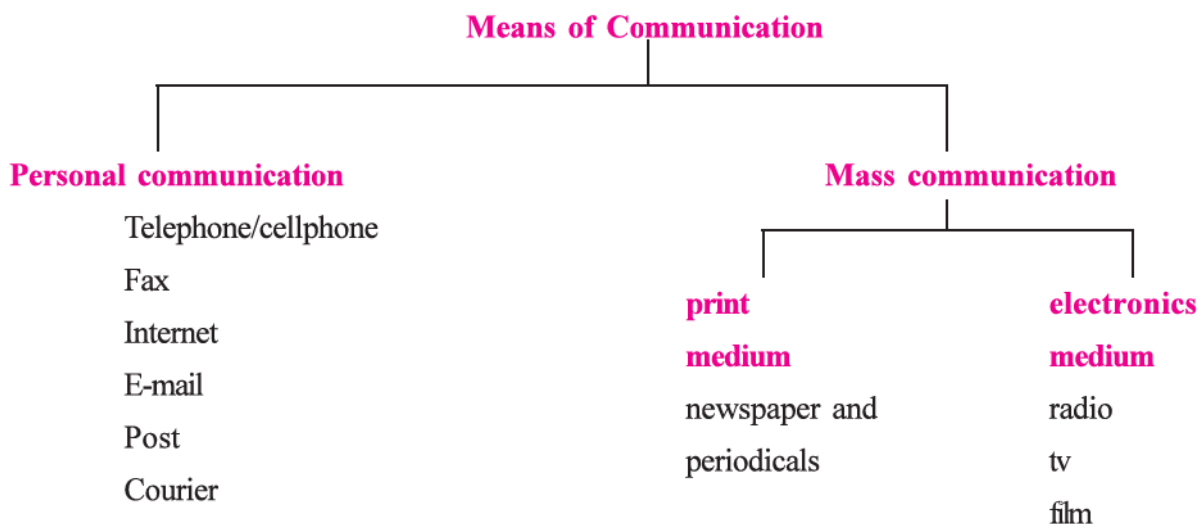


Communication

An extensive system of sending and receiving information or messages is called a communication system. In early times messages were propagated by different means- hitting a drum, using signals such as fire, smoke, hoisting flag or by shouting loudly. Some animals and birds were used to send messages. Initially, means of transport were also the means of communication. With time, printing press, post office, telephone, fax and satellites have made communication system very fast and easier.

Communication has played an important role in the development of science and technology. The means of communication have made the world smaller in terms of time. Modern communication system has transformed the entire world into a small global village, even more than transport. Current economic development is dependent on modern communication system. We can visualize events taking place live on the earth or in space. Along with the nation's economic, social, political and cultural development, communication plays an important role in maintaining national unity and integrity. In a vast country like India, flood, drought, earthquake, cyclone, tsunami and human induced disaster management is not possible without developed communication system.

Means of Communication



(1) Personal Communication System

Personal Communication System includes telephone, fax, internet, E-mail, postal service, and courier service.

Telephone : Telegraph and telephone companies of U.S.A. enjoyed monopoly over the telephone industry of U.S.A. from the beginning to the middle of the 20th century. Telephone service may be considered a significant factor in the urbanization of U.S.A. Through this, jobs could be connected to the company's headquarters. With the establishment of such contact facilities, sub-branches could be established in small cities.

With increase in competition, the telephone companies as part of upgradation, replaced copper wires with optical fibres supplemented by use of satellites. This resulted in speedy, safe and distortion free transmission.

In India, the foundation of telephone network was laid in the 19th century by the British

government. History of BSNL is related to India's Telecom sector. The Indian government maintains telecom services in India. The current company Bharat Sanchar Nigam Limited was formerly known as the Post and Telegram Department (**P & T**). In 1975, Department of Telecom (**DOT**) was separated from Post and Telegram (**P & T**) Department.

In India, **Sam Pitroda** has played a special role in the development of modern telephone services. In modern times, due to developments in science and information technology, cellphone services have rapidly become popular communication services across the world. Through these services, an individual can maintain contact with the entire world every moment. With the help of internet enabled smart cellphone, very speedy and effective exchange of information in many fields is possible. In last two decades, several private foreign companies have entered telecom sector.

