AWS Solutions Architect –Associate Level

Total Hours: 24

1. **Overview of Cloud Technology**

   - **Cloud computing and current Market**

   - **Difference Cloud Infrastructure and physical Infrastructure**

   - **Benefits of Cloud Computing**

   - **Different Types of Cloud and Uses**

2. **Overview of AWS**

   - **What is AWS?**

   - **On-premises server v/s AWS servers**

   - **Cloud Services and AWS**

   - **Benefits of Cloud on AWS**

3. **AWS Architecture**

   - **AWS Region**

   - **AWS Zone**

   - **Number of Edge Locations**

   - **AWS Partner ECO System**

   - **Initiates AWS services**

4. **Compute services: EC2**

   - **EC2 instance and services**

   - **Selecting and building EC2 instances**

   - **Amazon machine Images**

- **Attach and manage EBS Volume**

- **Cloud-int user data and metadata**

5. **Networking Services**

   - **Introduction of AWS Networking Services**

   - **Virtual Private Cloud**

   - **Private and Public Subnets**

   - **Internet & Virtual private Gateway**

   - **Route Table**

   - **Configuring NAT instance**

   - **VPC Peering**

   - **Using a BastionHost**

   - **VPN and Use cases**

6. **DNS Services:- Route 53**

   - **Zone Records**

   - **Zone Apex Support With ELB and S3**

   - **Types of Routing in route 53**

7. **More compute services**

   - **AWS Lambda**

   - **EC2 Container Services**

   - **Auto Scaling**

   - **Elastic Load Balancer**

8. **Storage services**

   - **EBS- Elastic Block storeage**

   - **S3- Simple storage services**

- **Amazon cloud front**

- **Elastic File storage**

9. **Database Services**

    - **RDS- Relational Database Services**

    - **Dynamodb**

    - **Manage Database instances and Use cases**

10. **Security & Identity**

    - **NACL**

    - **Security Group**

    - **IAM- Identity Access Management**

    - **Transmission & Encryption- TLS**

    - **Placement Group**

    - **Practical Implementation with Security Group & IAM**

11. **Monitor & Auditing Services**

    - **Amazon Cloud Watch**

    - **Amazon Cloudtrail**

12. **Analytics Services**

    - **Redshift**

    - **Elastic Map Reduce**

    - **Kinesis**

13. **Migration Services**

    - **Database migration**

    - **storage migration**

    - **Storage Gateway**

- **Direct Connect**

- **Snow ball**

- **Backup services**

14. **Application Services**

    - SQS – Simple Queue Service

    - SNS- Simple Notification Services

15. **Deployment & Management Services:**

    - **Elastic Benstalk**

    - **Cloud formation**

    - **Trusted Advisor**

16. **Application Services**

    - **SQS- Simple Queue Services**

    - **SNS-Simple Notification Services**

17. **AWS Troubleshooting**
    - **Connectivity issues**

    - **EC2 Troubleshooting Scenarios**

    - **VPC Troubleshooting Scenarios**

    - **ELB Troubleshooting Scenarios**

    - **Service based Troubleshooting Scenarios**

18. **Business Essentials:**

    - **AWS Pricing &Economics**

    - **Simple monthly calculator**

    - **AWS Marketplace**

    - **Business App's**