Enrollment No......................................

Faculty of Engineering
End Sem Examination May-2023
OE00074 Cloud Web Services

Programme: B.Tech.   Branch/Specialisation: All

Duration: 3 Hrs.   **Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

Q.1 i. What does S3 stand for in AWS?   1
       (a) Simple storage service   (b) Standard storage service
       (c) Simple standard storage   (d) Simple standard service

    ii. In AWS, IAM identities are categorized into how many parts?   1
       (a) 1   (b) 2   (c) 3   (d) 4

   iii. Classless Addressing overcomes the problem of-   1
       (a) Address completion   (b) Address depletion
       (c) Address extraction   (d) All of these

    iv. What is the size of host bits in class B of IP address?   1
       (a) 4   (b) 8   (c) 16   (d) 32

     v. Which of the following allows you to create instances of the MySQL   1
       database to support your Web sites?
       (a) Amazon Elastic Compute Cloud
       (b) Amazon Simple Queue Service
       (c) Amazon Relational Database Service
       (d) Amazon Simple Storage System

    vi. Which of the following is a structured data store that supports   1
       indexing and data queries to both EC2 and S3?
       (a) CloudWatch   (b) Amazon SimpleDB
       (c) Amazon Cloudfront   (d) All of these

   vii. Which of the following is an online backup and storage system?   1
       (a) Amazon Elastic Compute Cloud
       (b) Amazon Simple Queue Service
       (c) Amazon Simple Notification Service
       (d) Amazon Simple Storage System

viii. Point out the correct statement: **1**
  (a) To create an image backup of an active system, you may need to stop all application
  (b) To create an incremental backup of an active system, you may need to stop all applications
  (c) Differential backup allows a system to do what is referred to as a bare metal restore
  (d) All of these

ix. Which of the following dynamically grow and shrink the load-balancing capacity to adjust to traffic demands? **1**
  (a) Amazon Cloud-front   (b) Elastic Caches
  (c) Amazon RDS   (d) Elastic Load Balancing

x. Which of the following provides a bridge between a company's existing network and the AWS cloud? **1**
  (a) Amazon Virtual Private Cloud
  (b) AWS Premium Support
  (c) Amazon Fulfillment Web Services
  (d) All of these

Q.2 i. What is MapReduce in cloud computing? Explain the features of MapReduce. **4**
  ii. What is cloud computing? Differentiate various cloud service models. **6**
OR iii. Explain the Simple Storage Service and Elastic Cloud Compute. **6**

Q.3 i. What is CIDR? Explain the difference between gateway and router. **4**
  ii. What is elastic block storage? Why do we use elastic block storage? **6**
OR iii. Explain the instances management and image management. **6**

Q.4 i. What is Amazon simple queue service? Explain the characteristic of Amazon simple queue service. **4**
  ii. Write a short note on: **6**
  (a) Virtual hosts   (b) Relational database Service
OR iii. What is Amazon Simple DB? How do we create a simple database on AWS? **6**

Q.5 i. What is data backup? Why is it important? **4**
  ii. Explain the database sharding with example. **6**
OR iii. What is a firewall? How do firewalls work? **6**

Q.6 Attempt any two:
  i. What is a load balancer in AWS? What are the various types of load balancers in AWS? **5**
  ii. What is the auto-scaling group? How do we use auto-scaling in Amazon EC2? **5**
  iii. Short note on: **5**
  (a) DHCP   (b) DNS

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Marking Scheme
OE00074 Cloud Web Services

Q.1   i)   What does S3 stand for in AWS?   1

      a.) Simple storage service

  ii)   In AWS, IAM identities are categorized into how many parts?   1

      c. 3

  iii)   Classless Addressing overcomes the problem of –   1
     b) address depletion

  iv)   What is the size of host bits in class B of IP address?   1
     c)16

  v)   Which of the following allows you to create instances of the   1
     MySQL database to support your Web sites?
     c) Amazon Relational Database Service

  vi)   Which of the following is a structured data store that supports   1
     indexing and data queries to both EC2 and S3?
     b) Amazon SimpleDB

  vii)   Which of the following is an online backup and storage system?   1
     d) Amazon Simple Storage System

  viii)   Point out the correct statement.   1
     a) To create an image backup of an active system, you may need
     to stop all application

  ix)   Which of the following dynamically grow and shrink the load-   1
     balancing capacity to adjust to traffic demands?
     D. Elastic Load Balancing

  x)   Which of the following provides a bridge between a company's   1
     existing network and the AWS cloud?
     a) Amazon Virtual Private Cloud

Q.2   i.   What is MapReduce in cloud computing? **(2 marks)** Explain the   4
     features of MapReduce? **(2 marks)**

  ii.   What is cloud computing? **(3 marks)** Differentiate between   6
     various cloud service models. **(3 marks)**

OR   iii.   Explain the Simple Storage Service **(3 marks)**and Elastic Cloud   6
     Compute. **(3 marks)**

Q.3   i.   What is CIDR? **(2 marks)**Explain the difference between gateway   4
     and router. **(2 marks)**

  ii.   What is elastic block storage? **(3 marks)** why do we use elastic   6
     block storage? **(3 marks)**

OR   iii.   Explain the instances management **(3 marks)**and image   6
     management. **(3 marks)**

Q.4   i.   What is Amazon simple queue service? **(2 marks)**Explain the   4
     characteristic of Amazon simple queue service? **(2 marks)**

  ii.   Write a short note on   6
     a) Virtual hosts   **(3 marks)** b) Amazon Simple DB**(3 marks)**

OR   iii.   What is Amazon Simple DB? **(3 marks)**How do we create a   6
     simple database on AWS? **(3 marks)**

Q.5   i.   What is data backup **(2 marks)**and why is it important? **(2 marks)**   4

  ii.   Explain the database sharding **(3 marks)**with example**(3 marks)**.   6

OR   iii.   What is a firewall? **(3 marks)**How do firewalls work? **(3 marks)**   6

Q.6   Attempt any two:

  i.   What is a load balancer in AWS? **(2.5 marks)** What are the   5
     various types of load balancers in AWS? **(2.5 marks)**

  ii.   What is the auto-scaling group? **(2.5 marks)**How do we use auto-   5
     scaling in Amazon EC2? **(2.5 marks)**

  iii.   Short note on   5
     DHCP **(2.5 marks)** b) DNS **(2.5 marks)**

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