SECTION-I

1) Explain the concept of e-governance and its models.

Ans: Electronic governance or e-governance is the application of information and communication technology (ICT) for delivering government services, exchange of information, communication transactions, integration of various stand-alone systems and services between government-to-citizen (G2C), government-to-business (G2B), government-to-government (G2G), government-to-employees (G2E) as well as back-office processes and interactions within the entire government framework. Through e-governance, government services are made available to citizens in a convenient, efficient, and transparent manner. The three main target groups that can be distinguished in governance concepts are government, citizens, and businesses/interest groups. In e-governance, there are no distinct boundaries.

Models e-governance are -

- The Broadcasting Model
- The Critical Flow Model
- The Comparative Analysis Model
- The E-Advocacy/Mobilisation and Lobbying Model
- The Interactive-Service Model

The Broadcasting Model

The model is based on dissemination/broadcasting of useful governance information, which is in the public domain into the wider public domain with ICT and convergent media. The strength of the model rests upon the fact that a more informed citizenry is better able to judge the functioning of existing governance mechanisms and make an informed opinion about them. Consequently, they become more empowered to exercise their rights and responsibilities. Widespread application of this model corrects ‘information failure situations’ by providing people with the relevant information relating to the governance sphere to make informed opinion and impact governance processes further. The use of ICT opens an alternative channel for people to access information as well as validate existing information from different sources.

The Critical Flow Model

The model is based on disseminating/channelling information of critical value to the targeted audience or into the wider public domain with ICT and convergent media. The strength of this model is that ICT makes the concept of ‘distance’ and ‘time’ redundant when information is hosted on a digital network, and this could be used advantageously by instantly transferring the critical information to its strategic user group located anywhere or by making it freely available in the wider public domain.

The Comparative Analysis Model

This model is highly significant for developing countries and can be used for empowering people. Essentially, the best practices in the areas of governance are assimilated continuously by this model and then uses them as benchmarks to evaluate other governance practices. It then uses the result to advocate positive changes or to influence ‘public’ opinion on these governance practices. The comparison could be made over a timescale to get a snapshot of the past and present situation or could be used to compare the effectiveness of an intervention by comparing two similar situations. The strength of this model lie in the infinite capacity of digital networks to store varied information and retrieve and transmit it instantly across all geographical and hierarchical barriers.

The E-Advocacy/Mobilisation and Lobbying Model

This model builds the momentum of real-world processes by adding the opinions and concerns expressed by virtual communities. This model helps the global civil society to impact on global decision-making processes. It is based on setting up a planned, directed flow of information to build strong virtual allies to complement actions in the real world. Virtual communities are formed which share similar values and concerns and these communities in turn link up with or support virtual groups aimed at concerted action.

Hence, it creates a diversity of virtual community and the ideas, expertise and resources are accumulated through this virtual form of networking. In addition, it is able to mobilise and leverage human resources and information beyond geographical, institutional and bureaucratic barriers and use it for concerted action.

The Interactive-Service Model

It opens avenues for direct participation of individuals in governance processes and brings in greater objectivity and transparency in decision-making processes through ICT. Fundamentally, ICT has the potential to bring in every individual in a digital network and enable interactive (two-way) flows of information among them.

Under this model, the various services offered by the Government become directly available to its citizens in an interactive manner. It does so as an interactive Government to Consumer to Government (G2C2G) channel is opened up in various aspects of governance, such as election of government officials (e-bal lots); redressing online of specific grievances; sharing of concerns and providing expertise; opinion polls on various issues; etc.

After our discussion about the models of e-governance, we now focus on the legal and policy framework for the implementation of ICT and e-governance in the country.

2) Discuss computer hardware and computer software.

Ans: Computer Hardware

The hardware of a computer consists of the physical components that make processing data possible. The central processing unit, or CPU, contains data registers that work in conjunction with the cache to perform calculations at speeds of several billion clock cycles per second. The CPU also works in tandem with the random access memory, or RAM, to process all the data needed to run applications.

Depending on the speed of the RAM and bus of the motherboard, loading applications into memory can take a few seconds to more than a minute. During this time, applications typically display a splash screen to indicate that program information is being loaded into memory.