MIT ACADEMY OF ENGINEERING

COURSE CODE: CS353T **22 DECEMBER 2023**

TY BTECH SEMESTER-V 2019 REGULAR 2023-2024 EXAMINATION

DEPARTMENT OF COMPUTER ENGINEERING

END SEMESTER EXAMINATION

CLOUD COMPUTING FOUNDATIONS

TIME : 2 HOURS **MAX MARKS : 50**

TOTAL NO OF QUESTIONS: 05 **TOTAL NO OF PRINTED PAGES: 02**

INSTRUCTIONS TO CANDIDATES:

1. Assume suitable data wherever necessary
2. Non programmable scientific calculators are allowed
3. Black figures to the right indicate full marks

1	**a)**	Explain which database service is supported by AWS for the following types of databases with its features in short: 1. Relational database 2. Key-value based database 3. Document based database 4. In memory database 5. Graph based database	**[10]**	**CO4**	**L3**
2	**a)**	You need to create 2 public subnets and 2 private subnets. Explain which VPC Components will be used for the above scenario	**[4]**	**CO5**	**L4**
	b)	What is the need of VPC Peering? Explain its advantages and disadvantages	**[4]**	**CO5**	**L3**
3	**a)**	Explain various types of load balancers supported by AWS	**[6]**	**CO6**	**L2**
	b)	What is cross zone load balancing? Explain the behaviour of load balancer when the cross zone load balancing is enabled as well disabled with suitable example	**[6]**	**CO6**	**L4**

4	**a)**	What is the need of Autoscaling Groups? Explain the significance of minimum, desired and maximum fields of autoscaling groups	**[4]**	**CO6**	**L3**
	b)	With suitable diagram explain the concept of lifecycle hook in autoscaling groups	**[6]**	**CO6**	**L3**
	c)	Explain various scaling policies supported by autoscaling groups	**[6]**	**CO6**	**L2**
5	**a)**	What is need of CloudFront service provided by AWS?	**[4]**	**CO5**	**L2**

MIT ACADEMY OF ENGINEERING

COURSE CODE: CS353T **29 JANUARY 2024**

TY BTECH SEMESTER - V RE-EXAMINATION BACKLOG 2019 PATTERN 2023 - 2024

DEPARTMENT OF COMPUTER ENGINEERING

RE-EXAMINATION

CLOUD COMPUTING FOUNDATIONS

TIME : 3 HOURS **MAX MARKS : 80**

TOTAL NO OF QUESTIONS: 04 **TOTAL NO OF PRINTED PAGES: 02**

INSTRUCTIONS TO CANDIDATES:

1. Assume suitable data wherever necessary
2. Non programmable scientific calculators are allowed
3. Black figures to the right indicate full marks

1	**a)**	Explain the advantages of moving the applications on Cloud Computing	**[6]**	**CO1**	**L2**
	b)	Explain various Cloud Computing service models	**[6]**	**CO1**	**L2**
	c)	What is the need of placement groups? Explain various types of placement groups provided by AWS with their application areas	**[8]**	**CO1**	**L3**
2	**a)**	Which are the components of IAM policy? Explain with suitable example by creating a policy for EC2 instances	**[6]**	**CO2**	**L3**
	b)	With suitable example explain the concept of Permission Boundary and Service Control Policy	**[8]**	**CO2**	**L3**
	c)	Explain various storage classes available in Amazon S3	**[6]**	**CO3**	**L2**
3	**a)**	Explain any four types of database services supported by AWS	**[8]**	**CO3**	**L2**
	b)	Explain various components of VPC	**[8]**	**CO4**	**L2**
	c)	What is need of CloudFront service provided by AWS?	**[4]**	**CO5**	**L2**

4	**a)**	Explain various types of load balancers supported by AWS	**[6]**	**CO6**	**L2**
	b)	What is the need of Autoscaling Groups? Explain the significance of minimum, desired and maximum fields of autoscaling groups	**[6]**	**CO6**	**L3**
	c)	Explain various scaling policies supported by autoscaling groups	**[8]**	**CO6**	**L2**

MIT ACADEMY OF ENGINEERING

COURSE CODE: CS353T **25 SEPTEMBER 2023**

TY BTECH SEMESTER-V 2019 REGULAR 2023-2024 EXAMINATION

DEPARTMENT OF COMPUTER ENGINEERING

MID SEMESTER EXAMINATION

CLOUD COMPUTING FOUNDATIONS

TIME : 2 HOUR **MAX MARKS : 50**

TOTAL NO OF QUESTIONS: 04 **TOTAL NO OF PRINTED PAGES: 2**

INSTRUCTIONS TO CANDIDATES:

