LESSON PLAN

SUB: CLOUD COMPUTING
BRANCH:- COMPUTER SCIENCE& ENGG.
SEMESTER:6th
NAME OF FACULTY: ABHISHEK PADHI (GF in CSE)

GOVERNMENT POLYTECHNIC, BHADRAK

SESSION: 2025-26

18.12.25
Hod ,CSE

18.12.25
Academic Co-ordinator
Academic Co-ordinator

Principal
Govt. Polytechnic, Bhadrak

DEPARTMENT OF Computer Science & Engg,,

Discipline: Computer Science & Engineering	Semester: 6th, Summer/2025	Name of the Teaching Faculty: ABHISHEK PADHI Lecturer Email ID: abhishekpadhi24@gmail.com
Subject: Cloud Computing Theory- 03	No. Of Days / Week :04	StartDate:22.12.2025 EndDate:18.04.2026

Week	Class Day	Theory Topics
1st	1st	Historical development
	2nd	Vision of Cloud Computing
	3rd	Characteristics of Cloud computing, Cloud computing reference model
	4th	Cloud computing environment, Cloud service requirements, Cloud infrastructure, application
2nd	1st	Introduction Cloud Reference Model
	2nd	Types of Clouds
	3rd	Cloud Interoperability and standards Cloud computing Interoperability use cases
	4th	Role of standards in Cloud Computing environment
3rd	1st	Introduction Scalability and Fault Tolerance Cloud solutions Cloud Ecosystem
	2nd	Cloud Business process management Portability and Interoperability Cloud Service management
	3rd	Testing under Control Cloud Offerings
	4th	Cloud service Controls Virtual desktop Infrastructure
4th	1st	Create a virtualized Architecture. Data Centre Resilience Agility
	2nd	Cisco Data Centre Network architecture
	3rd	Storage Provisioning Asset Management Concept of Map Reduce Cloud Governance
	4th	Load Balancing High Availability Disaster Recovery
5th	1st	Virtualisation Benefits

	2nd	Desktop and Application Virtualisation Network Virtualisation
	3rd	Local desktop Virtualisation Desktop as a service
	4th	Virtualization
6th	1st	Server Virtualisation
	2nd	Block and File level Storage Virtualisation
	3rd	Virtual Machine Monitor
	4th	Infrastructure Requirements
7th	1st	VLAN and VSAN
	2nd	Cloud Security Fundamentals
	3rd	Cloud security services
	4th	Cloud security services
8th	1st	Design Principles
	2nd	Secure Cloud software requirements
	3rd	Policy Implementation
	4th	Cloud Computing Security Challenges
9th	1st	Introduction to Cloud Computing Security Architecture
	2nd	Architectural Considerations
	3rd	Information Classification
	4th	Virtual Private Networks
10th	1st	Public Key and Encryption Key management
	2nd	Digital certificates
	3rd	Key management
	4th	Memory Cards
11th	1st	Implementing Identity Management
	2nd	Controls and Autonomic System
	3rd	Introduction to Market Based Management of Clouds
	4th	Cloud Information security vendors
12th	1st	Cloud Federation, characterization
	2nd	Cloud Federation stack
	3rd	Third Party Cloud service
	4th	Case study
13th	1st	Introduction to Hadoop
	2nd	Data Source
	3rd	Data Source
	4th	Data storage and Analysis
14th	1st	Comparison with other system

	2nd	Quiz Test
	3rd	Revision
	4th	Revision
15th	1st	ASSESSMENT
	2nd	ASSESSMENT
	3rd	Discussion of previous year question answer
	4th	Discussion of previous year question answer

Abhishek Padki
18/12/25.
Signature of Faculty: