An online Course on,

Cloud Computing and Amazon Web Services (AWS)

Duration: 45 hrs
Mode: Live, interactive online sessions and demo.
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Note: This course can be useful for AWS Certified Cloud Practitioner Certification (CLF-C01) Exam preparation.

Course Prerequisites:
- General IT Knowledge
- Familiarity with general networking concepts
- Interest in cloud computing concepts.

Module 01: Introduction to Cloud Computing (Duration: 5 hrs)
- Overview
- Essential Characteristics
- Cloud Service Models- IaaS, PaaS, SaaS
- Cloud Deployment Models- Public, Private, Hybrid and Community
- Economics of Cloud
- Benefits of Cloud

Module 02: Virtualization- Technical Foundation of Cloud Computing (Duration: 3 hrs)
- Overview
- Compute Virtualization
- Storage Virtualization
- Network Virtualization
- Desktop and Application Virtualization
- Virtual Machines (VM)
- Demo- Virtual Machines(VM)

Module 03: Business Continuity (Duration: 2 hrs)
- Overview
- Backup Operations and Techniques
- Replication
- Fault Tolerance

Module 04: Cloud Security (Duration: 3 hrs)
- Overview

- Information Security Concepts
- Defense in Depth
- Cloud Security Concerns and Threats
- VM Vulnerabilities
- Hypervisor Security
- Security and network level

Module 05: Introduction to Amazon Web Services (AWS) (Duration: 1 hrs)
- Overview
- History and today
- Business Model

Module 06: AWS Global Infrastructure (Duration: 1 hrs)
- Overview
- AWS Regions
- AWS Availability Zones
- AWS Edge Locations

Module 07: AWS Core Service (Duration: 2 hrs)
- Overview
- AWS Service Categories/Models
- Global and Regional Services

Module 08: AWS Compute Service (Duration: 8 hrs)
- Overview
- Amazon EC2
- AWS Security Groups
- AWS Lambda
- AWS Elastic Beanstalk
- AWS LightSail

Module 09: AWS Storage Service (Duration: 3 hrs)
- Overview
- Elastic Block Storage (EBS)
- AWS Simple Storage Service (S3)
- Elastic File System (EFS)
- Amazon Glacier Service

Module 10: Amazon Virtual Private Cloud (VPC) (Duration: 1 hrs)
- Overview

- Advantages

Module 11: Introduction to Database Services (Duration: 3 hrs)
- Overview
- Amazon Relational Database Systems (RDS)
- Amazon DynamoDB
- Amazon Redshift
- Amazon Aurora

Module 12: Load Balancing and Monitoring Services (Duration: 3 hrs)
- Overview
- Elastic Load Balancing (EBS)
- Amazon Cloud Watch
- Auto Scaling
- AWS Route 53

Module 13: AWS Cloud Security Service (Duration: 5 hrs)
- Overview
- AWS Shared Responsibility Model
- AWS Identity and Access Management (IAM)
- AWS Trusted Advisor
- AWS CloudTrail
- AWS Config

Module 14: AWS Cloud Architecting (Duration: 2 hrs)
- Overview
- Well-Architected Design Principles
- Understanding High Availability and Reliability
- Scaling

Module 15: AWS Billing and Support (Duration: 3 hrs)
- Overview
- Fundamentals of AWS Pricing
- AWS Pricing Models
- AWS Cost Explorer
- AWS Support Plans

Module 16(Optional): AWS Certified Cloud Practitioner Certification (CLF-C01) Exam (Duration: 1 hrs)
- Overview
- Exam Pattern- A discussion
- Why and How to prepare?