UNIT 12 : INTERNET

UNIT STRUCTURE

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12.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- learn the basic concept of internet ;
- discuss different major constituent characteristics of internet ;
- explain the uses of internet in modern education and communication;
- enumerate the disadvantages of the internet.

12.2 INTRODUCTION

As we know that internet plays an important role everywhere at present. In the field of education also it has its very vital role. It is the most useful technology of modern times which helps us personal as well as professional lives too. For educational purposes, it is widely used to gather information and to do research or add to the knowledge of various subjects. Popular search engines like google, yahoo are the topmost choice of people as such engines provides vast amount of information in just a few seconds. It contains a wealth of knowledge that can be searched anytime and anywhere. In one sentence, it has introduced the improvement in technology, communication and online entertainment. On considering the significance

of internet, this unit has brought its different aspects in front of you for your better understanding and further practical applications. In this unit, first of all, you will able to learn about the basic concept of internet. You will also study the different characteristics of internet and its uses in modern education as well as communications. Also from the last part of this unit, you will able to analyze the disadvantages of using internet.

12.3 WHAT IS INTERNET?

Internet is the connector of all the computers around the world through a network. In can be defined as the global interconnected network of computer networks. It should be mentioned here that either two or more computers or mobile and such any other electronic devices are connected together in such a way that anyone can communicate by sending messages or video conferences or audio conferences to each other, then they form a network.

Internet is the latest wonder in the modern world of technological communication. It may be said as a future step to development of computer technology. The U.S. Department of Defence in the 1960 had undertaken the work of experimentation on computer network. They wanted to create a computer network that may work even if the nuclear took place due to hit by enemy nuclear missiles in the communication system. They were successful in their attempt. They have developed an agency called Advanced Research Project Agency (ARPA) for future study and research in this line. The present form of World Wide Internet Service was its origin to this achievement.

Since 1981 computers have increased dramatically in speed. Gem Burners Lee, research scholar in Switzerland had developed the World Wide Web (WWW) to make the information on the internet easier to read and understand. Internet is yet another bold step ahead of computer science to future progress of the modern communication technology.

Internet may be defined as the world's largest network system. So, it is said to be the networks of networks. It provides the fastest, easiest and

cheaper means of information communication on the global basis. On the technological level, it is millions of computers that are interconnected through worldwide telecommunication protocols. On the human level internet may be said as the people who make use of those computers, and share information among themselves. The internet has the reach content of information in the form of text, pictures, sounds and video clips. It should be noted that the concept internet has emerged in human mind not because some commonly agreed upon ideological principles but simply because of the sense of freedom and functional anarchy in mind of modern man. Nobody owes the internet nor censor authority is there to regulate it and no country has the power to bring it under control. The system itself enjoys unimaginable freedom in its functioning, although computer security rests on confidentiality and integrity maintained by users.



CHECK YOUR PROGRESS

Q 1: Who did undertake the work of experimentation on computer network?

.....

Q 2: Who developed the World Wide Web (WWW) to make the information on the internet easier to read and understand?

.....

Q 3: Why is internet said to be the networks of networks?

.....

12.4 MAJOR CONSTITUENT CHARACTERSTICS OF INTERNET

The true nature and its functions may be summarized with the following points.

- Internet can be said as the network of networks. It is the network of millions of computers working in the world.

- Nobody owns the internet, nor did any country have the authority to control it.
- Contents of communication through internet are varied and extensive that covers a wide ranging of subjects for the users.
- As internet is easily accessible to people, there is every possibility of it being misused.
- In order to safeguard internet from being misused, certain communication protocols for internet security have been designed.
- Internet communication recognizes no political boundaries. It has been globalised in its functions.
- It was invented; it has evolved over three decades out of desire of people of the world.



CHECK YOUR PROGRESS

Q 4: Do you think that internet has every possibility of it being misused?

.....

Q 5: Write three characteristics of internet.

.....

12.5 USES OF INTERNET IN MODERN EDUCATION AND COMMUNICATION

Explosion of human knowledge, information and education through the internet is undoubtedly the greatest and the most exciting contribution of modern communication technology of mankind. It has provided wider spectrum of learning opportunity more specifically through the World Wide Web (WWW). A variety of areas of education and information have been covered by the internet, so far and in the 21st century there are further promises and possibilities to cover certain more sensitive arrears. In this regard our attention may be drawn to the following vital areas.

