## KIIT POLYTECHNIC, BHUBANESWAR

## LESSON PLAN Session (2023-2024)

<b>Discipline:</b> : Computer	Semester: 4 <sup>th</sup> ,	Name of the faculty: Laxmipriya Samantaray
Science & Engineering	S/2024	Email: laxmipriyasamantarayfcs@kp.kiit.ac.in
Subject: Data	No. of	<b>Start Date:</b> 16/01/2024
Communication &	Days/week:	<b>End Date:</b> 26/04/2024
Computer Network,	04	
Theory-2		

Week	Class Day	Theory Topics	
1st	1 <sup>st</sup>	1. Introduction to Network & Protocol	
	2 <sup>nd</sup>	Data Communication	
	3 <sup>rd</sup>	Networks	
	4 <sup>th</sup>	Protocol & Architecture, Standards	
$2^{nd}$	1 <sup>st</sup>	OSI model	
	2 <sup>nd</sup>	TCP/IP	
	3 <sup>rd</sup>	2. Introduction to Data Transmission & Media	
	4 <sup>th</sup>	Data transmission Concepts and Terminology	
$3^{rd}$	1 <sup>st</sup>	Analog and Digital Data transmission	
	$2^{\rm nd}$	Transmission impairments, Channel capacity	
	3 <sup>rd</sup>	Transmission media	
	4 <sup>th</sup>	Guided Transmission	
$4^{th}$	1 <sup>st</sup>	Wireless Transmission	
	2 <sup>nd</sup>	Revision	
	3 <sup>rd</sup>	3. Introduction to Data Encoding	
	4 <sup>th</sup>	Data encoding,	
5 <sup>th</sup>	1 <sup>st</sup>	Digital data digital signals,	
	2 <sup>nd</sup>	Digital data analog signals	
	3 <sup>rd</sup>	Analog data digital signals	
	4 <sup>th</sup>	Analog data analog signals	
6 <sup>th</sup>	1 <sup>st</sup>	Quiz – 1	
	2 <sup>nd</sup>	4. Introduction to Data Communication & Data link control	
	3 <sup>rd</sup>	Asynchronous and Synchronous Transmission	
	4 <sup>th</sup>	Error Detection	
$7^{\mathrm{th}}$	1 <sup>st</sup>	Line configuration	
	2 <sup>nd</sup>	Flow Control	
	3 <sup>rd</sup>	Error Control	
	4 <sup>th</sup>	Discussion about control system	
8 <sup>th</sup>	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>	5. Introduction to Switching & Routing	
	$4^{th}$	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>	6. Introduction to LAN Technology	
	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>	7. Introduction to TCP/IP	
	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 Internetworking	
	3 <sup>rd</sup>	Internet Protocol operations	
	4 <sup>th</sup>	Internet Protocol	