Objective: This module gives trainees the skills and knowledge to understand how Cloud Computing Architecture can enable transformation, business development and agility in an organization.

1. Cloud Computing Basics	
1.	Introduction to Cloud Computing
2.	Cloud Computing definition, characteristics
3.	Pros and Cons of Cloud Computing,
4.	Cloud service Models(SAAS,PAAS,IAAS)
5.	Organizational Cloud Types(Private, Public, Hybrid)
6.	Benefits and limitations of Cloud
7.	Comparison of SAAS, PAAS, IAAS
8.	Cloud computing vs. Cluster computing vs. Grid computing
9.	Cloud Computing and SOA

2. Virtualization Basics	
1.	Virtualization Concept
2.	Virtualization Basics
3.	Objectives
4.	Benefits of Virtualization
5.	Understanding Hypervisors
6.	Virtual Machine Types
7.	VMware
8.	Virtualization

3. Infrastructure as a Service (IaaS)	
1.	Introduction to IaaS, IaaS definition,
2.	Different approaches to virtualization, Hypervisors
3.	Machine Image, Virtual Machine(VM)
4.	Resource Virtualization-Server,Storage,Network
5.	VM provisioning and manageability, storage as a service, Data storage in cloud computing
6.	IaaS Examples Amazon EC2, Renting, EC2 Compute : Platform and Storage, pricing, customers Microsoft Azure Viz. Platform and Storage, pricing, customers

4.Platform as a Service (PaaS)

1. Evolution of computing paradigms and related components (distributed computing, utility computing, Cloud computing,grid computing, etc.)
1. Introduction to PaaS-What is PaaS,
2. Service Oriented Architecture (SOA)
3. Examples-

Google App Engine

Microsoft Azure,

SalesForce.com's example

5.Software as a Service(SaaS)

1. Introduction to SaaS
2. Web services
3. Web 2.0
4. Web OS
5. Case Study on SaaS

6.Cloud Security

1. Cloud Security Fundamentals
2. Vulnerability Assessment Tool For Cloud
3. Privacy and Security in Cloud
4. Cloud Security Architecture
5. Identity Management and Access control
6. Cloud Computing security challenges

7.Issues in Cloud Computing

1. Issues in Inter cloud computing
2. Quality of services in cloud Computing
3. Data Migration in Cloud
4. Streaming in Cloud

8.Cloud Migration Strategy

1. Data Migration in Cloud
2. Application Migration in Cloud
3. QA of Cloud Applications

9.Summary and Topics of Interest

10.Case Studies on Cloud Based Application Development