Program	Bachelor of Engineering (B.E.)	**Semester - 5**
Type of Course	-	
Prerequisite	-	
Course Objective	-	

Teaching Scheme (Contact Hours)				Examination Scheme				
Lecture	**Tutorial**	**Practical**	**Credit**	**Theory Marks**		**Practical Marks**		**Total Marks**
				External Marks	**Internal Marks**	**External Marks**	**Internal Marks**	
4	0	2	5	70	-	30	-	150

SEE - Semester End Examination, *CIA* - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc.)

Course Content

T - Teaching Hours | **W** - Weightage

Sr.	Topics	T	W
1	**Introduction to Computer Networks and Internet**		
	Understanding of network and Internet, The network edge, The network core, Understanding of Delay, Loss and Throughput in the packet-switching network, protocols layers and their service model, History of the computer network.		
2	**Application Layer**		
	Principles of computer applications, Web and HTTP, E-mail, DNS, Socket programming with TCP and UDP.		
3	**Transport Layer**		
	Introduction and transport layer services, Multiplexing and Demultiplexing, Connection less transport (UDP), Principles of reliable data transfer, Connection oriented transport (TCP), Congestion control.		
4	**Network Layer**		
	Introduction, Virtual and Datagram networks, study of router, IP protocol and addressing in the Internet, Routing algorithms, Broadcast and Multicast routing.		
5	**The Link Layer and Local Area Networks**		
	Introduction and link layer services, error-detection and correction techniques, Multiple access protocols, addressing, Ethernet, Switches, VLAN.		
	Total		

List of Practical