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**NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA**  
(An Autonomous Institute Affiliated to AKTU, Lucknow)

**B.Tech**

**SEM: VI - THEORY EXAMINATION (2022-2023 )**

**Subject: Cloud Storage Management**

**Time: 3 Hours**

**Max. Marks: 100**

**General Instructions:**

**IMP:** Verify that you have received the question paper with the correct course, code, branch etc.

1. This Question paper comprises of **three Sections -A, B, & C.** It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.

2. Maximum marks for each question are indicated on right -hand side of each question.

3. Illustrate your answers with neat sketches wherever necessary.

4. Assume suitable data if necessary.

5. Preferably, write the answers in sequential order.

6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

**SECTION A**

**20**

**1. Attempt all parts:-**

- 1-a. Select private cloud from following. (CO1) 1
- (a) Amazon EC2
  - (b) Azure
  - (c) Eucalyptus
  - (d) Google App Engine
- 1-b. Cloud computing is a \_\_\_\_\_ system and it is necessarily unidirectional in nature. (CO1) 1
- (a) stateless
  - (b) stateful
  - (c) reliable
  - (d) all of the mentioned
- 1-c. Select one of the following which is NOT a security challenge faced in cloud storage management. (CO2) 1
- (a) Data loss

- (b) Data breaches
- (c) Data theft
- (d) Data corruption
- 1-d. Chose one option which is NOT a potential security risk in cloud storage. (CO2) 1
- (a) Insider attacks
- (b) Third-party access
- (c) Server downtime
- (d) Lack of integration with legacy systems
- 1-e. The following protocol is used for discovering and retrieving objects from a cloud. (CO3) 1
- (a) SMTP
- (b) OCCI
- (c) SOAP
- (d) HTTP
- 1-f. The following feature make cloud-based storage systems highly reliable. (CO3) 1
- (a) Redundant networks
- (b) Redundant name servers
- (c) Replication
- (d) All of the mentioned
- 1-g. Select the following cloud storage that is consumed by file sharing software. (CO4) 1
- (a) Managed
- (b) Replicated
- (c) Unmanaged
- (d) None of the mentioned
- 1-h. Snowball devices are designed to be requested and used within \_\_\_\_\_ AWS Region. (CO4) 1
- (a) Multi
- (b) Global
- (c) Single
- (d) All of the mentioned
- 1-i. Google Cloud Storage includes a free tier that includes\_\_\_\_\_. (CO5) 1
- (a) 10 GB of free storage

- (b) 15 GB of free storage
- (c) 20 GB of free storage
- (d) 30 GB of free storage

- 1-j. Cloud data management providers are committed to providing the best services and capabilities. When applications need updating, cloud providers run these updates \_\_\_\_\_.(CO5) 1
- (a) instantly
  - (b) eventually
  - (c) automaticall
  - (d) manually

## 2. Attempt all parts:-

- 2.a. Define Block storage. (CO1) 2
- 2.b. Explain digital assets in cloud storage. (CO2) 2
- 2.c. Define Network-based storage virtualization. (CO3) 2
- 2.d. Define 'Lift and Shift' strategy. (CO4) 2
- 2.e. Confer 2017's and 2018's black Friday. (CO5) 2

## SECTION B

30

## 3. Answer any five of the following:-

- 3-a. Define I/O connectivity related cloud storage with suitable example. (CO1) 6
- 3-b. Discuss file storage with their advantage and disadvantage. (CO1) 6
- 3-c. Define "data infrastructure" for cloud storage with suitable example. (CO2) 6
- 3-d. Define dark territories in cloud data center with suitable example. (CO2) 6
- 3.e. Brief Amazon FSx. (CO3) 6
- 3.f. Write short notes on: (i) AWS Snow Family (ii) AWS Snow Edge (CO4) 6
- 3.g. Discuss cloud specific challenges encountered by Walgreens "A pharma company". (CO5) 6

## SECTION C

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## 4. Answer any one of the following:-

- 4-a. Discuss storage virtualization with suitable example and their scope. (CO1) 10
- 4-b. Explain Community cloud and it's application with suitable example. (CO1) 10

## 5. Answer any one of the following:-

- 5-a. Explain Security checklist in cloud security with suitable example and also discuss their advantage and disadvantage. (CO2) 10

5-b. Discuss any six Cloud Data Security Issues with suitable real life example. (CO2) 10

**6. Answer any one of the following:-**

6-a. Differentiate various storage media solutions over different parameters like: Performance, Cost, Capacity and Endurance. (CO3) 10

6-b. Detail the functionalities of storage solutions and also draw the storage system architecture with API interaction. (CO3) 10

**7. Answer any one of the following:-**

7-a. Differentiate IaaS Migration, PaaS migration and SaaS Migration. (CO4) 10

7-b. Discuss the role of Data Replication, Data Cleansing and Data Harmonization in Data Synchronization. (CO4) 10

**8. Answer any one of the following:-**

8-a. Explain the migration objective of SHOPIFY. (CO5) 10

8-b. Explain the statement "Achieving Burstable Scalability and Consistent Uptime Using AWS Lambda with TiVo". (CO5) 10

2022-23 Jan \_ June