

Teaching Plan

Name of the Faculty : Ashutosh Singh
 Name of the Course : B.Sc. Mathematical Science
 Semester : VI
 Title of the Paper : Computer Networks

Month	Topics Covered	References
March	Introduction to data communications and networking, use of Computer Networks, classification of networks, OSI model, function of the layers, TCP/IP Protocol suite	Tanenbaum, A.S.&Wetherall, D.J.(2011) Computer Networks (5 th edition), Pearson Publication
	Bus, star, ring, mesh, tree, and hybrid topologies with their features, advantages and disadvantages of each type. Transmission Modes: simplex, half-duplex and full duplex	Forouzan, B. A. (2017). Data Communications and Networking (5 th edition). McGraw Hill
	Guided Media (Wired) (Twisted pair, Coaxial Cable, Fiber Optics). Unguided Media (Radio Waves, Infrared, Microwave, and Satellite).	Tanenbaum, A.S.&Wetherall, D.J.(2011) Computer Networks (5 th edition), Pearson Publication
April	Framing, Flow control, Error control	Tanenbaum, A.S.&Wetherall, D.J.(2011) Computer Networks (5 th edition), Pearson Publication
	Circuit switching, packet switching message switching, Routing, Repeaters, switches, bridges, gateways, Hubs, Routers, Multiplexing:(FDM, WDM, TDM)	Forouzan, B. A. (2017). Data Communications and Networking (5 th edition). McGraw Hill
	Internet Service Providers (ISP), Application layer protocols:(DNS, URL, WWW, FTP, SMTP, HTTP, TELNET), web pages, introduction to HTML	Comer,D. E.(2015). Computer Networks and Internet (6 th edition). Pearson Publication.
	Internet addressing system: IP address with their classification and notation	Forouzan, B. A. (2017). Data Communications and Networking (5 th edition). McGraw Hill

References

1. Comer,D. E.(2015). Computer NetworksandInternet(6thedition). Pearson Publication.
2. Forouzan, B. A.(2017).Data Communications andNetworking(5thedition). McGraw Hill
3. Tanenbaum,A.S.&Wetherall, D.J.(2011) Computer Networks (5th edition), Pearson Publication