**18CSD22**

**Hall Ticket Number:**

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| **III/IV B.Tech (Regular) DEGREE EXAMINATION** | | | |
| **August, 2021** | **Computer Science & Engineering** | | |
| **Sixth Semester** | **Cloud Programming** | | |
| **Time:** Three Hours | | **Maximum: 5**0 Marks | |
| *Answer Question No. 1 Compulsorily.* | | | (10X1 = 10 Marks) |
| *Answer* ***ANY ONE*** *question from each Unit.* | | | (4X10=40 Marks) |

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| 1. | a) | Define Cloud Computing. | CO1 | |  |
|  | b) | List the characteristics of cloud computing | CO1 | |  |
|  | c) | What is Software as a Service? | CO1 | |  |
|  | d) | Write about features of EC2 | CO2 | |  |
|  | e) | List the types of EC2 instances | CO2 | |  |
|  | f) | What is AMI? | CO2 | |  |
|  | g) | What is shard? | CO3 | |  |
|  | h) | What is Amazon S3? What is the maximum size of an Amazon S3 bucket object. | CO3 | |  |
|  | i) | What is Auto Scaling? | CO4 | |  |
|  | j) | Define SQL | CO4 | |  |
| **Unit - I** | | | | | |
| 2. | a) | Describe the cloud architecture with a neat sketch | CO1 | **5M** | |
|  | b) | List the phases of cloud migration. | CO1 | **5M** | |
|  |  | **(OR)** |  |  | |
| 3. | a) | Explain in detail about cloud deployment models with neat diagrams. | CO1 | **5M** | |
|  | b) | What are the actors and their roles in a typical cloud ecosystem? | CO1 | **5M** | |
| **Unit - II** | | | | | |
| 4. | a) | What is SQS? Explain managing SQS using management console. | CO2 | **5M** | |
|  | b) | Write a java program to add and consume messages from Amazon SQS Queue. | CO2 | **5M** | |
|  |  | **(OR)** |  |  | |
| 5. | a) | List out the steps needed to create an EC2 instance using AWS management console | CO2 | **5M** | |
|  | b) | Write a JAVA program to create security group, keypair, EC2 instance and describe instance. | CO2 | **5M** | |
| **Unit - III** | | | | | |
| 6. | a) | Explain the features of Amazon S3. | CO3 | **5M** | |
|  | b) | Design a Java Web Application to add images to a AWS S3 Bucket Storage and display them. | CO3 | **5M** | |
|  |  | **(OR)** |  |  | |
| 7. | a) | Discuss the features of AWS Kinesis Stream | CO3 | **5M** | |
|  | b) | Write and explain the commands to perform following operations on Amazon Kinesis Streams using AWS SDK   1. create-stream 2. describe-stream 3. increase-stream-retention-period 4. decrease-stream-retention-period | CO3 | **5M** | |
| **Unit - IV** | | | | | |
| 8. | a) | What is Amazon RDS? Explain its characteristics. | CO4 | **5M** | |
|  | b) | Develop a Java application to perform CRUD operations on a AWS Hosted MySQL Server database table. Specify the table structure. | CO4 | **5M** | |
|  |  | **(OR)** |  |  | |
| 9. | a) | Define NoSQL. Explain the various Database types supported by AWS. | CO4 | **5M** | |
|  | b) | Develop a .NET Console Application to access AWS DynamoDB table. Writethe steps involved in the program development. | CO4 | **5M** | |

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