Name of the Faculty **:** **Lalit Kumar**

Department **:** Computer Engineering

Semester **:** 5th

Subject **:** Cloud computing

Lesson Plan Duration **:** 15 weeks

**Work load (Lecture / Practical) per week (in hours): Lectures-03, practical -03

Week	Theory		Practical	
	Lecture day	**Topic (Including assignment / test)**	**Practical Day**	**Topic**
1st	1st	**I. Introduction** to Cloud Computing	1st	Introduction to Cloud Vendors
	2nd	Overview of Cloud Computing		
	3rd	Evolution of Cloud computing		
2nd	4th	Characteristics of Cloud Computing	2nd	Introduction to Cloud Vendors
	5th	Applications of Cloud Comp.		
	6th	Benefits of Cloud Comp.		
3rd	7th	Challenges of Cloud Comp.	3rd	Setting up Virtualization using Virtualbox/ VMWare Hypervisor
	8th	Seminar of 1st Chapter		
	9th	**II Service and Deployment Models** Service Models : Overview		
4th	10th	Infrastructure As A Service	4th	Setting up Virtualization using Virtualbox/ VMWare Hypervisor
	11th	Platform As A Service		
	12th	Software As A Service		
5th	13th	Cloud Computing Deployment Models: Overview	5th	Setting up Virtualization using Virtualbox/ VMWare Hypervisor
	14th	Private Cloud		
	15th	Public Cloud		
6th	16th	Hybrid Cloud	6th	Introduction to OwnCloud
	17th	Community Cloud		
	18th	Major Cloud Service Providers		
7th	19th	Seminar of 2nd chapter	7th	Installation and configuration of OwnCloud software for SaaS
	20th	**3. Service Level Agreement Management** : Overview of SLA		
	21st	Types of SLA		
8th	22nd	Types of SLA	8th	Installation and configuration of OwnCloud software for SaaS
	23rd	SLA lifecycle		
	24th	SLA management Process		
9th	25th	Seminar and 1st Sessional	9th	Installation and configuration of OwnCloud software for SaaS
	26th	**4. Virtualization Concepts** : Overview		
	27th	Types of Virtualization		
10th	28th	Benefits of Virtualization	10th	Accessing Microsoft AZURE

	29th	Hypervisors		cloud services
	30th	**5. Cloud Security:** Overview		
11th	31st	Infrastructure Security	11th	Accessing Microsoft AZURE cloud services
	32nd	Data Security		
	33rd	Privacy Issues		
12th	34th	Legal issues	12th	Accessing Microsoft AZURE cloud services
	35th	Seminar and 2nd sessional		
	36th	**6. Cloud Storage:** Overview		
13th	37th	Storage As A Service	13th	Cloud Simulation Software Introduction: CloudSim
	38th	Storage As A Service: Benefits		
	39th	Storage As A Service: Challenges		
14th	40th	SANs	14th	Cloud Simulation Software Introduction: CloudSim
	41st	**7. Scheduling in Cloud** : Overview of Scheduling Problem		
	42nd	Different types of Scheduling		
15th	43rd	Scheduling for dependent & independent tasks.	15th	Cloud Simulation Software Introduction: CloudSim
	44th	Static vs. Dynamic Scheduling		
	45th	Seminar and 3rd Sessional		