

## Lecture Plan

Name of the Faculty: Er. Priyanka Chopra

Discipline :CSE

Semester :8th

Subject :Cloud Computing

Lesson Plan Duration: 15 weeks (Feb-May 2024)

**\*\* Work (03 Lecture) per week (In Hours):Lecture -03**

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/ test)	Practical Day	Topic
1st	1st	Introduction of Cloud Computing	1st	Give a Service Analysis for Different Cloud Vendors in the industry/market.
	2nd	Recent trends in Computing		
	3rd	Evolution of Cloud Computing		
2nd	4th	Grid Computing, Cluster Computing	2nd	Global Infrastructure, Account Creation, common on navigation console.
	5th	Distributed Computing, Utility Computing,		
	6th	History of Cloud Computing,		
3rd	7th	Cloud service providers	3rd	AWE C2-Basics, Instance Creation, Security Groups, IP Addressing, Launching EC2 Instance.
	8th	Properties, Characteristics of Cloud Computing		
	9th	Cloud computing vs. Cluster computing		
4th	10th	Pros and Cons of Cloud Computing	4th	Identity & Access Management - Setup and Configuration, Users Groups & Roles
	11th	Cloud Computing Architecture		
	12th	Doubt clearing Session		

<b>5th</b>	<b>13th</b>	Sessional-I	<b>5th</b>	Identity & Access Management - Setup and Configuration, Users Groups & Roles
	<b>14th</b>	Sessional-I		
	<b>15th</b>	Cloud computingstack,		
<b>6th</b>	<b>16th</b>	Service Models (XaaS)	<b>6th</b>	AWS Networking & Connectivity-VPC, Gateways, Route Tables, NAT
	<b>17th</b>	Infrastructure as a Service (IaaS), Platform as a Service(PaaS),		
	<b>18th</b>	Software as a Service (SaaS)		
<b>7th</b>	<b>19th</b>	Deployment Models	<b>7th</b>	AWS Database Services - RDS & DynamoDB
	<b>20th</b>	Public cloud, Private cloud,		
	<b>21st</b>	Hybrid cloudDeployment		
<b>8th</b>	<b>22nd</b>	Community cloud	<b>8th</b>	AWS Monitoring - SNS, Cloud Watch & Cloud Trail.
	<b>23rd</b>	Service Management inCloud Computing		
	<b>24th</b>	Doubt clearing Session		
<b>9th</b>	<b>25th</b>	Doubt clearing Session	<b>9th</b>	Load-balancing, Elasticity, and Scalability in AWS - Basics, Auto-scaling, Route53.
	<b>26th</b>	Sessional-II		
	<b>27th</b>	Sessional-II		
<b>10th</b>	<b>28th</b>	Service Level Agreements (SLAs)	<b>10th</b>	Serverless Lambda Function
	<b>29th</b>	Billing & Accounting		
	<b>30th</b>	Traditional vs. Cloud, Economics of scaling:		
<b>11th</b>	<b>31st</b>	Database & Data Stores in Cloud,	<b>11th</b>	Viva-voce
	<b>32nd</b>	Large Scale Data Processing		
	<b>33rd</b>	Case study: Eucalyptus		
<b>12th</b>	<b>34th</b>	Microsoft Azure, Amazon EC2	<b>12th</b>	Viva-voce
	<b>35th</b>	Cloud Security: Infrastructure Security		

	<b>36th</b>	Network level security,		
<b>13th</b>	<b>37th</b>	Host level security, Application level Security	<b>13th</b>	Viva-voce
	<b>38th</b>	Data security and Storage		
	<b>39th</b>	Data privacy and security Issues		
<b>14th</b>	<b>40th</b>	Identity & Access Management,	<b>14th</b>	Viva-voce
	<b>41st</b>	AccessControl, Trust, Reputation,		
	<b>42nd</b>	Authentication in cloud computing,		
<b>15th</b>	<b>43<sup>rd</sup></b>	Client access in cloud,	<b>15th</b>	Viva-voce
	<b>44<sup>th</sup></b>	Cloud contracting Model		
	<b>45th</b>	Doubt Clearing Session		

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