SYNERGY SCHOOL OF ENGINEERING, DHENKANAL
DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

LESSON PLAN

Discipline: Computer Science& Engineering	**Semester:6th**	**Name of the Teaching Faculty : Smurti mayee Mishra**
		Subject Code: Th 3
Subject: Cloud Computing Theory-03	**No. Of Days/Week:04**	**StartDate:**04/02/2024 **End Date:** 17/05/2025

Week	Class Day	Theory Topics
1st	1st	**Unit-1:IntroductiontoCloudComputing** Historical development
	2nd	Vision of Cloud Computing
	3rd	Characteristics of Cloud computing
	4th	Characteristics of Cloud computing
2nd	1st	**Unit-2:CloudComputingArchitecture** 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	**Unit-3:Scalability and Fault Tolerance** 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	**Unit-4 Cloud Management and Virtualization Technology** Create a virtualized Architecture
	2nd	Data Centre Resilience Agility 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	**Unit–5:Virtualization** Virtualization Virtualization benefits
	2nd	Desktop and Application Virtualization Network Virtualization
	3rd	Local desktop Virtualization Desktop as a service
	4th	**Discussion of Question Answer**
6th	1st	Server Virtualization
	2nd	Block and File level Storage Virtualization
	3rd	Virtual Machine Monitor
	4th	Infrastructure Requirements
7th	1st	VLAN and VSAN
	2nd	**Unit-6:CloudSecurity** Cloud Security Fundamentals
	3rd	Cloud security services
	4th	Cloud security services
8th	1st	Design Principles
	2nd	Secure Clouds of software requirements
	3rd	Policy Implementation
	4th	Monthly Class Test-1
9th	1st	Cloud Computing Security Challenges
	2nd	**Discussion of Question Answer**
	3rd	**Unit 7:Cloud Computing Security Architecture**
	4th	Architectural consideration
10th	1st	Information Classification

	2nd	Virtual Private Networks
	3rd	Public key and Encryption Key management
	4th	Digital certificates
11th	1st	Key management
	2nd	Memory Cards
	3rd	Implementing Identity Management
	4th	Controls and Autonomic System
12th	1st	**Unit-8:MarketBasedManagementof Clouds**
	2nd	Cloud Information security vendors
	3rd	Cloud Federation, characterization
	4th	Cloud Federation stack
13th	1st	Third Party Cloud service
	2nd	Case study
	3rd	Discussion of Question Answer
	4th	Monthly Class Test-2
14th	1st	**Unit-9:Hadoop**
	2nd	Introduction
	3rd	Data Source
	4th	Data storage and Analysis
15th	1st	Comparison with other system
	2nd	**Revision**
	3rd	**Discussion of Question Answer**
	4th	**Quiz Test**

Prepared By:

Smishra
30/01/25

Verified By:

Smishra
30/01/25
(I.C. of HOD)