

Introduction to Computer Networks

This course is mainly for the undergraduate students and this course is useful for the students who are preparing for their gate exams. This course can be a prerequisite course to CCNE international certification course. Each layer is addressed separately as a separate chapters and it is dealt in a very detailed manner. Security is very important not only in real life even for computer networks too and the last phase of the computer network will cover the need for security and how security is provided in computer networks. A computer network is a set of nodes connected by communication links. A computer is a node because a computer can send data as well as receive data. A node can be a computer printer or any other device capable of sending or receiving data. Many devices like switches bridges and routers are also called as nodes. A computer network is mainly used for research and resource sharing say there are lots of nodes involved in this internet cloud. Internet contains lots of intermediary devices these are all intermediary devices and these role end devices why we call this as in device because this will be either the starting point of the communication or the end point in the communication say for example if this computer wants to access www.eso.org. It is a set of nodes connected by communication links where that link can be a wired link or a wireless link. The devices which are the source or the destination in the communication are called as **N devices** the devices which forwards the data from one side to another side are called **N devices**.