PNS SCHOOL OF ENGG. & TECH., MARSHAGHAI DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING LESSON PLAN		
BRANCHE: COMP.SC. & ENGG.	**SEMESTER : 6TH**	**NAME OF TEACHING FACULTY :** **ER. JYOTSNAMAYEE BISWAL**
SUBJECT: CLOUD COMPUTING	**NO. OF DAYS/ PER WEEK CLASS ALLOTTED : 06**	**SEMESTER FROM DATE : 13.02.2023 TO 23.05.2023** **NO. OF WEEKS : 15**
WEEK	**CLASSDAY**	**THEORY TOPICS**
1ST	**1st**	Introduction To Cloud Computing
	2nd	1.1. Historical development
	3rd	1.2. Vision of Cloud Computing
	4th	Characteristics of Cloud computing
	5th	1.4. Cloud computing Reference model
	6th	1.5. Cloud computing environment
2ND	**1st**	1.6. Cloud Service requirements
	2nd	1.7. Cloud and Dynamic Infrastructure
	3rd	1.8. Cloud Adoption
	4th	1.9. Cloud applications
	5th	Revision
	6th	Question Answer Discussion
3RD	**1st**	Doubt Clearing class
	2nd	Cloud Computing Architecture
	3rd	2.1. Introduction
	4th	2.2. Cloud Reference Model
	5th	2.3. Types of Clouds
	6th	2.4. Cloud Interoperability and standards
4TH	**1st**	2.5. Cloud computing Interoperability use cases
	2nd	2.6. Role of standards in Cloud Computing environment
	3rd	Scalability and Fault Tolerance
	4th	3.1. Introduction
	5th	3.2. Scalability and Fault Tolerance
	6th	3.3. Cloud solutions
	1st	3.4. Cloud Ecosystem

5TH	**2nd**	3.5. Cloud Business process management
	3rd	3.6. Portability and Interoperability
	4th	3.7. Cloud Service management
	5th	3.8. Cloud Offerings
	6th	3.9. Testing under Control
6TH	**1st**	3.10. Cloud service Controls
	2nd	3.11. Virtual desktop Infrastructur
	3rd	Revision
	4th	Question Answer Discussion
	5th	CLASS TEST
	6th	Cloud Management and Virtualisation Technology
7TH	**1st**	4.1. Create a virtualised Architecture
	2nd	4.2. Data Centre
	3rd	4.3. Resilience
	4th	4.4. Agility
	5th	4.5. Cisco Data Centre Network architecture
	6th	4.6. Storage
8TH	**1st**	4.7. Provisioning
	2nd	4.8. Asset Management
	3rd	4.9. Concept of Map Reduce
	4th	4.10. Cloud Goverance
	5th	4.11. Load Balancing
	6th	4.12. High Availability
9TH	**1st**	4.13. Disaster Recovery
	2nd	Virtualisation, 5.1. Virtualisation
	3rd	5.2. Betwork Virtualisation
	4th	5.3. Desktop and Application Virtualisation
	5th	5.4. Desktop as a service
	6th	5.5. Local desktop Virtualisation
10TH	**1st**	Revision
	2nd	Question Answer Discussion
	3rd	Internal Exam
	4th	5.6. Virtualisation benefits,
	5th	5.7. Server Virtualisation
	6th	5.8. Block and File level Storage Virtualisation
	1st	5.9. Virtual Machine Monitor

11TH	**2nd**	5.10. Infrastructure Requirements
	3rd	5.11. VLAN and VSAN
	4th	Cloud Security
	5th	6.1. Cloud Security Fundamentals
	6th	6.2. Cloud security services
12TH	**1st**	6.3. Design Principles
	2nd	6.4. Secure Cloud software requirements
	3rd	6.5. Policy Implementation 6.6. Cloud Computing Security Challenges
	4th	Cloud Computing Security Architecture
	5th	7.1. Architectural Considerations,7.2. Information Classification
	6th	CLASS TEST
13TH	**1st**	7.3. Virtual Private Networks
	2nd	7.4. Public Key and Encryption Key management
	3rd	7.5. Digital certificates
	4th	7.6. Key management,7.7. Memory Cards
	5th	7.8. Implementing Identity Management
	6th	7.9. Controls and Autonomic System
14TH	**1st**	Revision
	2nd	Market Based Management of Clouds
	3rd	8.1. Cloud Information security vendors
	4th	8.2. Cloud Federation, charactrization
	5th	8.3. Cloud Federation stack
	6th	8.4. Third Party Cloud service
15TH	**1st**	8.5. Case study
	2nd	Hadoop
	3rd	9.1. Introduction,9.2. Data Source
	4th	9.3. Data storage and Analysis
	5th	9.4. Comparison with other system
	6th	Revision