

## Teaching Plan

Name of the Faculty : Indu Dohare  
 Name of the Course : B.Sc. Physical Science  
 Semester : VI  
 Title of the Paper : Computer Networks

Month	Topics Covered	References
February	Introduction to data communications and networking, use of Computer Networks, classification of networks, OSI model, function of the layers, TCP/IP Protocolsuite	Tanenbaum, A.S.&Wetherall, D.J.(2011) Computer Networks (5 <sup>th</sup> edition), Pearson Publication
March	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 <sup>th</sup> 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 <sup>th</sup> edition), Pearson Publication
April	Framing, Flow control, Error control	Tanenbaum, A.S.&Wetherall, D.J.(2011) Computer Networks (5 <sup>th</sup> 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 <sup>th</sup> 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 <sup>th</sup> edition). Pearson Publication.
	Internet addressing system: IP address with their classification and notation	Forouzan, B. A. (2017). Data Communications and Networking (5 <sup>th</sup> 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 (5<sup>th</sup> edition), Pearson Publication