Fax : Fax makes it possible to print an exact copy of writing or picture at some another place with the help of a Fax machine. To send a Fax, the Fax machine needs to be connected to a telephone wire. Fax has its own number. The Fax machine receives image received by use of this number, and directs the image in the Fax machine of indicated number. The machine that receives messages produces a print out. Thus, with a Fax it is possible to send any writing or picture on a paper, from one place to another place. In modern times, use of other means of communication has reduced the use of Fax.

Internet : In the second half of the 20th century, with the transformation of instructions into digits, the telecommunication system has gradually become a part of computer. Through the medium of internet it has developed into a conjoined system. Today internet is the world's largest electronic system, through which more than 100 crore people establish contact.

"Internet is a Web of Computers formed by some centralized institute or independent communication, with the help of a telephone."

Among all the means of communication system, internet is the most effective and the latest. Its use has expanded from some local area to the world over. One who makes use of this facility can establish direct contact with the world of knowledge and information. Use of internet is rapidly increasing for E-commerce and financial transactions. Internet provides huge knowledge and more information on varied topics at a less expense. Besides cities, facility of cybercafé have enabled and increased use of internet even in small towns. A spaceship can also establish contact with a satellite through computer and internet. Such network that covers the entire world is known as the world wide web, www or web in short.

Internet services are important to know train or air flight schedules, to book tickets for rail, air or bus travel, to obtain documents of land record, to give educational guidance, to trace criminals, booking hotels, online purchase-sale, preparing results in public exams, using credit and debit cards, etc. Besides, internet is essential for whatsapp, twitter, facebook, E-mail and other services. Use of internet has increased in cellphone.

Worth Knowing

A site that can enhance geographical knowledge is www.worldgeographygames.com. Knowledge is placed on this site in the form of interactive game or quiz. Games are related to the world's countries, their capitals, flags, continents, oceans, rivers, deserts, etc. On selecting any such game, a world map is displayed. On clicking anywhere, the game starts followed by questions. We can see score to the right. Click on 'Give Up' and you can know answers to all questions at a time.

E-mail : The process of exchanging messages through computer and internet is called as E-mail. E-mail is a communication system that occurs with the help of internet. It is a paperless postal service.

G-mail, yahoo, hotmail, indiatimes, etc. provide e-mail services. E-mail address can be obtained by going to a company's browser and getting signed up. Once E-mail address is obtained, sign in to that browser, select E-mail address of the persons whom you want to send messages, pictures, photos, videos, etc. The mail will be sent instantly. E-mail services have become handy with mobile.

Mass Communication

Print Medium

Newspapers and magazines : TV, radio, cinema, newspapers, magazines, etc. are strong media of mass communication. In India, more than 70,000 daily newspapers are published in Hindi, English and other regional languages. More than ten crore copies are sold and read every day. Besides, more than 960 satellite channels are operating. Out of these, about 80 are news channels. World's first newspaper 'Morning Post' was published in 1772.

In India, the first newspaper 'Bengal Gazette' was published in 1780 by an Englishman James Augustus Hickey. In 1819, the first daily in the Indian language was in Bengali. Its name was 'Samvad Kaumudi' and was published by Raja Rammohan Roy. In 1822, a weekly newspaper in Gujarati was published named 'Mumbai Samachar'. In 1826, 'Udant Martand' was the first Hindi newspaper to be published. This was followed by the Maratha, Kesari, Bengal, Navjivan, Young India, Hindoostani, Sadhna, Pravasi.

Presently, newspapers in Gujarati language are the Gujarat Samachar, Divya Bhaskar, Sandesh, Sambhav, Mumbai Samachar, Kachchh Mitra, Janmbhumi, Jayhind, etc. Newspapers in Hindi are Dainik Bhaskar, Navbharat Times, Hindoostan, Amar Ujala, Ranchi Express, Deshbandhu, etc. Newspapers in English are Times of India, Indian Express, Mid Day, One India, India Today, Business Line, etc. Besides, local newspapers in regional languages are also published at district or taluka headquarters. In this age of modern technology, news can be known with mobile or computer through internet.

Newspapers enhance readers linguistic knowledge, understanding and skill. Readers can gain

extensive knowledge about entertainment, national-international news, advertisements, trade, geographical events, atmospheric conditions, sports, education, etc.