1. Assume suitable data wherever necessary
2. Non programmable scientific calculators are allowed
3. Black figures to the right indicate full marks

1	**a)**	Define Cloud Computing and explain the benefits of Cloud Computing	**[6]**	**CO1**	**L2**
	b)	Explain various Cloud Computing deployment models	**[6]**	**CO1**	**L2**
2	**a)**	Explain which EC2 instance types will be useful for running the following applications 1. Scientific modeling 2. Real time data analysis 3. Deep learning	**[3]**	**CO2**	**L3**
	b)	You want to deploy an application on EC2 instance. The application is using a propritory tool which is having a hardware lock. Which EC2 instance tenancy will be suitable for this situationand why?	**[3]**	**CO2**	**L4**

	c)	Which EC2 placement group will be used for running the following applications on EC2 instance? 1. High performance computing application 2. HDFS application 3. Highly available web application like Facebook	**[3]**	**CO2**	**L3**
	d)	What are spot instances? How spot instances are different from On-Demand instances?	**[3]**	**CO2**	**L3**
3	**a)**	Explain with suitable example, various components of an IAM Policy	**[4]**	**CO5**	**L3**
	b)	Explain with suitable example, various types of policies available in IAM for granting maximum permissions	**[6]**	**CO5**	**L3**
	c)	As a security specialist in AWS platform you have to decided whether to use IAM policy or IAM role for granting the permissions. Explain with suitable example when to use IAM policy and when to use IAM Role	**[4]**	**CO5**	**L3**
4	**a)**	Explain various storage classes available in Amazon S3	**[6]**	**CO3**	**L3**
	b)	Explain how Amazon S3 versioning is useful with suitable example.	**[3]**	**CO3**	**L3**
	c)	Your organization wants to transfer 10 TB of data to Amazon S3. As a storage specialist which S3 feature will you use so that the data transfer will be done in minimum amount of time?	**[3]**	**CO3**	**L4**

MIT ACADEMY OF ENGINEERING

COURSE CODE: CS353T **03 JUNE 2022**

TY BTECH SEMESTER - V RE-EXAMINATION 2021 - 2022

DEPARTMENT OF COMPUTER ENGINEERING

END SEMESTER EXAMINATION

CLOUD COMPUTING FOUNDATIONS

TIME : 3 HOURS **MAX MARKS : 100**

TOTAL NO OF QUESTIONS: 06 **TOTAL NO OF PRINTED PAGES: 02**

INSTRUCTIONS TO CANDIDATES:

1. Assume suitable data wherever necessary
2. Non programmable scientific calculators are allowed
3. Black figures to the right indicate full marks

1	**a)**	Explain the need for Multi Factor Authentican as well as the process to enable Multi Factor Authentication	**[6]**	**CO1**	**L3**
	b)	Explain the difference between IAM User, IAM Role and IAM Policy	**[6]**	**CO1**	**L3**
	c)	Explain various Cloud Deployment Models	**[4]**	**CO1**	**L2**
2	**a)**	Explain various options to be selected while launching an EC2 instance	**[6]**	**CO2**	**L3**
	b)	Which rules will be added in Security Group which are attached to an EC2 isntance	**[6]**	**CO2**	**L4**
	c)	What is the syntax to connect to an EC2 instance using a key pair?	**[4]**	**CO2**	**L3**
3	**a)**	Explain S3 LifeCycle Process	**[8]**	**CO3**	**L3**
	b)	Which options can be given while creating a S3 Bucket?	**[8]**	**CO3**	**L3**

4	**a)**	What is the difference between Amazon RDS and Amazon Aurora?	**[6]**	**CO4**	**L4**
	b)	Why In-Memory databases are used? Explain any one In-Memory Database Service available with AWS	**[6]**	**CO4**	**L4**
	c)	Explain the features of Amazon DynamoDB	**[4]**	**CO4**	**L3**
5	**a)**	What is the need for Amazon VPC? Explain various components available in Amazon VPC	**[8]**	**CO5**	**L3**
	b)	What is the difference between Public IP, Private IP and Elastic IP?	**[4]**	**CO5**	**L3**
	c)	Explain the need of Bastian Host and the steps to use it	**[6]**	**CO5**	**L4**
6	**a)**	What do you mean by high availability and fault tolerance? Explain the steps used to achieve high availability and fault toleance in AWS.	**[18]**	**CO6**	**L5**