

# PSIET, KARANDA, DHENKANAL

## LESSON PLAN Session(2022-2023)

<b>Discipline:</b> Electronics & Telecommunication Engineering	<b>Semester:</b> 4 <sup>th</sup> , S/2023	<b>Name of the faculty:</b> Somyashree Samal Lecturer
<b>Subject:</b> Data Communication & Computer Network, (Th.2)	<b>No. of Days/week:</b> 04	<b>StartDate:</b> 15/02/2023 <b>EndDate:</b> 23/05/2023

Week	Class Day	Theory Topics
1 <sup>st</sup>	1 <sup>st</sup>	<b>1. Introduction to Network &amp; Protocol</b>
	2 <sup>nd</sup>	Data Communication
	3 <sup>rd</sup>	Networks
	4 <sup>th</sup>	Protocol & Architecture, Standards
2 <sup>nd</sup>	1 <sup>st</sup>	OSI model
	2 <sup>nd</sup>	TCP/IP
	3 <sup>rd</sup>	<b>2. Introduction to Data Transmission &amp; Media</b>
	4 <sup>th</sup>	Data transmission Concepts and Terminology
3 <sup>rd</sup>	1 <sup>st</sup>	Analog and Digital Data transmission
	2 <sup>nd</sup>	Transmission impairments, Channel capacity
	3 <sup>rd</sup>	Transmission media
	4 <sup>th</sup>	Guided Transmission
4 <sup>th</sup>	1 <sup>st</sup>	Wireless Transmission
	2 <sup>nd</sup>	Revision
	3 <sup>rd</sup>	<b>3. Introduction to Data Encoding</b>
5 <sup>th</sup>	4 <sup>th</sup>	Data encoding,
	1 <sup>st</sup>	Digital data and digital signals,
	2 <sup>nd</sup>	Digital data and analog signals
	3 <sup>rd</sup>	Analog data and digital signals
6 <sup>th</sup>	4 <sup>th</sup>	Analog data and analog signals
	1 <sup>st</sup>	Quiz-1
	2 <sup>nd</sup>	<b>4. Introduction to Data Communication &amp; Data Link Control</b>
	3 <sup>rd</sup>	Asynchronous and Synchronous Transmission
7 <sup>th</sup>	4 <sup>th</sup>	Error Detection
	1 <sup>st</sup>	Line configuration
	2 <sup>nd</sup>	Flow Control
	3 <sup>rd</sup>	Error Control
8 <sup>th</sup>	4 <sup>th</sup>	Discussion about control system
	1 <sup>st</sup>	Multiplexing

	2 <sup>nd</sup>	Continuing Multiplexing
	3 <sup>rd</sup>	FDM synchronous TDM
	4 <sup>th</sup>	Continuing FDM synchronous TDM
9 <sup>th</sup>	1 <sup>st</sup>	Statistical TDM
	2 <sup>nd</sup>	Revision
	3 <sup>rd</sup>	<b>5. Introduction to Switching &amp; Routing</b>
	4 <sup>th</sup>	Circuit Switching networks
10 <sup>th</sup>	1 <sup>st</sup>	Packet Switching principles
	2 <sup>nd</sup>	X.25
	3 <sup>rd</sup>	Routing in Packet switching
	4 <sup>th</sup>	Congestion
11 <sup>th</sup>	1 <sup>st</sup>	Effects of congestion
	2 <sup>nd</sup>	congestion control
	3 <sup>rd</sup>	Traffic Management
	4 <sup>th</sup>	Congestion Control in Packet Switching Network.
12 <sup>th</sup>	1 <sup>st</sup>	Revision
	2 <sup>nd</sup>	<b>6. Introduction to LAN Technology</b>
	3 <sup>rd</sup>	Topology and Transmission Media
	4 <sup>th</sup>	LAN protocol architecture
13 <sup>th</sup>	1 <sup>st</sup>	Medium Access control
	2 <sup>nd</sup>	Bridges, Hub, Switch
	3 <sup>rd</sup>	Ethernet (CSMA/CD), Fiber Channel
	4 <sup>th</sup>	Wireless LAN Technology.
14 <sup>th</sup>	1 <sup>st</sup>	Revision
	2 <sup>nd</sup>	Quiz-2
	3 <sup>rd</sup>	<b>7. Introduction to TCP/IP</b>
	4 <sup>th</sup>	TCP/IP Protocol Suite
15 <sup>th</sup>	1 <sup>st</sup>	Basic Protocol functions
	2 <sup>nd</sup>	Principles of Internet networking
	3 <sup>rd</sup>	Internet Protocol operations
	4 <sup>th</sup>	Internet Protocol

*Soumyashree Samal*  
Signature of the faculty

*[Signature]*  
15/12/23  
Signature of the Principal