

LESSON PLAN

Name of the faculty: Sonia Lalita Tirkey

Session: 2020-2021

Discipline: Electronics & Telecommunication

Semester: 4th

Subject: Data Communication & Computer Network

No. of weeks: 17

No. of periods per week: 4

Week	Class	Topic	Remarks
1 st week 20/04/21 to 24/04/21	1 st	Chapter-1 Introduction to data communication, components and data representation	21/04/21 (holiday)
	2 nd	Network, types of connection and physical topology	
	3 rd	LAN, MAN and WAN	
	4 th	OSI model	
2 nd week 26/04/21 to 1/05/21	1 st	OSI model	
	2 nd	Protocols, network standards	
	3 rd	TCP/IP protocol suite	
	4 th	TCP/IP protocol suite	
3 rd week 03/05/21 to 08/05/21	1 st	Chapter-2 Data transmission terminology	
	2 nd	Representation of data	
	3 rd	Analog & digital transmission	
	4 th	Transmission impairment	
4 th week 10/05/21 to 15/05/21	1 st	Channel capacity	14/05/21 (holiday)
	2 nd	Transmission media-twisted pair and coaxial cable	
	3 rd	Transmission media-optical fiber, wireless transmission	
	4 th	Transmission media- terrestrial microwave, satellite microwave	
5 th week 17/05/21 to 22/05/21	1 st	Chapter-3 Data encoding, digital data digital signals	
	2 nd	Digital data digital signals (NRZ, RZ)	
	3 rd	Digital data digital signals (bipolar-AMI, Manchester)	
	4 th	Digital data digital signals (B8ZS, HDB3)	
6 th week 24/05/21 to 29/05/21	1 st	Digital data analog signal (ASK, FSK, PSK)	
	2 nd	Analog data digital signals (PCM)	
	3 rd	Analog data digital signals (DM)	
	4 th	Analog data analog signals (AM, FM, PM)	
7 th week 31/05/21 to 05/06/21	1 st	Chapter-4 Asynchronous and synchronous transmission	
	2 nd	Error detection	
	3 rd	Error detection	
	4 th	Flow control	
8 th week 07/06/21 to 12/06/21	1 st	Error control- Stop and wait ARQ, Go back N ARQ	
	2 nd	Selective-reject ARQ, multiplexing	
	3 rd	WDM, TDM	
	4 th	Framing, pulse stuffing, statistical TDM	
9 th week	1 st	Chapter-5	15/06/21 (holiday)

14/06/21 to 19/06/21		Introduction to switching, circuit switching	
	2 nd	Circuit switching	
	3 rd	Packet switching	
	4 th	Virtual circuit switching	
10 th week 21/06/21 to 26/06/21	1 st	X.25	
	2 nd	Routing in packet switching	
	3 rd	Network information source & update timing, Routing strategies	
	4 th	Congestion, effect of congestion	
11 th week 28/06/21 to 03/07/21	1 st	Congestion control	
	2 nd	Traffic management	
	3 rd	Chapter-6 LAN topology	
	4 th	LAN transmission media, LAN protocol architecture	
12 th week 05/07/21 to 10/07/21	1 st	Logical link control	
	2 nd	Medium access control, bridge	
	3 rd	Bridge protocol architecture, hub	
	4 th	Layer 2 & layer 3 switches	
13 th week 12/07/21 to 17/07/21	1 st	Ethernet	12/07/21 (holiday)
	2 nd	CSMA technique	
	3 rd	Fiber channel	
	4 th	Internal assessment	
14 th week 19/07/21 to 24/07/21	1 st	Wireless LAN technology	21/07/21 (holiday)
	2 nd	Chapter-7 TCP/IP protocol suite	
	3 rd	Basic protocol functions	
	4 th	Basic protocol functions	
15 th week 26/07/21 to 31/07/21	1 st	Principle of internetworking	
	2 nd	Principle of internetworking	
	3 rd	Internet protocol	
	4 th	IP address	
16 th week 02/08/21 to 07/08/21	1 st	IP address	
	2 nd	MCQ on unit-1	
	3 rd	MCQ on unit-2	
	4 th	Discussion of MCQ	
17 th week 09/08/21 to 14/08/21	1 st	MCQ on unit-3,4	
	2 nd	MCQ on unit-5,6	
	3 rd	MCQ on unit-7	
	4 th	Discussion of MCQ	