Magazines provide readers knowledge about entertainment, worth knowing technical information, current events, knowledge about forms of literature, understanding of social, religious and cultural traditions, etc. Magazines are published in different languages in India and the world. Magazines published in Gujarati are Aarpar, Udesya, Gruhshobha, Akhand Anand, India Today, Kumar, Chitrlekha, Rojgar Samachar, Lok Gurjari, Vishvavihar, Safari, Navneet, Samarpan, Balshruti, Cyber Safar, etc.



6.1 Aakashvani logo

All India Radio : It is public broadcasting radio service handled by India's Information and Broadcasting Ministry. The first radio transmission in India started in 1923, by Radio Club of Bombay. In 1930, the service was nationalized and was renamed as Indian Broadcasting Corporation. Extensive radio transmission commenced in 1936, when it was named as All India Radio (AIR). In 1957, it was renamed as Aakashvani.

Aakashvani broadcasts its programmes in various languages from its various centres. Aakashvani broadcasts a wide range of information to its listeners in a speedy and effective manner. These include education, entertainment, music, drama, bhavai, news, world events, sports, weather, trade, advertisements, agriculture, etc. A radio becomes handy while travelling. In 1997, Aakashvani became part of an autonomous institute named Prasar Bharti. Today, many big cities have private FM channels.

Television : Television is the technique of transmission and reception of audio video content as electromagnetic signals.

The first TV transmission in the world was done in 1936, in the U.K. by the BBC (British Broadcasting Corporation). But three years later, it was interrupted due to commencement of Second World War. In 1937, the NBC (National Broadcasting Company) started broadcasting from New York. By 1960, television was available to 90% American families. By the seventh decade of the 20th century, television services were widely available in Japan, Australia, Sweden, France and other countries.



6.2 Doordarshan Logo

In India the first TV broadcast of Doordarshan was in Delhi on 15th September, 1959. At the time it could be viewed only in Delhi. Regular Doordarshan programmes commenced in 1965. Progress of TV was slow relative to radio due to higher cost of electronics items at the time. Till 1975, centres of Doordarshan were limited to Mumbai, Kolkata, Delhi, Chennai, Lucknow, Srinagar and Amritsar. In 1975-76, satellite technology was first used in TV transmission.

Commencement of national programmes and colour TV broadcast in the country was in 1982. Doordarshan is India's national TV broadcast. Among the world's electronics media, it is one of the largest regional broadcast organizations. The broadcast services of Doordarshan's basic programme is of 3 levels : (1) Local (2) Regional (3) National.

Imparting information, entertainment and education, Doordarshan is one of the most extensive, speedy and effective mass media in India. Republic Day celebration, Gulf War, election results, live telecast of sports, (cricket, Asian, Olympics, etc.) natural hazards (flood, earthquake, drought, tsunami, storm, etc.), accidents, responses to events influencing social life (budget, market ups and downs, economic scams, etc.), interesting facts about the entire earth, various events, latest discoveries, etc. can be seen on TV. TV programmes provide knowledge, information and entertainment. Now, TV has not just remained a medium for information and entertainment, but is also an effective medium for advertising of products of big companies as well.

Film : Hollywood is the world's oldest film industry. It is located in Los Angeles of the U.S.A. the first film was released in 1884 in Hollywood.

The first film to be released in India was 'Raja Harishchandra' in 1913. It was produced by Dadasaheb Phalke. Films produced initially in India were mute and in black and white. The first talky black and white film to be released in India was 'Alam Ara' released in 1931, produced by Ardeshir Irani. The film also became very popular. In the decade 1950 colour films began to be produced. Hindi films are known in the name of Bollywood. In India Mumbai is the centre of Hindi film industry. Kolkata, Bangaluru, Hyderabad and Chennai are other centres.

Films are a very strong means of mass media. They have made an impact in social, religious, economic, political, cultural and other sectors. Social films are more effective. Besides entertainment, films also provide knowledge about the latest technology, events and information about global trends to their viewers.

Our social systems are reflected in films. The film industry has played an important role in national upliftment, social development and upholding the Indian culture. The best films are being produced in India. Due to production of the best quality films with the latest equipment, the Indian cinema industry today stands among the world's cine industry. In India, films are being produced in many regional languages also, besides Hindi.

Satellite Communication : U.S.A. and erstwhile Soviet Union have been forerunners in space research. The first satellite to be sent into space was the Sputnik-I. It was launched by erstwhile Soviet Union in 1957. Since then, a rivalry for new research in space science continued between U.S.A. and the Soviet Union (U.S.S.R.). These researches brought forth new scientific facts and a new era commenced in the field of communication. Satellite communication system is so effective that a satellite can establish communication over one-third of the earth, while three satellites can establish communication over the entire earth. Another advantage of satellite communication is that

expense and time incurred with respect to distance remains unchanged. Expense of sending message over 500 km to 5000 km is almost the same.

