AWS Online Training **Objectives**

**Objectives of the course**

* Compute (EC2)
* Storage (S3, EBS, EFS, Storage Gateway and Snowball)
* Database (RDS, DMS and Redshift)
* Network and Content Delivery (Route53, VPC and CloudFront)
* Management Tools (CloudWatch, Cloud Formation andCloudTrail)
* Security & Identity Compliance (IAM, Trusted Advisor, Config andInspector)
* Application Services (SWF and Elastic Transcoder)
* Messaging (SNS, SQS and SES)
* DevOps tools (Code Commit, Code Build, Code Deploy and Code Pipeline)

**Prerequisites**

* Absolute Beginners. No prior AWS experience is necessary.
* Previous System Administration/ Development knowledge would be added advantage.
* System Administrators Interested in Deploying Applications on AWS
* Cloud Computing enthusiasts

**Setup requirements**

* Need to set up an AWS Account

(Most of the Services comes with AWS free tier eligibility)

* **Windows:** Putty, Putty KeyGen and Web Browser with Internet connectivity.
* **Linux/Mac:** DefaultTerminal

AWS Online Course **Curriculum**

[AWS Course Modules](https://www.nareshit.com/aws-online-training/#collapse1341052252)

**Introduction to Cloud Computing**

* Introduction to cloud computing
* Essential Characteristics of Cloud Computing
* Service Models in Cloud computing
* Deployment models in Cloud Computing
* Introduction to AWS
* AWS Account creation &free tier limitations overview

**Identity Access Management**

* Root Account Vs IAM user
* Multi Factor Authentication for Users
* IAM Password Policies
* Creating Customer Managed Policies.

**Storage**

* What is Simple Storage Service (S3)
* Storage Classes
* Versioning&Cross-region replication
* Life Cycle Management
* Security & Encryption
* Static Webhosting with S3 bucket
* Events configuration on S3 buckets
* S3 Data management and backup using 3rd Party applications.
* S3 Cross Account Access and Pre-Signed URLs
* Storage Gateway

**Linux Introduction**

* Basics of Linux for AWS
* Linux Installation and Basic commands overview
* Web Server and Services Configurations

**Compute**

* EC2 Instance Launch Wizard
* EC2 Instance Types
* Generating custom Public Key and Private keys for EC2 instances
* Security groups
* Volumes and Snapshots
* Creating customized Amazon Machine Images
* RAID Overview andRAID Configurations
* User Data and Metadata
* ElasticLoad Balancer&Auto Scaling Groups
* CloudWatch
* Creating Billing Alarm and EC2 instance alarms.
* AWS CLI&EC2 Roles
* Elastic File System
* AWS Lightsail
* Elastic Beanstalk
* Placement Groups

**Route 53**

* DNS Records overview
* Routing Policies
* Hosting sample Website and configuring Policies.

**Databases**

* Launching a RDS Instances (MySQL, MSSQL & Aurora)
* Multi-AZ & Read Replicas for RDS instances
* DynamoDB
* Redshift
* Elastichache
* **Database Migration Service** and Schema conversion tool

**VPC (Virtual Private Cloud)**

* Networking Basics
* Creating custom VPCs and custom Subnets
* Network ACL’s
* Route Tables & IGW
* VPC Peering
* Flowlog creation
* VPN Configuration with AWS (OpenVPN)

**Security Options:**

* CloudTrail
* AWS Config
* Key Management Services
* AWS Certificate Manager
* AWS Inspector
* AWS Trusted Advisor
* Content Delivery Networks / CloudFront

**Application Services**

* Simple Email Service
* Simple Queue Service
* Simple Workflow Service
* Simple Notification Service
* **SMS – Server Migration Service**
* Migrating server from on-premises to cloud
* Cloud Formation
* Directory Services and Adding EC2 instance to Domain
* AWS TCO Calculator and Simple Monthly calculator

**DevOps Tools Overview**

* What is DevOps in Cloud
* Code Pipeline
* Code Commit
* Code Build
* Code Deploy
* Lambda

**Monitoring Tools:**

* Nagios
* Creating Custom Metrics with CloudWatch

**Amazon White Papers review**

**Quiz and Scenario based questions discussion**

**Resume Key Points and AWS Certifications overview**