

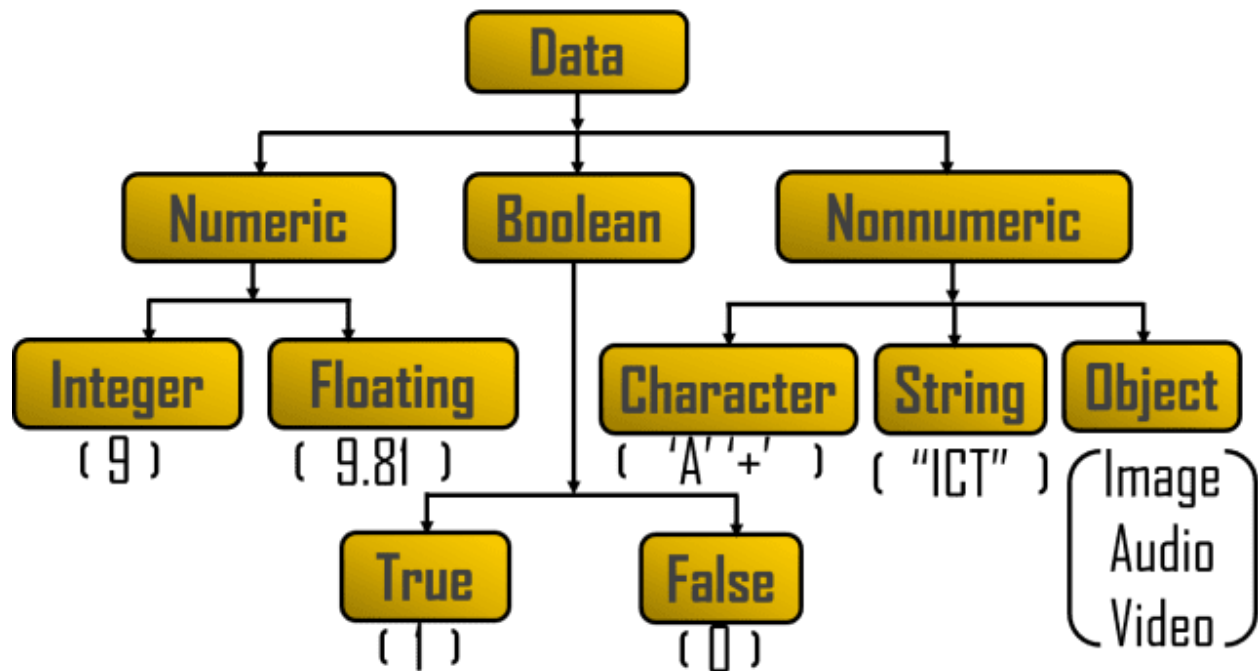
First Chapter Lesson-1: Concept of Information and Communication Technology

At the end of this lesson-

- 1. You will be able to explain the concept of ICT.
- 2. You will be able to explain the concept of information technology and communication technology.
- 3. You will be able to explain the different types of information and communication technologies.
- 4. You will be able to describe various machines related to information and communication technology.

Data: Datum is a singular form of Data. It is the smallest part of information that's stored in or used by a computer.

Types of Data:



Information: Information is organized or classified data, which has some meaningful values for the receiver. Information is the processed data on which decisions and actions are based.



Communication: Exchanging of information or connection between people or places, in particular.

Technology: The application of scientific knowledge for practical purposes, especially in industry. Machinery and equipment developed from the application of scientific knowledge. The branch of knowledge dealing with engineering or applied sciences.

Information Technology: Information technology is the application of computers to store, study, retrieve, transmit, and manipulate data, or information, often in the context of a business or other enterprise.

Communication Technology: Communication Technology is used to design, construct and maintain communication systems.

Classification of ICT:

1. Computing & Information System
2. Broadcasting
3. Telecommunications
4. Internet

Computing & Information System: Computing with all electronic data processing where Artificial intelligence, expert system and so can be used.

Broadcasting: Radio, Television that broadcast unidirectional information to the people.

Telecommunications: Telephone and Mobile or cellular phone with all types of telecommunication systems.

Internet: The Internet is a massive network of networks. It's a Connection System. It connects millions of computers together globally.

Various instruments related to information and communication technology:

Mobile Phones:

Mobile phones or cellular phones are wireless telephone. Mobile means "transferable". This phone has been renamed as a mobile phone that can be easily carried and used anywhere. It is also known as "cellphone" because the mobile network consists of hexagonal shaped cells. Mobile phones communicate via wireless waves, it can connect seamlessly to many large geographical areas.

Not just talking, modern mobile phones can receive many more services. Examples of this are self-messaging – SMS or text message services, MMS or multimedia message services, e-mail services, Internet services, infrared, Bluetooth services, cameras, gaming, business or economic software. The mobile phones that provide

these services and some of the general benefits of the computer are called smart phones.

Radio:

Radio is a powerful medium of information and communication technology. Through which information can be transmitted unidirectional. In radio communication, sound is transmitted electromagnetic waves from one place to another. The system consists of radio transmitters, radio receivers and antennas. The radio communication system mainly uses AM, FM and microwave broadcast methods. FM radio is currently very popular. AM's Amplitude Modulation, FM's Frequency Modulation.

Television:

Television is a popular medium. Through which information can be transmitted unidirectional. In this system a signal is sent from a particular broadcast station and everyone under that broadcast station can watch the program through the television device. Various TV standards – NTSC – National Television System Committee, PAL – Phase Alternation by Line etc.

Lesson Evaluation-

Knowledge Based Questions:

- a. What is the data?
- a. What is the information
- a. What is information technology?
- a. What is communication technology?
- a. What is the internet
- a. What is a smart phone?

Comprehension Based Questions:

- b. Why is a mobile phone called a cellphone?
- b. Explain one-way transmission of radio or television information

Creative Questions:

Multiple Choice Questions:

1. What does information technology usually mean?

- a) Treating the earth as a village b) Converting sound into electronic data.
c) Providing work results through data processing d) Technology for data collection and use

2. What has changed in the information and communication system radically?

- a) Modern digital electronics technology b) Use of local area networks C) Use of interactive telecommunication technology d) Use of voice over internet protocol

3. Uses of information and communication technology are-

- i. Books can be read ii. Bank transactions can be done iii. The game can be played

Which one is correct?

- a) i & ii b) i & iii c) ii & iii d) i, ii & iii

4. The things included in Information and communication technology are-

i. Data storing ii. Data processing iii. Input data

Which one is correct?

a) i & ii b) i & iii c) ii & iii d) i, ii & iii