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

Class: III B Tech   Branch – Section: IT- A   Semester: I
Subject: Data Communication and Computer Networks   Lectures per week: 4

Lecture Number	Topics to be covered	Date (s)
UNIT I: Data Communications		
1	Introduction	01 September 2020
2	Components, Direction of flow	02 September 2020
3	Networks Components and Categories Internet	03 September 2020
4	Types of connections	04 September 2020
5	Topologies	08 September 2020
6	Protocols and Standards, ISO/OSI Model	09 September 2020
7	Example Networks such as ATM,	10 September 2020
8	Frame Relay Multiplexing	11 September 2020
9	ISDN Physical layer	15 September 2020
10	Transmission modes,	16 September 2020
11	Transmission Media	17 September 2020
12	Switching, Circuit Switched Networks	18 September 2020
13	Datagram Networks Virtual Circuit Networks	22 September 2020
UNIT II: Data Link Layer		
14	Introduction	23 September 2020
15	Framing and Error Detection, Error Correction	24 September 2020
16	Parity LRC	25 September 2020
17	CRC, Hamming code	29 September 2020
18	Flow and Error Control , Noiseless Channels	30 September 2020
19	Noisy Channels	01 October 2020
20	HDLC Protocol	06 October 2020
21	Point to Point Protocols	07 October 2020
22	Medium Access Sub layer, ALOHA, CSMA/CD	08 October 2020
23	LAN- Ethernet IEEE 802.3, IEEE 802.5	09 October 2020
24	IEEE 802.11	13 October 2020
25	Random Access, Controlled access and Channelization	14 October 2020
UNIT III: Network Layer		
26	Introduction	15 October 2020
27	Logical Addressing	16 October 2020
28	Physical Addressing, Address mapping	27 October 2020
29	ICMP Message format, Types of messages	28 October 2020
30	IGMP Introduction	29 October 2020
31	IGMP Messages	10 November 2020
32	IGMP Message Format	11 November 2020
33	Tunneling	12 November 2020
34	Routing Table	17 November 2020
35	Uni-Cast Routing Protocols	18 November 2020
36	Multi- Casting Protocols	19 November 2020
UNIT IV: Transport Layer		
37	Introduction, Process to Process Delivery	20 November 2020
38	UDP Protocol and	24 November 2020

39	TCP protocols	25 November 2020
40	Data Traffic Congestion	26 November 2020
41	Congestion Control	27 November 2020
42	Quality of Service, Integrated Services	01 December 2020
43	Diffrentiated Services	02 December 2020
44	Qos in Switched Networks	03 December 2020
45	Qos in Frame Relay and ATM	04 December 2020
UNIT V: Application Layer		
46	Introduction	08 December 2020
47	Domain Name Space	09 December 2020
48	DNS in internet	10 December 2020
49	Electronic mail	11 December 2020
50	SMTP	15 December 2020
51	Message Access Agent	16 December 2020
52	Web Documents	17 December 2020
53	HTTP Protocol	18 December 2020
54	Proxy Server	22 December 2020
55	SNMP Protocol	23 December 2020
56	Management Information Base	24 December 2020
57	UDP Ports	39 December 2020
58	File Transfer Protocol	30 December 2020
59	Revision	31 December 2020

Text books:

1. Data Communications and Networking, Behrouz A. Forouzan, Fourth Edition TMH, 2006.

2. Computer Networks, Andrew S Tanenbaum, 4th Edition. Pearson Education, PHI.

References:

1. Data communications and Computer Networks, P.C Gupta, PHI.

2. An Engineering Approach to Computer Networks, S. Keshav, 2nd Edition, Pearson Education.

3. Understanding communications and Networks, 3rd Edition, W.A. Shay, Cengage Learning.

4. Computer Networking: A Top-Down Approach Featuring the Internet. James F. Kurose &   Keith, third edition, Pearson Education.

5. Data and Computer Communication, William Stallings, Sixth Edition, Pearson Education,   2000.

Name and signature of the faculty: C Murugamani

Name and signature of Head of the Department: C Murugamani