- **E-mail:** People naturally want to communicate important information with the near and dear ones in the fastest way possible. Electronic mail connected with the internet is the means to achieve this objective easily. In order to send and receive the message both the users must have an E-mail address that usually rests in the form of user's domain.
- **Collection and Publication of Information:** Internet is the fastest way to collect and publish the news and information from any part of the globe. A modern man needs to be well informed of the latest and up to date news and information in order to serve his personal need and make immediate reaction to them. One can collect such information immediately and the new agencies can publish them in the newspapers overnight make available early in the morning through internet.
- **Business Purposes:** Internet is of great help to the business world today. The business and big business houses are taking the first advantage of this media in making advertisement and publicities of their industrial goods in the world market. Customers of those goods can also easily come to know about the quality products and use ability of them sitting in their own homes. Business discussion for promotion of international trade and commerce has also been greatly helped by the internet.
- **Data collection for Research:** Undertaking research work by the scholars on certain subjects has been very much simplified by the internet. Renowned scholars of the world over have made their original contribution in the field of modern science and technology. The new researchers need to know them for their own creation at the easiest and the earliest convenience. This has made possible by the world internet.
- **Inter - University Communication:** Inter services can practically help the universities in the different parts of the world to maintain their universal characteristics. Those universities must maintain intellectual cooperation and co-ordination in their exchange of

knowledge and in sharing experiences. Teachers and students of them are now greatly helped by use of internet services, in maintaining such communication. It is a big step to globalization of education.

- **Distance Learning Programme:** The concept of distance learning through correspondence with the educational authority by the learner has been made a reality through the internet. The different open universities have been able to cater to the needs of higher education to people through this powerful communication media. Scope of non-formal education has been widened quite un-believably through the use of it.
- **Video- Conferencing:** It is a technique of getting both audio and video communication facility at a time through the internet. It may be applied for effective learning by making contact with the expert person in a certain subject who stays at distance places. It helps in economizing time, money and effort in getting valuable knowledge and information. Instantly which otherwise is not possible to be had from distance.
- **Recreation and Entertainment:** The need of recreation and entertainment for the modern men has been greatly served by the internet. It provides leisure time education through songs, dances feature films and serials etc. presented by the renowned artist. Famous international games and sports held on any part of the world are being brought to every home by the internet services. The common people use to live with those entertainments provided by the media that have the far reaching effect on their keeping of mental health and hygiene.

Besides above discussion, regarding the benefits of internet in the field of education, the following points can also be added for our further knowledge.

- **Cost Effective and Affordable Education:** High cost is one of the largest barriers to education. The Internet improves the quality of education, which is said to be one of the pillars of sustainable

development of a nation. It provides education through Videos (like YouTube tutorial videos) and web tutorials that are affordable to everyone as well as cost-effective.

- **Student - Teacher and Peer Interaction:** The internet has allowed students to be in constant touch with their teachers or with other fellow classmates with the help of social media, messaging apps and chat forums. Parents can interact or communicate with teachers and school authorities about their kid's performance in the school. Interaction with the likeminded people on forums can help students to explore new ideas and enrich their knowledge too.
- **Effective Teaching and Learning Tool:** The Internet has become an effective teaching as well as a learning tool. Teachers can use it as a teaching tool by posting their teaching materials (notes and videos) on school website or forum. The learning process becomes interesting and diverse with the use of tutorial videos and notes. Teachers can teach with the use of animation, PowerPoint slides, and images to capture the students' attention.
- **Easy Access to Quality Education:** Students can easily access quality education materials like tutorial videos on YouTube for free or pay fees online for more quality study materials. Teachers can also make use of the internet by proving the students with extra study material and resources such as interactive lessons, educational quiz as well as tutorials. Teachers can record their lectures and provide it to the students for revisions which is better than reading from notes.
- **Interaction with Digital Media:** Regular use of digital media is one of the most basic parts of our lives. Digital bulletin boards save paper, allow displaying of videos and audios to attract the attention of students. Nowadays, there are many paid sites which provide education resources which are rich in quality and easily understandable to masses.

- **Keeping updated with Latest Information:** The biggest advantage of internet is offering information. There is a huge amount of information available for every subject. It keeps us up to date with the latest information regarding the subjects in which we are interested.
- **Learning with Multimedia:** It helps the students with the learning process as it helps to simplify the knowledge. Also, it helps to visualize what is being taught by the teachers in school.

