Module 1
1. Cloud computing & diff (cloud/grid/cluster)
2. Types of computing (utility computing /grid computing/autonomic computing).
3. Service models (Iaas/paas/saas)
4. Deployment models (Public/Private/Hybrid/Community)
5. Roots of cloud computing & features & challenges & Disaster recovery

Module 2.1
1. Virtualization & its benefits
2. Traditional stack & virtualization stack
3. Understanding hypervisors (Type 1/Type2)
4. Virtual machine management
5. Working of virtual Machine

Module 2.2
1. Vm provisioning process steps.
2. Vm migration techniques(hot/cold/live)
3. Stages of live migration
4. Provisioning in cloud contest (Amazon Elastic Compute Cloud/ Eucalyptus Architecture OpenNebula/Aneka/Manjrasoft Aneka layered architecture)
5. Need of docker container
6. Diff b/w docker container and Vm
7. Fundamental Docker Concepts & Docker Eco system
8. Hadoop maps reduce.
9. Exploring Paas & Salesforce.com (paas and saas)
10. Differentiate b/w three flexible purchasing models that are provided by amazon ec2.
11. A Review on Amazon Web Service (AWS), Microsoft Azure & Google Cloud Platform (GCP) Services

Module 3
1. Security Boundaries models (NIST/CSA)
2. Understanding Data Security
   a. Access Control (Brokered Cloud Storage /Encryption)
   b. Auditing and Compliance
   c. Establishing Identity (FIM/IAM system /Standardization and Initiative Groups (SAML/Oth2.0/OpenID)
   d. Authentication
   e. Authorization (Access control lists/Role-based access control/Attribute-based access control)

Module 4
 SLA Management-
   1. SLA Life cycle
   2. SLA Metrics for cloud services

 SOA Class-
   1. Characteristics of a Service
   2. SOA Architecture and use of soa
   3. SOA characteristics
   4. Key components of soa
   5. Soa working
   6. Challenges of Soa

Module 5

IDM-
1. Goals of Proposed User-Centric IDM for the Cloud
2. Mechanisms in Proposed IDM

Enterprise Service Bus-
1. Connectivity and the SOA Reference Architecture
2. Working of Enterprise Service Bus

SOA Management-
1. Requirements for SOA Management

SOA Security-
1.Identity challenges in SOA
SOA Security (IDM)-
    1.Typical logical deployment architecture for an SOA application
    2.Identity propagation, mapping, and provisioning
    3.Addressing the requirements around identity propagation and mapping