

# SCHEDULE

-----Day-1-8hrs-----

## **Module 1- Fundamentals of Cloud Computing**

- Introduction of Cloud Computing
- Key characteristics of Cloud Computing
- Cloud Analogy
- Cloud Computing Service, Deployment Models
- Comparison between Cloud and Legacy IT systems
- Advantages of Cloud Computing

## **Module 2- AWS Cloud Overview**

- Introduction & History of AWS Cloud
- Global Infrastructure of AWS
- AWS Service scope in this course
- AWS Global vs. Regional Services
- Overview on Billing and Pricing

## **Module 3- AWS Free Tier Account**

- Introduction
- AWS Free Tier Account Creation
- Basic account Setting & Management
- Setting up Billing Alarm & Budget
- Activate MFA on Root Account

-----Day-2-8hrs-----

## **Module 4 -AWS Beanstalk: Amazon PaaS service**

- Understanding Beanstalk
- Benefits of Beanstalk
- Configuration of Beanstalk service
- Use Cases & Pricing

## **Module 5 –AWS IAM: Security, Authentication & Managing Users and Groups**

- Introduction to Identity & Access Management
- Components of IAM
- Creating and Managing Users, Groups and IAM policies
- Roles and its use cases
- Multi-Factor Authentication - [MFA]
- Security Features in IAM
- Best Practices of IAM
- Use Cases and Pricing

## **Module 6 – AWS S3: Storage System**

- Introduction to Simple Storage Service - S3
- Components of S3
- Important Properties of S3 Bucket
- Enabling and Managing Versioning on S3 bucket
- Creating Life-Cycle Management Rule S3
- Hosting a static-website in S3
- Transfer Accelerator in S3
- MFA and Pre-signed URL in S3

  
Principal  
Nutan Maharashtra Institute  
of Engg. & Technology  
"Sachchid Vidya Sankul" Vishnupuri  
Talgaon Dabhade, 410507



- Security feature of S3- Encryption, Bucket Policy, and Permissions
- Snow devices - Types & Use Cases
- Use Cases and Pricing

-----Day-3-8hrs-----

#### **Module 7 – AWS EC2: Amazon Virtual Servers and its features**

- Introduction to Elastic Cloud Compute - EC2
- Use cases and important features of EC2
- Amazon Machine Images (AMI) and its Uses
- Configuring EC2 Instance and its types
- Security Groups - Creation & Management
- Key Pairs - Why & How
- Launching & Connecting to Linux Instance
- Setting up a web server on Linux Instance - Hosting a website
- Elastic IP Address, Placement Group
- Use Case and Pricing

#### **Module 8 –AWS Load Balancers and Auto Scaling Configuration**

- Types of Load Balancer in AWS
- Important Components of Load Balancer
- How Health-Check Works for Load Balancer
- Configuration of a load balancer and its management
- Understanding Launch Configuration and AutoScaling Group
- Configuration of Autoscaling group
- Use cases and Pricing

-----Day-4-8hrs-----

#### **Module 9 -AWS RDS: Amazon Relational Database Service**

- Introduction to RDS
- DB engines provided by RDS
- Snapshots and Back-up in RDS
- Read Replicas in RDS
- Creating and connecting to a RDS database
- RDS Security Groups
- Pricing

#### **Module 10 –AWS Route53: Understanding and Configuring DNS service**

- Introduction to Route53
- Health Checks in Route53
- Routing Policies in Route53
- Records Sets supported by Route53
- Pricing - Route53

-----Day-5-8hrs-----

#### **Module 11 -AWS CloudWatch: AWS Monitoring service**

- Important Components of CloudWatch
- Creating and Managing metrics in CloudWatch
- Creating and managing Events in CloudWatch
- Creating and Managing Dashboards in CloudWatch
- Creating and managing Alarms in CloudWatch
- Logs and Log agent in CloudWatch
- Use Cases and Pricing

#### **Module 12 – AWSCLI: Amazon command line Interface**

- Setting-Up AWS CLI on local machine
- Creating Users and groups using AWS CLI
- Creating & Managing IAM Roles & Policy using AWS CLI
- AWS CLI Command Syntax walkthrough



*Principal*  
Nutan Maharashtra Institute  
of Engrg. & Technology  
"Samarth Vidya Sanstha" Vishnupuri  
Talgaon Dabhade, 410507