

LESSON PLAN

SUB: COMPUTER NETWORKS lab
BRANCH:- COMPUTER SCIENCE& ENGG.
SEMESTER:4th
NAME OF FACULTY: SOUDAGAR JENA(GF)



GOVERNMENT POLYTECHNIC, BHADRAK

SESSION: 2025-26

[Signature]
18/11/25
Hod, CSE

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18/11/25
Academic Co-ordinator
Academic Co-ordinator

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Principal
Govt. Polytechnic, Bhadrak

DEPARTMENT OF Computer Science & Engg.,

Discipline: Computer Science and Engineering	Semester: 4 th , S/2025	Name of the faculty: SOUDAGAR JENARAJ Email: jenasoudagar@gmail.com
Subject: Computer Network lab	No. of Days/week: 03	StartDate: 22.12.2025 EndDate: 18.04.2025

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

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Signature of Faculty