**Day – 1**

1. Theory - What is the cloud?
2. Theory - History of Cloud Computing
3. Theory - How Cloud Computing Works?
4. Theory - Cloud Deployment model
   1. Public
   2. Private
   3. Community
   4. Hybrid
5. Theory - Cloud Computing Architecture
6. Theory - Cloud Computing Terminology
7. Theory - Cloud Computing Essential Characteristics
   1. On-Demand Self-Service
   2. Rapid Elasticity
   3. Broad Network Access
   4. Resource Pooling
   5. Measured Service
8. Theory - Cloud Service models –
   1. Communication-as-a-Service (CaaS)
   2. Infrastructure-as-a-Service (IaaS)
   3. Monitoring-as-a-Service (MaaS)
   4. Software-as-a-Service (SaaS)
   5. Platform-as-a-Service (PaaS)
   6. Database-as-a-Service (DbaS)
9. Theory - Capital expenditure (CapEx) versus operational expenditure (OpEx)
10. Theory - Cloud Connectivity
11. Hands On - Create account on Azure Cloud
12. Theory - Understand Azure billing
13. Hands On - Azure Support Options
14. Hands On - Create account on AWS Cloud
15. Theory - Cloud Computing Security
16. Theory - Controls in Cloud Security
17. Theory - SIP service over Cloud
18. Hands On - Create Azure compute
    1. Essential Azure compute concepts
    2. Explore Azure Virtual Machines
    3. Explore Azure App Service
    4. Explore Serverless computing in Azure
19. Theory - Advantages of using Cloud Computing
20. Theory - Disadvantages of using Cloud Computing

**Day – 2**

1. Theory - Virtualization
   1. Virtualization Basics
   2. Types of Virtualization in Cloud
   3. Technologies & Objective
   4. Benefits of Virtualization
2. Theory - Microsoft Azure & Amazon Web Services
   1. Overview
   2. Architecture & How it works
   3. Deployment
   4. Applications for Businesses – Some Examples
3. Hands On - Manage services with the Azure portal
   1. Azure management options
   2. Navigate the portal
   3. Work with panes
   4. Use the Azure portal
   5. Azure Portal dashboards
   6. Customize the dashboard
   7. Access public and private preview features
4. Hands On - Manage services with AWS
5. Building Cloud Networks
   1. Hands On - Deploy and Manage VMs in Azure
      1. Building a VM
      2. Connecting to the Virtual Machine
      3. State of the Virtual Machine
      4. Build a Linux Virtual Machine
      5. Deploying a Windows 10 Virtual Machine
      6. Data Disks
      7. Adding data disks
      8. Creating a storage account
      9. Azure Backup Service for Azure Virtual Machines
      10. Soft Delete for Azure Virtual Machines
      11. Azure Backup Policy for Azure Virtual Machines
      12. Azure Site Recovery for Virtual Machines
      13. Redeploying a virtual machine
      14. Azure virtual machine scale sets
      15. Lab - Resizing a virtual machine
   2. Hands On - Deploy and Manage VMs in AWS
   3. Theory - Designing and Implementing a Data Center-Based Cloud
   4. Theory - Communication Requirements for Cloud Implementation
   5. Theory - Public/Private Internet
   6. Theory - Routing to the Data center
   7. Theory - Switching within the Data Center
   8. Hands On - Configure and Manage Virtual Networks in Azure
      1. Introduction to Virtual Networks
      2. The network interface
      3. Azure networking
      4. Address spaces
      5. Working with Azure virtual networks
      6. Network Security Groups
   9. Hands On - Azure RBAC