

UNIT 9. Contemporary Technology (4 Marks)

1. E-learning: E-learning is the process of learning through the electronic media like computers. The concept of Distant Learning has become possible through the e-learning. One can get degree of a university through the e-learning. The CAL (Computer Assisted/Aided Learning) is an example of E-learning. Internet, Intranet, Extranet, Virtual Class room and Multimedia CD/DVD ROM are the tools used in E-learning. It has many advantages:

- Very flexible and cheaper
- Time saving
- Can be read any time and any where
- Course moves faster than traditional method
- Uniformity of content
- Interactive online session

2. E-commerce: The commerce through the use of electronic media is called E-commerce. It is the most popular and highly used advantage of IT. Replacing the traditional method of account controlling, quality and quantity controlling, money transaction, official and industrial management, etc. by the computers and electronic machines are some popular concepts of E-commerce. There are basically three types of E-commerce:

- i. Business-to-Business
- ii. Business-to-Customer
- iii. Digital Middle Man

3. E-Business: The process of performing business activities through the electronic media, especially Internet is called E-Business. It includes selling, buying and servicing customers and collaborating with the business partners, too. It uses web-based technology for the advertisements and for the improved business performance. Some examples of this system are www.ebay.com, www.amazon.com, www.rebok.com, www.myownbike.de, etc.

4. E-Governance: The process of governing through the use of Electronic media is called E-Governance. The traditional governing system cannot reach to the remote or rural area and it cannot address the actual problem of them. It is centered in the urban area. So, the E-Governance has become a popular concept of governing. It uses electronic media like Internet, Intranet, Wireless Phone, E-voting, E-commerce, E-health service and E-education, etc to address the problem of the people. It increases the speed of working of Government. The following are the E-Governance models:

- i. Government to Citizens (G2C)
- ii. Government to Employees (G2E)
- iii. Government to Government (G2G)
- iv. Government to Business (G2B)

5. E-Medicine: Electronic medicine is a service of E-Government, which provides E-health services to the people. The use of computers for diagnosis of diseases, operations and research of medicine are the examples of E-Medicine.

6. Virtual Reality: It is an artificial environment created by using the computers, which tries to give natural environment of the presentation. It creates an illusion of the real world. Head Mounted Display (HMD), Binocular Omni Oriented Monitor (BOOM) and Cave Automatic Virtual Environment (CAVE) are some common devices used for Virtual Reality. It is very popular in the fields of entertainment, space and civil aviation.

7. Robotics: It is the term used for the designing, constructing and using robots in various purposes. The term 'robot' was first used by Karel Capek in his play Rossum's Universal Robots, published in 1920. Scientists are trying to give the human-like intelligence to the robots, so that they understand the natural languages and they can be able to interact with the humans to assist them. Transportation, exploration, surgery, bomb diffusion, etc. are some popular application of robots. They are especially used in the areas, which are full of risk.