Faculty in-charge	Dr. Geetha.V and Ms.Thanmayee		
Course Code:	IT200	**Course Name:**	Computer Communication and Networking
Core/Elective/MLC:	Core	**L-T-P:**	(4-0-0) 4
Pre-requisites:		**Contact Hours:**	4 per week - Lecture
Type of course: (Lecture/Tutorial/Seminar/Project)	Lecture	**Course Assessment Methods:** (both continuous and semester-end assessment)	**Theory: (100%)** 25% Test, Quiz/Assignment 25% Midsem Exam 50% Endsem Exam

Course Description:

This course introduces the concepts of data communication and Computer networks. It mainly focuses on theory and design aspects of data communication and computer network and performance issues. In data communication, the focus is on the concept of modulation and demodulation techniques for analog and digital signals and bit and burst error detection and correction techniques

Objectives:
The main objective of the course is to learn the protocols of computer network. Focus is given on the concept of networking and performance comparison.
After completion of the course the students will be able to
- Identify basic protocols of Computer network
- Compare protocols for performance analysis
- Explain the working of existing protocols in network layers.
- Explain the working of modulation and demodulation techniques, encoding, flow control and error handling.

Aim: On completing this course the students should have acquired the following Capabilities:
CO1. To explain the functionality of each layer in the OSI and TCP/IP network model.
CO2. To know the working of the application layer and design and develop small applications
CO3. To explain the concept of TCP and UDP, congestion control in Transport layer
CO4. To explain the concepts of IP addressing and designing and solving issues related to routing in Network layer
CO5. To explain and solve problems related data communication: Modulation/demodulation, encoding, framing, flow control and error handling in physical and MAC layer.

Course Plan
Theory:

Week	Topics to be covered
1	Introduction to computer networks, Network architecture - Layering and Protocols, OSI architecture, TCP/IP architecture, Performance
2	Application layer Protocols - Email, WWW, DNS, SNMP, Multimedia
3	Transport layer -Protocols (UDP,TCP) Congestion control and resource allocation