



## Cloud Computing

### Assignment-Week 4

#### TYPE OF QUESTION: MCQ/MSQ

Number of questions: 10

Total mark: 10 X 1 = 10

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#### **QUESTION 1:**

SQL Azure is a cloud-based relational database service that is based on:

- (a) Oracle
- (b) SQL Server
- (c) MySQL
- (d) None

**Correct Answer:** b

**Solution:** SQL Azure is Microsoft's cloud database service based on SQL Server database technology and built on Microsoft's Windows Azure cloud computing platform

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#### **QUESTION 2:**

Microsoft Azure provides

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- (a) SaaS
  - (b) PaaS
  - (c) IaaS
  - (d) None
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**Correct Answer:** a, b, c

**Solution:** Microsoft Azure, formerly known as Windows Azure, is Microsoft's public cloud computing platform. It provides a range of cloud services, including those for compute, analytics, platform, storage and networking

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#### **QUESTION 3:**

Azure App Service plan defines

- (a) Region
- (b) Instance size
- (c) Scale count
- (d) None

**Correct Answer:** a,b,c

**Solution:** An App Service plan defines a set of compute resources for a web app to run. Each App Service plan defines:

- I. Region (West US, East US, etc.)
- II. Number of VM instances



III. Size of VM instances (Small, Medium, Large)

IV. Pricing tier (Free, Shared, Basic, Standard, Premium, PremiumV2, Isolated, Consumption)

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**QUESTION 4:**

The OpenStack component - Glance monitors and meters the OpenStack cloud for billing, benchmarking. State True or False.

- a) True
- b) False

**Correct Answer:** b

**Solution:** Glance image services include discovering, registering, and retrieving virtual machine images. Ceilometer provides telemetry services, which allow the cloud to provide billing services to individual users of the cloud.

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**QUESTION 5:**

GCP: Choose the correct option(s)

- a) To run your web-application, you need to configure only the Google Storage bucket
- b) “gcloud app deploy app.yaml” the command can be used to deploy your app to app-engine
- c) After launching your application to app-engine anyone can view the app at [http://\[YOUR\\_PROJECT\\_ID\].appspot.com](http://[YOUR_PROJECT_ID].appspot.com)
- d) “gcloud app browse” – can be used to start the local development server for the application

**Correct Answer:** b, c

**Solution:** a) is wrong because you can't run your web-app only configuring storage bucket, you need a PaaS configuration. Option d) is incorrect as that command is used to view web-app.

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**QUESTION 6:**

In OpenStack, the different components of Nova (e.g. scheduler, Compute, api etc.) communicate via:

- (a) Message Queues
- (b) Neutron
- (c) Conductor
- (d) Swift

**Correct Answer:** a



**Solution:** Nova is comprised of multiple server processes, each performing different functions. The user-facing interface is a REST API, while internally Nova components communicate via an RPC message passing mechanism

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**QUESTION 7:**

In OpenStack, \_\_\_\_\_ is a system for managing networks and IP addresses.

- (a) Nova
- (b) Keystone
- (c) Neutron
- (d) None of these

**Correct Answer: c**

**Solution:** Neutron provides the networking capability for OpenStack. It helps to ensure that each of the components of an OpenStack deployment can communicate with one another quickly and efficiently.

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**QUESTION 8:**

Cloud DataStore in GCP is a NoSQL document database built for automatic scaling, high performance, and ease of application development

- a) True
- b) False

**Correct Answer: a**

**Solution:** Google Cloud Datastore is a highly scalable, fully managed NoSQL database service offered by Google on the Google Cloud Platform. Cloud Datastore is built upon Google's Bigtable and Megastore technology.

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**QUESTION 9:**

GCP: Which one is/are correct statement(s)?

- a) You can reuse the project ID only after you delete the previous project in GCP
- b) A CNAME alias is a DNS record that lets you use a URL from your own domain to access resources, such as a bucket and objects, in Cloud Storage using your custom domain URL
- c) "Multi-Regional" Storage class is used for the bucket to stream videos and host hot web content accessed frequently around the world
- d) "Nearline" Storage class is used for the bucket to store data accessed frequently in one part of the world

**Correct Answer: c, b**

**Solution:** We cannot use the same project ID as it is the unique identifier. Nearline Storage is appropriate for data backup, disaster recovery, and archival storage while Regional Storage enables to store data at lower cost and data being stored in a specific regional location, instead of having redundancy distributed over a large geographic area.

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**QUESTION 10:**

OpenStack: Which IP use is preferred for transferring data to a VM from

- (i) Another VM in the same cloud
- (ii) One organization's network-
  - (a) i. Floating IP, ii. Private IP
  - (b) i. Private IP, ii. Floating IP
  - (c) Floating IP in both cases
  - (d) Private IP in both cases

**Correct Answer: b**

**Solution:** Compute assigns a private IP address to each VM instance. Compute makes a distinction between fixed IPs and floating IP. Fixed IPs are IP addresses that are assigned to an instance on creation and stay the same until the instance is explicitly terminated. Floating IPs are addresses that can be dynamically associated with an instance. A floating IP address can be disassociated and associated with another instance at any time. A user can reserve a floating IP for their project.

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