2111N786   Candidate's Seat No : _____

IM.Sc AIML & DS Sem.-9 Examination
CC 502
1. Cloud Computing-II (AIML)

Time : 2-30 Hours]   November-2024   [Max. Marks : 70

Instructions: All questions are compulsory. Use of non-programmable scientific calculator is allowed.

Q.1   **(a)**   What is Cloud Computing? Explain the different types of clouds.   (07)

   (b)   What is AWS Identity and Access Management (IAM)?   (07)

OR

   (a)   Explain the concept of scalability in cloud computing and describe the different   (07)
   scalability options in AWS, including auto-scaling and load balancing.

   (b)   Describe the different security features in AWS.   (07)

Q.2   **(a)**   Compare the different Amazon storage services. When would you use each service and   (07)
   why?

   (b)   Explain the Amazon CloudFront service.   (07)

OR

   (a)   Describe the advantages of utilizing Amazon Storage Gateway to connect on-premises   (07)
   storage with AWS.ct

   (b)   What are the features of Amazon ML and how can you use it for predictive analytics?   (07)

Q.3   **(a)**   Explain Amazon Relational Database Service (RDS) and its features in detail.   (07)

   (b)   Explain the benefits of using Amazon DynamoDB, a NoSQL database service.   (07)

OR

   (a)   Describe the security features of Amazon RDS and how it ensures the security of your   (07)
   database.

   (b)   Explain the concept of cost-effectiveness in cloud computing.   (07)

Q.4   **(a)**   Explain how to use the Kinesis Client Library (KCL) and the limits of Amazon Kinesis.   (07)

   (b)   Compare the different analytics services offered by AWS   (07)

OR

   (a)   Explain the benefits of using Amazon Elastic MapReduce (EMR) for big data processing   (07)

   (b)   Describe the process of setting up a data pipeline using AWS Data Pipeline.   (07)

(P. T. O)

Q.5 Attempt any **SEVEN** out of **TWELVE:** (14)

    (1) What is Hybrid cloud

    (2) Explain PaaS

    (3) Explain scalability in cloud computing?

    (4) Describe - AWS load balancing

    (5) Explain data encryption in AWS

    (6) Explain EBS in AWS

    (7) What is a Volume Gateway in AWS Storage Gateway?

    (8) Describe the steps to delete an AWS Data Pipeline.

    (9) Describe the steps to set up Amazon EMR.

    (10) Full form of EBS & EFS

    (11) How do you empty a bucket in Amazon S3?

    (12) What are two primary limits of Amazon Kinesis?

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IM.Sc AIML & DS Sem.-9 Examination

CC 502

2. Project Development on Cloud AWS (DS)

Time : 2-30 Hours]   November-2024   [Max. Marks : 70

Instructions: All questions are compulsory. Use of non-programmable scientific calculator is allowed.

Q.1   **(a)**   What is Cloud Computing? Explain the different cloud service models.   (07)

      (b)   What is AWS Identity and Access Management (IAM)?   (07)

OR

      (a)   Explain the concept of scalability in cloud computing and how AWS provides scalability for web applications.   (07)

      (b)   Describe the different security features in AWS.   (07)

Q.2   **(a)**   Explain the Amazon CloudFront service.   (07)

      (b)   Explain the different Amazon storage services and its usage.   (07)

OR

      (a)   Explain the benefits of using Amazon Storage Gateway to integrate on-premises storage with AWS.   (07)

      (b)   What are the key features of Amazon Machine Learning, and how can it be applied for predictive analytics?   (07)

Q.3   **(a)**   Describe the Amazon Relational Database Service (RDS) and its features.   (07)

      (b)   Explain the benefits of using Amazon DynamoDB, a NoSQL database service.   (07)

OR

      (a)   Describe security features of Amazon RDS and how it ensures the security of your database.   (07)

      (b)   Describe the different pricing models in AWS, including pay-as-you-go and reserved instances.   (07)

Q.4   **(a)**   Describe the Amazon Kinesis service and its features.   (07)

      (b)   Compare the different analytics services offered by AWS   (07)

OR

      (a)   Explain the benefits of using Amazon Elastic MapReduce (EMR) for big data processing.   (07)

      (b)   Describe the process of setting up a data pipeline using AWS Data Pipeline.   (07)

Q.5 Attempt any **SEVEN** out of **TWELVE:** (14)

    (1) Differentiate between Public, Private, and Hybrid clouds.

    (2) Explain IaaS

    (3) What is scalability in cloud computing?

    (4) Describe - AWS load balancing

    (5) Explain data encryption in AWS

    (6) Explain EFS in AWS

    (7) What is Amazon Glacier

    (8) What is a Volume Gateway in AWS Storage Gateway?

    (9) Name two key features of AWS Data Pipeline.

    (10) Mention two benefits of using Amazon EMR.

    (11) Full form of KCL & EMR

    (12) Describe the process to delete an object from Amazon S3.

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