Use of cellphone, popular programmes on Doordarshan and live telecast of any event are possible today with satellite communication.

India has also made big achievements in the field of satellite communication. For this, different satellites are placed in orbits with different heights, depending on the purpose. The first Indian communication satellite was 'Aryabhata' launched in 1975 with Soviet help. Bhaskar-I and Bhaskar-II were launched into space respectively in 1979 and 1981. Afterwards, India successfully launched three satellites of 'Rohini' series, with its indigenous rocket from Sriharikota off the coast of Andhra Pradesh. In 1981, India launched another communication satellite named APPLE (Ariane Passenger Payload Experiment) into geo-stationary orbit from French Guyana in South America. Between 1982 and 1992, four more satellites (INSAT 1A, 1B, 1D and INSAT 2A) were launched into space under the series of Indian National Satellite. These modern satellites have made telecommunications, TV and radio broadcast very effective.

Additional information about the satellites launched by the Indian government for development of communication is given in Appendix-1.

Computer : In early times, man used fingers and stones for counting. The abacus was invented about 5000 years ago, and was used for making simple calculations. In 1822, Charles Babbage developed design of a model named Difference Engine. This invention was capable of making calculations without human interference. In 1833, Charles Babbage developed the Analytic Engine. This technology of Analytic Engine is the basis of modern day computer technology. For this contribution, Babbage is regarded as the father of modern computer.

There has been worldwide development of computer in modern times. Computer has revolutionized many fields. We can make highly complex calculations with high speed and accuracy with the help of a computer. Computer is used for exchange of information in this age of electronics communication.

Uses of Computer

- Computer is useful for keeping a record of employees attendance, calculating salary, online salary, accounts keeping and for maintaining other documents in any office.
- In the industrial field, computer is useful for keeping documentary record of purchase of raw material, stock of raw material and finished goods, sale of finished goods, financial transactions with traders, etc.
- Use of computer has become essential in financial transactions of banks, keeping the bank records, for reservation of tickets of rail, air flights, bus, etc. and also in hotel, hospital, etc.
- By connecting a computer with internet E-mail, E-commerce, online purchase-sale, outsourcing and other works can be done.
- To launch a satellite by a space vehicle. Before a space craft lands on a planet, the computer at the control station on the earth helps in precisely determining its path in the space, its site of landing and also how it will return to the earth.

- For curbing of crimes, finger print, to get information about past crimes committed by criminals, cctv cameras, and to know location of mobile, etc., computers are used.
- Computer is important for maintaining information of insurance policy holders, online education, results of public exams and for preparing various accounts.

Exercise

1. Answer the following questions in detail :

- (1) Mention the means of communication and describe the telephone and E-mail in detail.
- (2) Write in detail about the internet.
- (3) Discuss in detail about satellite communication.
- (4) Discuss the uses of computer.
- (5) Write a detailed note on Television.

2. Write to the point answer for the following questions :

- (1) Write a short note on newspapers and magazines.
- (2) Discuss in detail the film industry.

3. Answer the following in brief :

- (1) What is communication ?
- (2) Which are the personal means of communication ?
- (3) Which services are provided by BSNL ?

4. Answer the following in one-two sentences :

- (1) Who played an important role in development of modern telephone services in India ?
- (2) When and where was the first TV telecast done in India ?
- (3) Which was India's first satellite ?
- (4) Who is known as the father of modern Computer ?

5. Select the correct option from the options given :

- (1) Which of the following is an electronics medium of mass communication system ?
 (a) E-mail (b) post (c) telephone (d) television
- (2) When was the first radio broadcast done in India ?
 (a) 1936 (b) 1975 (c) 1923 (d) 1957
- (3) Which was India's first talky black and white Hindi film ?
 (a) Alam Ara (b) Pakiza
 (c) Raja Harishchandra (d) Narsinh Mehta
- (4) When did India launch the 'Aryabhata' satellite ?
 (a) 1981 (b) 1975 (c) 1957 (d) 1979

Activity

- Open various websites on Geography on the internet and know more about them.
- Visit a nearby Doordarshan centre in your village and get more information.