



Lesson Plan for DCCN(Th-2) session 2022-23-(S)
Department of Electronics and Telecommunication Engg.
Government Polytechnic Balasore

Discipline: E&TC	Semester: 4th	Name of the Faculty: Er. Swagatika Malik
Subject: Data Comm. & Comp. N/W. Code: TH-2	No of Days/per week class allotted: 4 P/W	Semester from date: 14/02/2023 To Date: 23/05/2023 No of weeks: 15
WEEK	PERIOD	TOPIC
1 st	1 st	1. Network & Protocol: 1.1 Define Data Communication and its components. 1.2 Define Data flow modes.
	2 nd	1.3 Define Networks and its criteria.
	3 rd	1.4 Explain Network topologies.
	4 th	1.5 Explain Network topologies.
2 nd	1 st	1.6 Explain types of networks.
	2 nd	1.6 Explain types of networks.
	3 rd	1.7 Explain network standards
	4 th	1.8 Define protocol and its architecture
3 rd	1 st	1.8 Define protocol and its architecture
	2 nd	1.9 Explain Network Models OSI and TCP/IP protocol suite
	3 rd	1.9.1 Physical Layer and Data link Layer
	4 th	1.9.2 Network Layer and Transport layer
4 th	1 st	1.9.3 Application Layer
	2 nd	2. Data Transmission and Media:
	3 rd	2.1 Explain Data transmission concepts and terminology.
	4 th	2.2.1 Explain Analog transmission and digital transmission.
5 th	1 st	2.2.2 Explain Analog transmission and digital transmission.
	2 nd	3. Data Encoding:
	3 rd	3.1 Define Data encoding.
	4 th	3.2.1 Explain Digital data digital signals.
6 th	1 st	3.2.2 Explain Digital data digital signals.
	2 nd	3.3.1 Explain Digital data analog signals.
	3 rd	3.3.2 Explain Digital data analog signals.
	4 th	3.4.1 Explain Analog data digital signals.
7 th	1 st	3.4.2 Explain Analog data digital signals.
	2 nd	3.5.1 Explain Analog data analog signals.
	3 rd	3.5.2 Explain Analog data analog signals.
	4 th	4. Data Communication and Data link control
8 th	1 st	4.1.1 Explain briefly Asynchronous and synchronous Transmission.
	2 nd	4.1.2 Explain briefly Asynchronous and synchronous Transmission.

	3 rd	4.2.1 Explain briefly Error Detection.
	4 th	4.2.2 Explain briefly Error Detection.
9 th	1 st	4.3 Line configuration.
	2 nd	4.4 Flow Control.
	3 rd	4.5 Error Control.
	4 th	4.6 Multiplexing
10 th	1 st	4.7 FDM synchronous TDM
	2 nd	4.8 Statistical TDM
	3 rd	5. Switching & Routing
	4 th	5.1 Explain the Features of circuit switching
11 th	1 st	5.2 Packet switching, Data gram approach
	2 nd	5.3 Explain X.25 protocol.
	3 rd	5.4 Explain the features of Routing in packet switching.
	4 th	5.5.1 Explain Congestion briefly
12 th	1 st	5.5.2 Effects of congestion, congestion control.
	2 nd	5.6 Traffic Management.
	3 rd	5.7 Congestion control in Packet Switching Network.
	4 th	6. LAN Technology:
13 th	1 st	6.1 Topology and Transmission Media.
	2 nd	6.2 Describe briefly LAN protocol architecture
	3 rd	6.3 Explain the Medium Access Control.
	4 th	6.4 Explain the following terms – Hub, Bridge, Switch.
14 th	1 st	6.5 Explain Ethernet (CSMA/CD), Fiber Channel.
	2 nd	6.6 Describe Wireless LAN Technology.
	3 rd	7. TCP/IP:
	4 th	7.1 Explain briefly TCP/IP Protocol Suite.
15 th	1 st	7.2 Explain Basic Protocol functions.
	2 nd	7.3 Explain Principles of Internetworking.
	3 rd	7.4 Explain Internet Protocol operations.
	4 th	7.5 Explain the Internet Protocol.

Smalin
13/02/2023
Lecturer (IT)

24/2/23