UNIT 1

1. cloud services requirements
2. applications of cloud computing
3. cloud computing reference model
4. cloud scalability
5. Virtual desktop infrastructure
6. Fault tolerance and cloud Ecosystem
7. Hypervisor Management Software and their requirements
8. High availability
9. disaster recovery
10. Platform as a Service (PasS) model
11. Azure Virtualization

UNIT 2

1. Cloud Characteristics
2. Cloud Delivery Models
3. Denial of Service attack
4. myTrendek application Case study
5. Types of threats in cloud
6. Amazon Structured Storage
7. Architecture of Google AppEngine
8. AppFabric of Microsoft Azure

UNIT 3

1. Auto-scaling is done in DTGOV Case Study
2. Failover system mechanism
3. Billing Management System
4. Remote Administration
5. Digital Signature
6. Identity and Access Management
7. Hashing & Encryption
8. Resource cluster

UNIT 4

Design a Cloud Architecture on Data consistency (Case Study will be given)

Design a Cloud Architecture on Data availability (Case Study will be given)

Design a Cloud Architecture on Data security (Case Study will be given)

Design a Cloud Architecture on Service oriented (Case Study will be given)

UNIT 5

1. Cloud deployment model considerations
2. SLIs and SLOs
3. Service quality and availability metrics
4. Google applications engine Features
5. PaaS model provider's perspective
6. SLA Guidelines
7. Service quality metrics
8. cost metrics a. Network Usage b. Server Usage c. Cloud Storage Device Usage
9. Cost in Cloud