

Bhoj Reddy Engineering College for Women: Hyderabad
Department of Electronics and Communication Engineering
Lesson plan of faculty member for the academic year 2020–21

Class: IV B Tech
Subject: Computer Networks

Branch-Section: ECE-B

Semester: I
Lectures per week: 3

Lecture Number	Topics to be covered	Date (s)
UNIT -I: Introduction to Networks		
1.	Internet, Protocols and Standards	2 September 2020
2.	OSI Model, Layers in OSI Model, TCP/IP Suite	4 September 2020
3.	TCP/IP Suite, Addressing	7 September 2020
4.	Physical Layer: Multiplexing, Transmission Media	9 September 2020
5.	Circuit Switched Networks	11 September 2020
6.	Circuit Switched Networks	14 September 2020
7.	Datagram Networks	16 September 2020
8.	Virtual Circuit Networks	18 September 2020
Unit -II: Data Link Layer		
9.	Introduction, Checksum, Framing	21 September 2020
10.	Flow and Error Control	23 September 2020
11.	Noiseless Channels- Simplest, Stop-and Wait Protocol	25 September 2020
12.	Noisy Channels- Stop-and-Wait ARQ	28 September 2020
13.	Go-Back-N ARQ Protocol	30 September 2020
14.	Selective Repeat ARQ Protocol	5 October 2020
15.	Random Access	7 October 2020
16.	Controlled Access	9 October 2020
17.	Channelization	12 October 2020
18.	IEEE Standards	14 October 2020
19.	Giga-Bit Ethernet, Wireless LANs	16 October 2020
20.	SONET-SDH	19 October 2020
21.	Frame Relay and ATM	21 October 2020
Unit-III : Network Layer		
22.	Logical Addressing	23 October 2020
23.	Internetworking, Tunneling	26 October 2020
24.	Address Mapping	28 October 2020
25.	ICMP, IGMP	2 November 2020
26.	Forwarding, Routing-Flooding	4 November 2020
27.	Bellman & Ford	6 November 2020
28.	Dijkstra's routing protocols	9 November 2020
29.	Dijkstra's routing protocols	11 November 2020
30.	RIP, OSPF	13 November 2020
31.	BGP and Multicast Routing Protocols	16 November 2020
32.	Connecting Devices-Passive Hubs	18 November 2020
33.	Repeaters, Active Hubs	20 November 2020
34.	Active Hubs	23 November 2020
35.	Bridges, Routers	25 November 2020
36.	Revision Unit II	27 November 2020
37.	Revision Unit III	2 December 2020

Lecture Number	Topics to be covered	Date (s)
Unit-IV : Transport Layer		
38.	Process to process Delivery,UDP	4 December 2020
39.	TCP and SCTP Protocols	7 December 2020
40.	SCTP Protocols	9 December 2020
41.	Congestion Control,Quality of Service	11 December 2020
42.	Application Layer-Domain Name Space	14 December 2020
43.	DNS in Internet,Electronic Mail, File Transfer Protocol	16 December 2020
44.	WWW,HTTP,SNMP,Multi-Media	18 December 2020
Unit-V: Network Security		
45.	Security Services Mechanisms and attacks, IPSec	21 December 2020
46.	IPSec, ISSL, VPN, Zigbee	23 December 2020
47.	Firewall, Bluetooth,IPv4,IPv6	28 December 2020
48.	Revision Unit IV,V	30 December 2020

TEXTBOOKS

- Data Communications and Networking — Behrouz A. Forouzan, Fifth Edition TMH, 2013.
- Computer Networks — Andrew S Tanenbaum, 4th Edition, Pearson Education.
- Computer Networking: A Top-Down Approach Featuring the Internet, James F.Kurose,K.W.Ross,3rd Edition, Pearson Education

REFERENCE BOOKS

- An Engineering Approach to Computer Networks-S.Keshav, 2nd Edition, Pearson Education.
- Data Communications and Networks by William Stallings,Pearson Edu. 10th Edition.
- Understanding communications and Networks, 3rd Edition, W.A.Shay, Cengage Learning.
- Data Communications and Networks-Bhusan Trivedi,Oxford University press 2016.

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