

BLACK DIAMOND SCHOOL OF ENGINEERING, JHARSUGUDA

LESSON PLAN

Session (2023-2024)

Discipline: Computer Science and Engineering	Semester: 4 th , S-2024	Name of the faculty: JUGESH BESAN
Subject: Data Communication & Computer Network, Theory-2	No. of Days/week: 04	Start Date: 16/01/2024 End Date: 26/04/2024

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

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