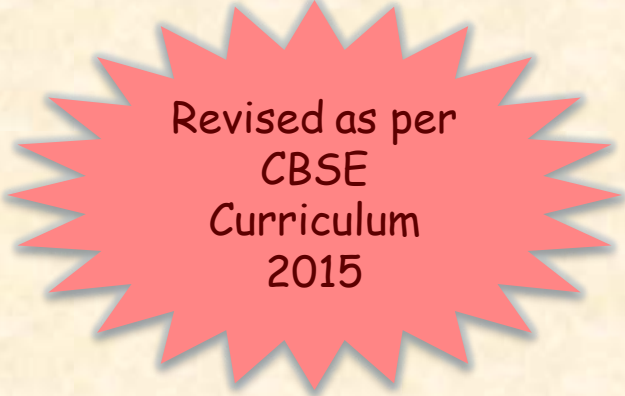# Chapter 11:

IT Applications

Informatics Practices

Class XII (CBSE Board)

Revised as per CBSE Curriculum 2015

"Open Teaching-Learning Material"

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Introduction

The modern e-technology changed our lives and facilitated to all the area of applications like Banking, Education, Entertainment and Government etc. Now days, <u>Information & Communication Technology (ICT)</u> enabled services are essential requirement of every walk of life.

In this chapter you will learn about some web-based IT Applications and development of new applications.

☐ **E-Governance**

☐ **E-Business**

☐ **E-Learning**

E-Governance

☐ **What is E-Governance ?**

E-Governance refers to the application of e-Technologies in governance to provide effective, efficient, faster and transparent services to citizens.

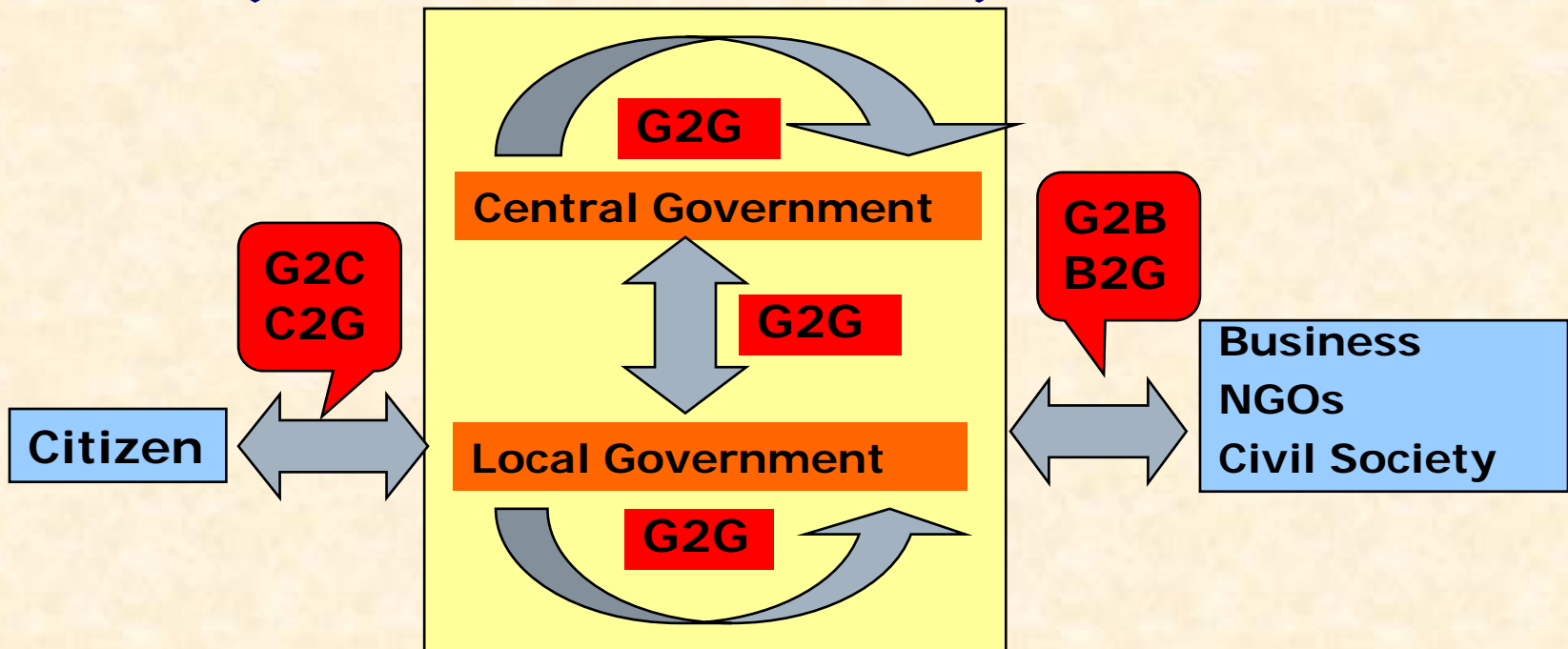☐ **Objective of E-Governance Applications**