12.6 DISADVANTAGES OF INTERNET

Nothing in the world is perfect, everything and everyone has its own pros and cons. Similarly, contrary to popular belief the Internet isn't just full of advantages. There exist many disadvantages that many people still aren't aware of or refuse to talk about. The disadvantages of internet have been discussing below.

- **Cyber Bullying:** Cyber bullying is a serious crime that is usually ignored by most, due to the simple fact that it is "virtual" and not physical. But little do people know it almost has the same consequences as physical bullying, as it is the most common cause linked to depression, leading to suicide. Everyone has a Smartphone these days that allow them to stay connected to the Internet all the time, which makes it very easy to be exposed to Cyber Bullying. Here are some ways it can take form in:
  - Defamation
  - Discrimination
  - Manipulation
  - Abusive language

  Cyber Bullying usually takes place on social network platforms such as Face book, Twitter, Instagram, Ask FM, YouTube etc. where one would easily be able find people who won't miss a chance to bully someone.
- **Being exposed to hackers, viruses & identity theft:** As not

everyone in the world is technical, it can be easy for hackers to hack a non-technical person without him or her noticing at all. Internet is a very risky job and may sometime result in some mis-happenings where hackers can manipulate someone into downloading a fishy file and gain access to all their private data. One of the most common hacking that is done is on Face book or other social networks, to gain access to personal data or conversations to learn more about the victim - with the ultimate desire to steal their identity.

- **Exposure to negative content on the Internet:** People may exploit themselves on the Internet intentionally or unintentionally by exposing themselves to negative content on the web, such as graphic image or video of someone getting killed or pornographic material. This can be a very big issue for parents especially, hence it's best to install a spying or a social media monitoring app on their device to make sure what they are doing at all times.
- **Health issues:** Too much of anything always has a side effect, where as in this case - sitting all day in front of the computer or using the mobile phone to access the Internet can cause a lot of health issues which include heart problems, obesity, skin problems, eye problem, back pain etc.
- **Distraction:** The biggest disadvantage of the Internet is that it's easy to get distracted from it and spend hours without realizing, which could've been utilized in a more productive way.
- **Addiction:** Addiction to the net is known to be the biggest factor contributing to the Disadvantages of the Internet. Once any one is connected to the Internet, he or she cannot disconnect himself or herself from the Internet. The individual is stuck to the world of media and endless information.
- **Less focus & tolerance:** According to a survey conducted, it is observed that many people who use Internet on regular basis tend to lose their focus and are generally less patient/tolerating. This is a disadvantage of the Internet that is mostly ignored, which in return can affect a person's personal and career life deeply.

- **Social Isolation:** Usage of the Internet, especially using many social media has been linked with depression & anxiety. People give less time to the people who are present near them physically and give more time on the Internet. Even though they may have 500 friends on Face book, they still feel lonely and depressed due to lack of physical contact.

The Internet is a boon to the people, which is used all over the world. Hence, it should be used for good purpose. It has had a great impact on imparting education to the children. If this is used in appropriate ways that meet children's development level, they can benefit and learn from the Internet.



CHECK YOUR PROGRESS

Q 6: Mention two points regarding internet is helpful for communication.

.....

Q 7: Write two forms of Cyber bullying.

.....

Q 8: How internet is helpful in keeping us up to dated?

.....



12.7 LET US SUM UP

- Internet is the connector of all the computers around the world through a network. In can be defined as the global interconnected network of computer networks.
- Internet is the latest wonder in the modern world of technological communication. It may be said as a future step to development of computer technology.
- The U.S. Department of Defense in the 1960 had undertaken the work of experimentation on computer network.

