

**Academic**

Department : Information Technology	Semester : 6th
Week	Days
Subject: Cloud Computing	No.of days/per week class allotted . 4p/week.
Feb 3rd week	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
Feb 4th week	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
	4 <sup>th</sup>
Feb 5th week	1 <sup>st</sup>
	2 <sup>nd</sup>
March 1st week	1 <sup>st</sup>
	2 <sup>nd</sup>
March 2nd week	1 <sup>st</sup>
	2 <sup>nd</sup>
March 3rd week	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
	4 <sup>th</sup>
March 4th week	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
	4 <sup>th</sup>
March 5th week	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
April 2nd week	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
April 3rd week	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
	4 <sup>th</sup>
April 4th week	1 <sup>st</sup>

	2 <sup>nd</sup>
	3 <sup>rd</sup>
	4 <sup>th</sup>
May 1st week	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
	4 <sup>th</sup>
May 2nd week	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
	4 <sup>th</sup>
May 3rd week	1 <sup>st</sup>
	2 <sup>nd</sup>
	3 <sup>rd</sup>
	4 <sup>th</sup>
May 4th week	1 <sup>st</sup>
	2 <sup>nd</sup>

## **Lesson Plan of Summer 2023**

Name of the teaching faculty: Pranati Pattnaik
Theory
Semester from : 14th Feb 2023 to 23rd May 2023
No. of weeks:15 weeks
Topics to be covered:
Introduction To Cloud Computing ,Historical development
Characteristics of Cloud computing,Cloud computing Reference mode
Cloud computing environment, Cloud Service requirements, Cloud and Dynamic Infrastructure
Principles of security
Cloud Adoption,. Cloud applications
REVISION
Introduction to Cloud Computing Architecture
Cloud Reference Model,. Types of Clouds
Cloud Interoperability and standards.Cloud computing Interoperability use cases
Role of standards in Cloud Computing environment
REVISION
Introduction to Scalability and Fault Tolerance,Cloud solutions
Cloud Ecosystem,Cloud Business process management
Introduction to Scalability and Fault Tolerance,Cloud solutions
Cloud Offerings,Testing under Control,Data Centre,Resilience, Agility
Cloud service Controls,Virtual desktop Infrastructure
Cloud Management and Virtualisation Technology, Create a virtualised Architecture
Data Center,Resilience,Agility
Cisco Data Centre Network architecture,Storage
Provisioning,Asset Management,Concept of Map Reduce
Cloud Governance,Load Balancing,High Availability,Disaster Recovery
REVISION
Virtualisation, Network Virtualisation
Desktop as a service,. Local desktop Virtualisation,Desktop and Application Virtualisation
Virtualisation benefits,Server Virtualisation
Block and File level Storage Virtualisation
Virtual Machine Monitor,Infrastructure Requirements, VLAN and VSAN
REVISION
Cloud Security,Cloud Security Fundamentals
Cloud security services,Design Principles,Secure Cloud software requirements
Policy Implementation.. Cloud Computing Security Challenges
REVISION

Cloud Computing Security Architecture,Architectural Consideration
Information Classification,Virtual Private Networks
Digital certificates,Key management,Memory Cards
Implementing Identity Management
Public Key and Encryption Key management
Controls and Autonomic System
REVISION
Market Based Management of Clouds
Cloud Information security vendors
Cloud Federation, charactrization, Cloud Federation stack
Third Party Cloud service
Case study
Data Source
Data storage and Analysis
Comparison with other system
Revision & Semester Question Answer Discussion
Revision & Semester Question Answer Discussion

**Signature of the Faculty**