benefits of both the practices of traditional and e-learning.
- **Complete e-learning:** In this mode of learning the traditional class room teaching- learning is totally replaced by the virtual classroom teaching-learning. There is no existence of class room, schools and teaching-learning environment as happens in the traditional setup of school education. The learners are free to take the learning tasks independently with the help of properly designed e-learning courses.

Q. Discuss the education advantages and disadvantages of E-Learning.

Ans: **ADVANTAGES OF E-LEARNING:**

1. **Individualized instructions:** E-learning provides individualized instructions suiting to the need, abilities, learning styles and interests of the learners. E-learning has much potential to make the education, instruction and learning opportunities provided to the learners adaptable to their need, local need and resources at their hands. Thus, it is learner-centered.
2. **Easy access:** The learner get access to learning by breaking all barriers of time, place and distance. The learners can access information and educational contents any time and at any place
3. **Disadvantageous children:** It is available for those with poor health or disadvantageous conditions that can inhibit them

from undergoing any institutionalized education. E-learning enables even handicapped like deaf and dumb to learn.

4. **Qualitative** : E-learning has a unique feature of arranging an access to unlimited number of students the same quality of the content that a full time student has.
5. **Effective media** : E-learning can prove an effective media and tool for facing the problems of lack of trained teachers, shortage of schools and needed facilities for providing quality education to the number of students residing in far and wide comers of the country.
6. **Different learning styles**: Unlike traditional class room education, e-learning can cater to different learning styles and promote collaboration among students from different localities, cultures, 'regions, states and countries.
7. **On-line, Off-line and live interaction**: The opportunities of having an on-line, off-line and live interaction between the students and teachers and among the students them-selves may make the task of e-learning a joy and best alternative to the lively face-to-lace interaction.
8. **Self-turning and self-improvement**: E-learning leads to sell learning. It can be uti-lized for improving technical and vocational skills.

Disadvantages of E-Learning

All though e-learning has all the benefits cited above yet it is not free from some drawbacks. They are

1. All the skills and knowledge can not be attained through online. As for example the practical skills are difficult to acquire through online.

2. E-learning has the advantages of flexibility, ease; learning at one pace but it also isolates one individual from the classroom situation. ‘
3. As the e-learning provides the scope for learning at own pace the de-motivated learners may tend to fall behind.
4. Not all the people are competent in using computer and internet. So it is not meant for everyone. Specially in the states like Assam most of the people are deprived from the facilities of computer and internet.
5. All learners may not enjoy the activities designed in the e-learning. There lies a challenge to make e-learning attractive for all the learners.
6. E-learning makes us depend on the technology.
7. All the materials developed for e-learning may not be of proper standard.
8. Students with visual or physical impairments may find it difficult to learn through e-learning.