**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU -27**

Registration Number:

Date & Session

**BCA – V SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2023**

**(Examination conducted in November/December 2023)**

**CAVO1: AWS -Cloud Practitioner Essentials**

**(For Current Batch Students only)**

**Time: 2 Hours Max Marks: 60**

**This paper contains 2 printed pages and 3 parts**

**PART-A**

**Answer all FIVE questions (2 X 5 = 10)**

1. What is the AWS shared responsibility model?
2. Explain the concept of auto-scaling in Amazon EC2 instances.
3. Synthesize a comprehensive strategy for disaster recovery in AWS, incorporating services like Amazon S3, Amazon RDS, and AWS Backup. Explain how each service contributes to the strategy.
4. Assess the impact of adopting Amazon VPC on an organization's network security and connectivity. Highlight the benefits and potential challenges of implementing a Virtual Private Cloud.
5. Amazon charges are based on actual usage of the service in which all four areas.

**PART- B**

**Answer any FIVE questions (4 X 5 = 20)**

1. Evaluate the benefits and risks of using serverless computing with AWS Lambda for mission-critical applications. Provide recommendations for ensuring reliability and addressing potential challenges.
2. Imagine you are responsible for deploying a web application on AWS. Describe the steps you would take to deploy the application using AWS Elastic Beanstalk.
3. List out best practices to be considered while choosing the optimal compute service or services.
4. Compare Amazon S3 and Amazon S3 Glacier with respect to Object Storage.
5. Analyze the benefits and limitations of using Amazon RDS compared to managing a database on your own EC2 instances. Provide examples of scenarios where each approach would be more suitable.
6. Explain the key differences between unmanaged and managed AWS solutions, and provide examples of scenarios where each type of solution is more suitable?
7. What are the key factors that influence and determine the overall availability of an application in a cloud-based environment

**PART- C**

**Answer any THREE questions (10 X 3 = 30)**

1. a. Explain Amazon Route 53. [5]

b. Perform basic functions in Amazon EC2 to build a virtual

 computing environment. [5]

1. a. Perform functions in Amazon EBS to build an Amazon EC2 storage

 solution. [6]

 b. Explain the features of Amazon Aurora. [4]

1. Identify how Amazon CloudWatch enables you to monitor AWS resources

and applications in real time. [10]

1. a. Explain the three available types of Elastic Load Balancing? [5]

b. Describe the five design principles that can improve performance

 efficiency. [5]