- To provide information and knowledge about political system and services to the citizens.

- To fulfill the requirement of citizens by providing services at minimal cost and at doorsteps.

- To facilitate faster, transparent, accountable, efficient and reliable system for various administrative and social activities of the Government.

Example of such applications are Birth/Death Registration, issuing Passport, making of Voter ID Card, Filing Income Tax returns, Railway Enquiry & Ticket booking, On-line delivery of Land records etc.

E-Governance Model

E-Governance system is based on the need of the Citizens, Businesses and Government itself. It can be in the following Interaction Model.

❖ **G2C (Govt. to Citizens)**   ❖ **C2G (Citizens to Govt.)**

❖ **G2B (Govt. to Businesses)**   ❖ **B2G (Businesses to Govt.)**

❖ **G2G (Government to Government)**

Important E-Governance Portals:

☐ **National Portal of India**

The National Portal of India is a single window to access all the information and services being provided by various Indian Government bodies. This contains information of Government Ministries and Departments at the Central, State and District level.

This Portal is designed and maintained by the National Informatics Centre (NIC), Deptt. Of Information Technology, Ministry of Comm. & Information Technology, Govt. of India.

URL: http://www.india.gov.in

☐ **Govt. of India Web Directory**

The Government of India Web Directory is repository of various Government Department's web sites including States and Union territories and Central Government Departments.

URL: http://www.goidirectory.nic.in

Important E-Governance Portals:

☐ Income Tax Department's Portal

To meet the demand for easy access of Information about Income Tax Rules and efficient system for Income-tax collection, the Income Tax Department launched a centralized website in 2002. Presently this portal offers various services to citizen including PAN/TAN enquiries and Online filling of Income Tax Returns etc.

   URL: http://www.incometaxindia.gov.in

☐ Right To Information (RTI) Act Portal

Right To Information Act 2005 facilitates citizen to gain information regarding Government's activities. The RTI portal provides details about RTI procedures, Appellate Authorities, Public Information Officer (PIO) in various Departments and other related information.

   URL: http://www.rti.gov.in

Social Impacts of E-Governance

☐ Positive Impact

❖ E-Governance Programs facilitates Government in <u>effective Administration</u> and service delivery.

❖ It provides <u>reliable, secure, economical and faster services</u> at door step.

❖ E-Governance has proved as a <u>successful tool to minimize the corruption</u> to some extent by providing transparent and easily-accessible services to common man.

☐ Limitations

❖ People in <u>rural and remote area could not get benefit</u> from these E-Governance projects due to <u>poor ICT infrastructure and lack of Awareness</u>.

❖ <u>Unavailability of computers, Internet and lack of knowledge of computer operation</u> has also prevented people to get benefit from E-Governance Applications.

❖ Not all the services can be computerized and offered by the E-Governance.

E-Business (E-Commerce)

☐ **What is E-Commerce ?**

E-Business or E-Commerce refers to any form of business or trade that uses e-Technologies to facilitate the selling or buying of products and services, transactions of money and goods etc.

☐ **Benefits of E-Commerce Applications**

- E-Commerce reduces cost of production by reducing overheads like high rent of shops or retail-outlet and reducing stock cost.

- It increases profit by increasing sales volume and offers opportunity to access new customer and market on the glob.

- It provides more accurate information about the product and offers 24x7 access to market and customer services.

- It provides cost-saving, improved customer service and faster response to customers.

Major E-Business Portals

☐ **IRCTC Portal**

The Indian Railway Catering & Tourism Corporation (IRCTC) Portal provides information of Trains, Availability of seats and On-line booking of Railway Tickets in India.

