30/01/2024

Day - 2

1. Define Elasticity and scalability?
2. Define Agility?
3. List out some Aws Management and Administrative services?
4. Give some advantages of Regions?
5. What are the services that are available under Compute in Aws?
6. Differentiate between public, private and Hybrid cloud?
7. Illustrate the procedure to connect Aws Instance?
8. What is Disaster Recover? (Replica)
9. Define Autoscaling?
10. Define scale up and scale down?
11. Define Instance Family and some examples.

1A)- Elasticity is used to meet dynamic changes, where the resources need can increase / decrease.

- Scalability is always used to address the increase in workload in an organization.

2A) Agility is the ability to develop quickly, test and launch applications in a cloud-based environment.

3A) 1) Aws Identity and Access management (IAM)

2). Aws organizations

3) Aws key Management service

4) Aws cloud Trial

5) Aws config

6) Aws cloudwatch.

7) Aws cloud formation.

4A) * Advantages of Regions:

→ Disaster Recovery → Tolerance.

→ Low Latency → service Availability.

→ Global presence

→ Cost optimization.

✗ → Disaster Recovery.

→ scalability

5A) * Services available under Compute in AWS:-

i) (EC2) Elastic compute cloud

ii) (ECS) Elastic Container service

iii) AWS EC2 Auto scaling.

iv) Amazon RAS

v) Amazon EC2 Image Builder

6A)* Difference between Public, private and Hybrid :-

Features	Public	private	Hybrid
Ownership & Management	cloud provider	organization	Both
Access	shared	Restricted	Varies
security	Managed by provider	High level of control	Balance b/w security & flexibility
cost	Pay-as-you-go	High	cost varies
Control	Limited	Full	varies

7A) i) open AWS console and sign in into your Root Account.

ii) open EC_2

iii) select Launch Instance

iv) select session Manager for connection.

v) select Connect

vi) choose EC_2 Instance Connect

vii) verify user name and choose connect to open a terminal window.

8A) Disaster Recovery in cloud is a cloud based service that helps the organizations quickly recover their critical systems after a disaster.

9A) * Autoscaling is a cloud computing feature that automatically adjusts the no. of computational resources in a system based on the current workload

* Scale-up refers to increasing the resources like CPU, Memory or storage of a single virtual machine.

* Scale-down reducing the resources allocated to an instances when demand decreases

10A) Instance family is a group of instance types that have similar compute, memory and storage capabilities.

* Some Instance families are -

→ General purpose Instances
→ Compute optimized Instances
→ Memory - optimized Instances
→ Storage - optimized Instances
→ Accelerated computing Instances.