Printed Page:-04 Subject Code:- ACSAI0611 Roll. No: NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA (An Autonomous Institute Affiliated to AKTU, Lucknow) **B.Tech** SEM: VI - THEORY EXAMINATION (2024-2025) **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 the right way how is data accessed in object storage. (CO1, K2) 1 By navigating through a hierarchical file system (a) By searching through a relational database (b) By accessing objects with their unique identifiers (c) By retrieving sequential bytes from the storage device (d) Select which of the following is an example of a block storage service. (CO1, K2) 1-b. 1 Amazon EBS (a) Google Drive (b) OneDrive (c) Dropbox (d) Select the right option which define the primary risk associated with disposing of 1-c. 1 digital assets and technology. (CO2, K2) (a) Data loss (b) Unauthorized access to sensitive information (c) Hardware malfunction (d) Network downtime

- 1-d. Choose one option which is NOT a potential security risk in cloud storage. (CO2, 1 K1)
 - (a) Insider attacks

- (b) Third-party access
- (c) Server downtime
- (d) Lack of integration with legacy systems
- 1-e. Redundancy has to be implemented at the ______ architectural level for effective results in cloud storage solutions. (CO3, K1)

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- (a) Lower
- (b) Middle
- (c) Higher
- (d) Any of the mentioned
- 1-f. By default, each Compute Engine virtual machine (VM) instance has/have ______boot persistent disk. (CO3, K1)
 - (a) Multi
 - (b) Single
 - (c) Dual
 - (d) None of the mentioned
- 1-g. The ______ is a standalone terminal application that you run on your local 1 workstation to do your data transfer. (CO4, K1)

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- (a) Snowball Family
- (b) Snowball Edge
- (c) Snowball client
- (d) None of the mentioned
- 1-h.
 Snowball devices are designed to be requested and used within _____ AWS 1

 Region. (CO4, K1)
 - (a) Multi
 - (b) Global
 - (c) Single
 - (d) All of the mentioned
- - (a) higher cost
 - (b) lower cost
 - (c) hidden cost
 - (d) simple cost
- 1-j. _____ allow IT to quickly deliver the exact amount of storage needed, whenever and 1 wherever it's needed. (CO5, K1)
 - (a) Cloud storage services
 - (b) backup services
 - (c) hardware services
 - (d) maintenance services

2. Atter	npt all parts:-	
2.a.	Define any two IT opportunities related to cloud storage. (CO1, K1)	2
2.b.	Explain some management related cloud storage issues. (CO2, K2)	2
2.c.	Define Redundancy and enlist its need in cloud storage. (CO3, K1)	2
2.d.	Outline Hot and Cold migration in VM migration. (CO4, K2)	2
2.e.	Explain AWS marketplace with suitable example. (CO5, K2)	2
<u>SECTI</u>	<u>ON-B</u>	30
3. Ansv	ver any <u>five</u> of the following:-	
3-a.	Explain wireless access point with their advantage and disadvantage. (CO1, K2)	6
3-b.	Explain Para virtualization with suitable example. (CO1, K2)	6
3-c.	Explain desktop servers with proper flow diagram and suitable example. (CO2, K2)	6
3-d.	Explain Security checklist in cloud security with suitable example. (CO2, K2)	6
3.e.	Discuss the two performance modes of Amazon EFS. (CO3, K2)	6
3.f.	Enlist and brief the services in AWS Transfer Family. (CO4, K2)	6
3.g.	Cloud-based data are generally more secure than data stored on a home computer connected to the Internet. Justify this statement in your words. (CO5, K3)	6
SECTION-C		50
4. Allov	Differentiate between Hybrid cloud and Community cloud with suitable	10
4-a.	example. (CO1, K4)	10
4-b.	Differentiate between File storage and Object storage with suitable example. (CO1, K4)	10
5. Ansv	ver any <u>one</u> of the following:-	
5-a.	Explain digital assets in cloud storage with suitable example and also discuss their advantage and disadvantage. (CO2, K2)	10
5-b.	Discuss any six applications related issues in cloud storage management with suitable example. (CO2, K2)	10
6. Ansv	ver any <u>one</u> of the following:-	
б-а.	Write short notes on: (i) Bucket (ii) Object in cloud storage (iii) Versioning (iv) Access control. (CO3, K2)	10
6-b.	An organization have tier 0, tier 1, tier 2 and tier 3 categories of data. Discuss these categories and provide cloud storage sloutions for these categories. (CO3, K2)	10
7. Ansv	ver any <u>one</u> of the following:-	
7-a.	Discuss the role of Data Replication, Data Cleansing and Data Harmonization in Data Synchronization. (CO4, K2)	10
7-b.	Differentiate AWS Transfer Family with Database Migration Services on the basis	10

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of their usage and functionalities. (CO4, K4)

8. Answer any one of the following:-

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- 8-a. Explain how the homelessness is removed with cloud powered solutions. (CO5, 10 K2)
- 8-b. Explain the role of AWS cloud in agriculture with suitable cases. (CO5, K2) 10

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