



**KR Network Cloud Technologies PVT. LTD.**

## About KR Network Cloud

“KR Network Cloud Technologies is a one of the leading IT providing hands-on practical training to both individuals as well as corporate professionals. Live instructor led hands-on IT Networking Courses, onsite training, as well as IT certification boot Camps. The training team of Network Cloud includes professionals who have more than 6 years’ experience in their respective fields. We design and deliver the best quality training to meet the changing and growing needs of the Professionals.

## Our Strengths

- ❖ Customized training Programs.
- ❖ Flexible Training Schedule
- ❖ Courseware includes all latest technologies.
- ❖ Flexible group size.
- ❖ Affordable Price.
- ❖ Most advanced Training Resources
- ❖ Highly experienced and certified faculty members.
- ❖ Lab Environment as per globally recommended standards.
- ❖ Post Training Support.
- ❖ Convenient Batch Timings.
- ❖ Customized Training for your organization.
- ❖ Specialized Batch for Corporate Clients.
- ❖ Certified and Industry Experienced Instructors.
- ❖ Globally recommended Official Curriculum.

## AWS Certified Solutions Architect - Associate (SAA-C02)

**Total Questions:** 65

**Time:** 130 Minutes

**Mode:** Online and Multiple Choices



**KR Network Cloud Technologies PVT. LTD.**

- a. Correct Answer of 4 choices
- b. Correct Answer of 5 choices

**Passing Marks:** 720/1000

**Stages:** Easy Questions, Complex Questions and Unknowns

No Weighted for each Question

No Partial Marking

**Course Duration:** 50 hours (2 Months)

## **AWS Certified Solution Architect Associate Syllabus**

### **Module-1: Introduction to Cloud Computing**

- a. What is Virtualization?
- b. What is Cloud Computing?
- c. Types of Cloud
- d. Service models of Cloud Computing
- e. What is AWS (Amazon Web Service)?
- f. AWS Global Infrastructure
- g. How to start with AWS?
- h. Launch windows and Linux EC2 Instance in AWS Cloud

### **Module-2: VPC (Virtual Private Cloud)**

- a. What is VPC?
- b. How to create custom VPC, subnet, route table, IGW and NAT Gateway?
- c. Difference between public, Private and Elastic IPs.
- d. Security group
- e. NACL (Network Access Control List)
- d. VPC Peering
- f. How to take addition NIC and virtual IP for EC2 Instance

### **Module-3: EBS (Elastic Block Storage)**

- a. How to configure AWS storage and storage terminology.
- b. Difference between object level storage and block Level storage
- c. How to create secondary volume for EC2 instance
- d. How to extend EBS volume of EC2 Instance
- e. How to create custom image by using primary volume
- f. How to take backup/snapshot of EBS volume
- g. How to share volume cross AZ, region and AWS account

### **Module-4: Ephemeral Storage**

- a. What is Ephemeral or temporary storage?
- b. How to launch EC2 instance by using temp storage.

### **Module-5: EFS (Elastic File System)**

- a. What is EFS in AWS? - Recording
- b. How to mount EFS file system inside EC2 Instance
- c. How to restrict client access for EFS file system

### **Module-6: IAM (Identity and Access Management)**

- a. What is IAM?
- b. How to create IAM user and attach pre-defined IAM policy
- c. How to write custom IAM policy
- d. How to write custom role
- e. Cross account IAM access management

### **Module-7: S3 (Simple Storage Service)**

- a. What is S3 and Object Level Storage?
- b. How to create bucket and upload, download objects

- c. How to mount bucket as a Network drive inside EC2 Instance
- d. S3 Versioning
- e. S3 Static Website hosting
- f. S3 Bucket replication
- g. S3 transfer acceleration
- h. S3 storage classes and object life cycle management
- i. S3 VPC endpoints
- j. S3 Server access logging

#### **Module-8: CloudWatch**

- a. What is CloudWatch?
- b. How to monitor EC2 Instance by using CloudWatch?
- c. How to monitor CPU of EC2 Instance by using CloudWatch?
- d. How to design custom dashboard - Recording
- e. How to write custom metrics for EC2 instance?
- d. How to push OS logs to CloudWatch?

#### **Module-9: ELB (Elastic Load Balancing)**

- a. What is ELB and type of Load Balancer?
- b. How to create network load balancer?
- c. How to create application load balancer?
- d. How to run HTTPs base website by using load balancer

#### **Module-10: ASG (Auto Scaling Group)**

- a. What is ASG?
- b. How to create ASG without LB?
- c. How to create ASG with LB?
- d. How to define scheduled scaling activity

### **Module-11: RDS (Relational Database Service)**

- a. What is RDS?
- b. How to create MYSQL database by using RDS?
- c. How to create snapshot of RDS?
- d. How to restore DB Instance by using snapshot and backup?
- e. How to read replica of DB Instance?

### **Module-12: Route53**

- a. What is route53?
- b. How to setup internal DNS?
- c. How to register public domain and run a website on custom URL?
- d. How to run website on custom URL with LB?
- e. How to run website on custom URL with S3 bucket?
- f. Route53 routing policies

### **Module-13: EC2 (Elastic Compute Cloud)**

- a. EC2 instance Families and Types.
- b. Calculating EC2 instance Pricing. Pricing Models. On Demand , Reserved, Spot instance.
- c. EC2 Tenancy Models, Shared instance, Dedicated Instance, Dedicated Host.
- d. Change EC2 instance Type. (Upgrade/Downgrade)- Resize EC2 EBS Backed Instance.
- e. Creating Custom Image.
- f. How to recover Private key file.
- g. DLM (Data Lifecycle Manager).
- h. Launching Instance by using Launch template.

### **Module-14: Migration (On-Premises to AWS Cloud)**

- a. On Premises DC migration to Cloud.
- b. Planning for migration.

**Module-15: Lambda – Add Topic**

- a. What is Lambda service?
- b. How to execute code by using Lambda Function

**Module-16: CloudFormation – Add Topic**

- a. Use cases of CloudFormation.
- b. How to create, update and delete a stack.
- c. How to understand syntax of YML and JSON templates.
- d. Creating VPC, Volumes and Instances by using CloudFormation

**Module-17: SNS (Simple Notification Service) – Add Topic**

- a. How to create a SNS topic; publish a Message to topic and Subscription.
- b. Use SNS topic to receive notification on mobile and publish a text message.
- c. SNS Notifications When Auto Scaling Group Scales.
- d. Setting up an SNS Topic Using the AWS CLI

**Module-18: AWS-CLI – Add Topic**

- a. Installing AWS CLI tool inside Linux/Windows machine by using AWS bundle installer.
- b. AWS CLI tool in windows and Linux by using PIP method.
- c. AWS CLI setup and practical.

**Module-19: AWS VPN (Virtual Private Network) – Add Topic**

- a. What is VPN and types of AWS VPN?
- b. How to setup OpenVPN server
- c. How to setup ClientVPN Endpoint
- d. How to setup site to site VPN



**KR Network Cloud Technologies PVT. LTD.**

**Module-20: S3 Glacier – Add Topic**

- a. What is S3 Glacier storage?
- b. How to create vault and upload objects

**For detailed course contents please feel free to contact us.**

**Mobile:** +91-9555378418 & +91-8800272669

**Email:** [info@krnetworkcloud.org](mailto:info@krnetworkcloud.org)

**Website:** [www.krnetworkcloud.org](http://www.krnetworkcloud.org)

**Facebook:** <https://www.facebook.com/krnetworkcloud>