- Since 1981 computers have increased dramatically in speed. Gem Burners Lee, research scholar in Switzerland had developed the World Wide Web (WWW) to make the information on the internet easier to read and understand.
- Internet may be defined as the world's largest network system. So, it is said to be the networks of networks.
- Nobody owes the internet nor censor authority is there to regulate it and no country has the power to bring it under control. The system itself enjoys unimaginable freedom in its functioning, although computer security rests on confidentiality and integrity maintained by users.
- Contents of communication through internet are varied and extensive that covers a wide ranging of subjects for the users.
- As internet is easily accessible to people, there is every possibility of it being misused.
- In order to safeguard internet from being misused, certain communication protocols for internet security have been designed.
- Internet communication recognizes no political boundaries. It has been globalised in its functions.
- Explosion of human knowledge, information and education through the internet is undoubtedly the greatest and the most exciting contribution of modern communication technology of mankind.
- It has provided wider spectrum of learning opportunity more specifically through the World Wide Web (WWW).
- A variety of areas of education and information have been covered by the internet, so far and in the 21st century there are further promises and possibilities to cover certain more sensitive arrears.
- Internet is the fastest way to collect and publish the news and information from any part of the globe.
- Undertaking research work by the scholars on certain subjects has been very much simplified by the internet.
- The concept of distance learning through correspondence with the educational authority by the learner has been made a reality through the internet.

- It is a technique of getting both audio and video communication facility at a time through the internet. It may be applied for effective learning by making contact with the expert person in a certain subject who stays at distance places.
- The need of recreation and entertainment for the modern men has been greatly served by the internet.
- The Internet has become an effective teaching as well as a learning tool. Teachers can use it as a teaching tool by posting their teaching materials (notes and videos) on school website or forum.
- There exist many disadvantages that many people still aren't aware of or refuse to talk about. These are like Cyber Bullying, Exposure to negative content on the Internet, Distraction, and Addiction etc.

12.8 FURTHER READING

1) Mangal S.K., Mangal Uma. (2016) Essentials of Educational Technology. Asoke K. Ghose, PHI Learning Private Limited, Delhi
2) Aragon, S. R. (2003). Creating social presence in online environments. New Directions for Adult and Continuing Education, 100, 57-68.
3) Ayers, E. L. (2004). The academic culture and the IT culture: Their effect on teaching and scholarship. EDUCAUSE, 39, 48-62.
4) Baker, J. (2003). Instructor immediacy increases student enjoyment, perception of learning. Online Classroom: Ideas for Effective Instruction, Sept. 2003.
5) Bates, Anthony, (1982). Roles and characteristics of television and some implications for distance learning. Distance Education, 3, 1, pp. 29-50.

12.9 ANSWER TO CHECK YOUR PROGRESS

Ans to Q No 1: The U.S. Department of Defense in the 1960 had undertaken the work of experimentation on computer network.

Ans to Q No 2: Gem Burners Lee, research scholar in Switzerland had developed the World Wide Web (WWW) to make the information on the internet easier to read and understand.

Ans to Q No 3: Internet may be defined as the world's largest network system. So, it is said to be the networks of networks.

Ans to Q No 4: As internet is easily accessible to people, there is every possibility of it being misused.

Ans to Q No 5: The characteristics of internet are-

- Internet can be said as the network of networks. It is the network of millions of computers working in the world.
- Nobody owns the internet, nor did any country have the authority to control it.
- Contents of communication through internet are varied and extensive that covers a wide ranging of subjects for the users.

Ans to Q No 5: Internet is very helpful in case of communication. For example,

- Internet is the fastest way to collect and publish the news and information from any part of the globe. A modern man needs to be well informed of the latest and up to date news and information in order to serve his personal need and make immediate reaction to them.
- Internet is of great help to the business world today. The business and big business houses are taking the first advantage of this media in making advertisement and publicities of their industrial goods in the world market.

Ans to Q No 6: Two forms of Cyber bullying are: Defamation and Discrimination.

Ans to Q No 7: The biggest advantage of internet is offering information. There is a huge amount of information available for every subject. It keeps us up to date with the latest information regarding the subjects in which we are interested.



12.10 POSSIBLE QUESTIONS

Short Questions (Answer each question in around 150 words)

Q 1: Mention the constituent characteristics of internet.

Q 2: How much internet is helpful in distance learning programme?

Q 3: Easy access to quality education is possible through internet. How?

Q 4: What is meant by video conferencing?

Q 5: What is Cyber bullying?

Q 6: Do you think that excessive use of internet may lead us to social isolation?

Q 7: Exposure to negative content on the Internet may affect the individual. Is it true?

Q 8: Internet may have also negative impact on health. How?

Q 9: What are the different forms of cyber bullying?

Long Questions. (Answer each question in around 300-500 words)

Q 1: Explain the uses of internet in the field of education.

Q 2: Discus about the impact of internet in the field of communication.

Q 3: Discus the disadvantages of internet with examples.

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