Aws certificate solutions architect professional course (SAP-CO2)

1 High Availability and Business Continuity

1.1 Multi-region and multi-account architecture
1.2 Disaster recovery (DR) and backup strategies
1.3 Design for fault tolerance

2 Cost Optimization

2.1 Cost-effective resources provisioning
2.2 Identifying cost reduction opportunities
2.3 Using AWS Cost Management tools

3 Network Design

3.1 Advanced VPC (Virtual Private Cloud) configurations
3.2 Hybrid architecture (On-premises to AWS)
3.3 Network security and compliance

4 Storage Solutions

4.1 Data storage and archiving options
4.2 Data migration strategies
4.3 Designing for data consistency and durability

5 Security and Identity Management

5.1 AWS Identity and Access Management (IAM)

5.2 Security best practices

5.3 Encryption and key management

6 Scalability and Elasticity

6.1 Auto Scaling strategies

6.2 Load balancing and scaling

6.3 Application and infrastructure scalability

7 Deployment Management

7.1 AWS Elastic Beanstalk

7.2 AWS CloudFormation

7.3 Blue/Green and Canary deployments

8 DevOps and Automation

8.1 Infrastructure as Code (IaC)

8.2 AWS OpsWorks

8.3 CI/CD pipelines with AWS CodePipeline, CodeBuild,and CodeDeploy

9 Monitoring and Troubleshooting

9.1 AWS CloudWatch
9.2 CloudTrail for auditing
9.3 Troubleshooting performance and operational issues

10 Databases

10.1 AWS RDS (Relational Database Service)
10.2 Amazon DynamoDB
10.3 Data warehousing with Amazon Redshift

11 Specialty Services

11.1 AWS Lambda and serverless architecture
11.2 AWS Elastic Container Service (ECS)
11.3 AWS Global Accelerator

12 Case Studies and Best Practices

12.1 Real-world architectural scenarios
12.2 Best practices for various industries and use cases