

**GOVERNMENT POLYTECHNIC, SAMBALPUR, RENGALI**

**DEPARTMENT OF E&TC ENGINEERING**

**LESSON PLAN**

**SUBJECT- DATA COMMUNICATION & COMPUTER NETWORK (TH-2)  
SEMESTER-4<sup>th</sup>**

**NAME OF THE FACULTY- MS. LOPAMUDRA BHOI**

**TOTAL NO. OF PERIODS-60(4/W)**

<b>UNIT</b>	<b>DATE</b>	<b>PERIOD</b>	<b>TOPICS TO BE COVERED</b>
1	1 <sup>st</sup> week of May,2022		<b>Network&amp; Protocol</b>
		1	Data Communication
		2	Networks
		3	Protocol & Architecture, Standards, OSI, TCP/IP
		4	assignments
2	2 <sup>nd</sup> week of May,2022		<b>Data Transmission &amp; Media</b>
		1	Data transmission Concepts and Terminology
		2	Analog and Digital Data transmission
		3	Transmission impairments, Channel capacity
		4	Transmission media, Guided Transmission, Wireless Transmission
		5	Previous year questions discussion & assignments
3	3 <sup>rd</sup> week of May,2022		<b>Data Encoding</b>
		1	Data encoding
		2	Digital data digital signals
		3	Digital data analog signals
		4	Analog data digital signals
		5	Analog data analog signals
		6	Previous year questions discussion & assignments
4	4 <sup>th</sup> week of May,2022		<b>Data Communication &amp; Data link control</b>
		1	Asynchronous and Synchronous Transmission
		2	Error Detection
		3	Line configuration
		4	Flow Control
		5	Error Control
		6	Multiplexing
		7	FDM synchronous TDM
		8	Statistical TDM
		9	Previous year questions discussion & assignments
5	2 <sup>nd</sup> week of June,2022		<b>Switching &amp; Routing</b>
		1	Circuit Switching networks
		2	Packet Switching principles
		3	X.25
		4	Routing in Packet switching
		5	Congestion
		6	Effects of congestion ,congestion control
		7	Traffic Management
		8	Congestion Control in Packet Switching Network
		9	Previous year questions discussion & assignments
6	3 <sup>rd</sup> week of June,2022		<b>LAN Technology</b>
		1	Topology and Transmission Media
		2	LAN protocol architecture
		3	Medium Access control
		4	Bridges, Hub, Switch

		5	Ethernet (CSMA/CD), Fiber Channel
		6	Wireless LAN Technology
		7	Previous year questions discussion & assignments
7	4 <sup>th</sup> week of June,2022		<b>TCP/IP</b>
		1	TCP/IP Protocol Suite
		2	Basic Protocol functions
		3	Principles of Internetworking
		4	Internet Protocol operations
		5	Internet Protocol
		6	Previous year questions discussion & assignments