URL: www.irctc.co.in

☐ **Online Reservation site Yatra.com**

This portal provides facility for airline reservation. You can book flight tickets for domestic and International flights, Hotels and avail Tourist packages etc.

URL: www.yatra.com

☐ **Life Insurance Corporation of India**

LIC of India is one of the premier Insurance company of Govt. of India. This portal offers facilities like Online deposit of Premium, Sales of Insurance Policies and enquiry.

URL: www.licindia.com

Major E-Business Portals

☐ **E-Banking Site of State Bank of India**

SBI is the largest government owned bank. It has launched e-banking services for customers to facilitate Personal Banking, Loan Lending and Fund Transfer etc.

URL: www.statebankofindia.com

☐ **On-line Store Amazon.com**

Amazon is the world's largest online store, which sells books, Music CDs and DVDs, Computer Software, Video Games, Furniture, Electronic goods and Toys etc.

URL: www.amazon.com

☐ **On-line Auction Site – eBay India**

eBay.in is India's most popular online shopping store which provides online sells, purchase, auctions for various products like Mobile, Cameras, Computers and others appliances.

URL: www.ebay.in

Social Impacts of E-Business

☐ Positive Impact

❖ It <u>reduces Transaction and other overhead cost</u> of the products.

❖ It <u>increases productivity and efficiency</u> and offers improved customer services.

❖ It <u>opens the global market</u> for the Manufacturer and gives opportunity to sell the product on the globe.

❖ Offers easy shopping by Secure and Online payments system.

☐ Limitations

❖ <u>Lack of knowledge and poor Telecommunication Infrastructure</u> and unavailability of Internet connectivity in Rural areas are major issues for limited use of e-Business.

❖ People are still unaware about legal remedies. There are <u>high chances for fraud, theft of private information</u> due to lack of effective legal framework.

E-Learning

☐ **What is E-Learning ?**

E-Learning describe as a means of teaching and learning through e-technology like Internet and Multimedia enriched contents on CDROM or DVD.

☐ **Benefit of E-Learning**

❖ **For Trainer**

▪ It reduces Teaching and Learning times.

▪ It facilitates consistent and fast delivery of Teaching-Learning contents at low cost.

▪ E-Contents can be updated and organized easily.

❖ **For Learner**

▪ It provides opportunity to learn Any time-Any Where.

▪ It offers Multimedia (Text, Audio, Video, Graphics and Animation) contents for easy and long-lasting learning.

▪ It facilitates Self-Motivational and Self-Paced learning.

Major E-Learning Portals

☐ **Moodle.org**

Moodle is an Open Source Course Management System (CMS) also called Learning Management System (LMS). It help students in learning of various subjects/topics online.
URL: www.moodle.org

☐ **W3Schools.com**

It is free e-learning portal, where you can learn Web site designing, and other related subjects through online web tutorials.
URL: www.w3schools.com

☐ **Xerte Project**

It is also an Open Source e-learning developer tool, which is used to develop interactive e-learning materials for the students.

URL: www.nottingham.ac.uk/xerte

Social Impacts of E-Learning

☐ Positive Impact

- ❖ Cost effective, <u>Interactive and Multimedia enriched</u> Material for effective and long-lasting learning.
- ❖ No physical Interaction among Teacher and Learner is required i.e. <u>most suited for working people</u>.
- ❖ Easily available and facilitates <u>Any-time and Any-Where</u> Learning.

☐ Limitations

- ❖ <u>High dropout rate</u> due to lack of interaction among Trainer and Trainee.
- ❖ Sometimes less effective due to inappropriate learning contents.
- ❖ It <u>requires prior knowledge of Computer</u> and other Technologies.

Impact of ICT on the Society

☐ **Social Impact:**

The Internet and ICT enabled services are playing very important role in modern lives. Some social impacts are-

1. ICT facilitated us fast, secure, reliable and economical communication services like Internet, e-mail etc.
2. It is helpful in minimizing corruption in the society.
3. ICT increases participation of people in planning and decision making activities of Government.
4. ICT is connecting people on the globe and facilitating various global services in education, cultural , social and political field.

☐ **Economic Impact:**

The modern ICT practices are helpful in Economic growth of the people and development of the country.

1. ICT has opened a new and global area of employment and personal growth.
2. The ICT offers global market for manufacturer and consumer with fast and reliable services.