**Understanding OpenStack Cloud Solution – Series II**

**Module 3 – OpenStack Neutron Service**

1. **In Network Technologies, \_\_\_\_\_\_ network where, all the instances will reside on the same network, which can also be shared by the host.**
   1. **Flat**
   2. **No VLAN**
   3. **GRE**
   4. **VXLAN**

The correct answer is option a –Flat

Explanation for correct answer:

* In Network Technologies, Flat network where, all the instances will reside on the same network, which can also be shared by the host.

Explanation for Wrong answer:

* Option b– This option is incorrect, as VLAN network where user can create multiple networks using VLAN ids, which corresponds to VLANs present in the physical network.
* Option c and Option d – These options are incorrect as GRE and VXLAN, which create an overlay network to activate and control communication between two compute instances.

1. **Is this statement true:**

**Self-service network is an external network, while Provider network is internal network**

The correct answer is False.

Explanation for correct answer:

* Yes, this statement is false. The Neutron Networking Options are of two types of networks - Provider network and Self-service network, where Provider network is an external network, while self-service network is internal network.

Explanation for Wrong answer:

* No, this statement is false. The Neutron Networking Options are of two types of networks - Provider network and Self-service network, where Provider network is an external network, while self-service network is internal network.

1. **\_\_\_\_\_\_\_\_\_ acts as a virtual firewall for all computing instances to control inbound and outbound traffic.** 
   1. **Secure group**
   2. **Traffic group**
   3. **Security group**
   4. **Computing group**

The correct answer is option c - Security group

Explanation for correct answer:

* Security group acts as a virtual firewall for all computing instances to control inbound and outbound traffic. Security group is a collection of network access rules

Explanation for Wrong answer:

* The option a, b and d are wrong, because these options are not related to OpenStack Neutron Service

1. Which of the following is correct for OpenStack - Neutron Service?
   1. network as-a-service
   2. storage as-a-service
   3. platform as-a-service
   4. infrastructure as-a-service

The correct answer is option a - network as-a-service

Explanation for correct answer:

* Neutron is a network as-a-service, which is responsible for providing networking to running instances within OpenStack. This also provides API for defining, configuring and using the networks.

 Explanation for Wrong answer:

* The option b, c and d are wrong, because these options are not related to OpenStack Neutron Service

1. **Is this statement true:**

**OpenStack Networking (neutron) allows you to create and attach interface devices managed by other OpenStack services to networks.”**

The correct answer is True.

Explanation for correct answer:

* Yes, this statement is True. Neutron is OpenStack networking service which allows us to create and attach a networking interface to the network, which we will manage by multiple OpenStack services.

Explanation for Wrong answer:

* No, this statement is True. Neutron is OpenStack networking service which allows us to create and attach a networking interface to the network, which we will manage by multiple OpenStack services.

**Module 4 – OpenStack - Cinder Service**

1. **Which of the following is not related to cinder-volume.**
   1. **Manager**
   2. **Drivers**
   3. **Admin**
   4. **Multi-tasking**

The correct answer is option d - Multitasking

Explanation for correct answer:

* Multi-tasking is incorrect, It is Multi-threading, so we can create any number of volumes though Cinder volume services concurrently..

Explanation for Wrong answer:

* Option a - Manager: Generic code to implement API
* Option b - Drivers: Called by Manager, contains back-end-specific code to communicate with various storage types (e.g., Linux LVM, storage controllers from various vendors,distributed file systems, etc.)
* Option c - Admin: can run multiple cinder-volume instances, each with its own configuration file describing settings and the storage back-end

1. **Is this statement true:**

**Cinder Service is an OpenStack block storage service.**

The correct answer is True

Explanation for correct answer:

* Yes, this statement is true. Cinder Service is an OpenStack block service. Cinder manages the creation, attaching and detaching of persistence volumes to compute instances. Compute instance is nothing but virtual machines.

Explanation for Wrong answer:

* No, this statement is true. Cinder Service is an OpenStack block service. Cinder manages the creation, attaching and detaching of persistence volumes to compute instances. Compute instance is nothing but virtual machines.

1. **In Cinder architecture, Cinder service has four sub services, which of the following service is not provided by the Cinder project**
2. **OpenStack Cinder API**
3. **OpenStack Cinder Backup**
4. **OpenStack Cinder Volume**
5. **OpenStack Cinder Secure**

The correct answer is option d - OpenStack Cinder Secure

Explanation for correct answer:

* + OpenStack Cinder Secure **is incorrect. The correct answer is Cinder scheduler will take all the calls or whatever calls are queuing in the message queue**.

Explanation for Wrong answer:

* Option a - The Cinder API will segregate all those calls to Cinder backup, scheduler and the Cinder volume services.
* Option b – The Cinder backup service is used to create a backup or snapshot of volume.
* Option c - The Cinder volume service is the service which creates the volume.

1. **Is this statement true:**

**In the persistent volume, even if we delete the instance we can still have the data present on volume.**

The correct answer is True

Explanation for correct answer:

* Yes, this statement is true. In the persistent volume, even if we delete the instance we can still have the data present on volume.

Explanation for Wrong answer:

* No, this statement is true. In the persistent volume, even if we delete the instance we can still have the data present on volume.

1. **In Cinder API, majorly there are four operations for the Cinder services. Which of the following is incorrect?** 
   1. **Volume creation**
   2. **Volume deletion**
   3. **Volume list**
   4. **Volume command**

The correct answer is option d – Volume command

Explanation for correct answer:

* In Cinder API, majorly there are four operations for the Cinder services. Volume creation, deletion, list and show. And Volume command is incorrect.

Explanation for Wrong answer:

* In Cinder API, majorly there are four operations for the Cinder services. Volume creation, deletion, list and show. And Volume command is incorrect.

**Module 5 – OpenStack - Swift Service**

1. **\_\_\_\_\_\_\_ is highly scalable and can manage large amounts of unstructured data at low cost through a RESTful http API.**
   1. **Swift**
   2. **Swift schedulerAPI**
   3. **Swift messageAPI**
   4. **Swift computeAPI**

The correct answer is option a – Swift

Explanation for correct answer:

* Swift is a OpenStack object storage which supports multi-tenant object storage system. It is highly scalable and can manage large amounts of unstructured data at low cost through a RESTful http API.

Explanation for Wrong answer:

* Option b, c and d are incorrect, because Swift is a OpenStack object storage which supports multi-tenant object storage system. It is highly scalable and can manage large amounts of unstructured data at low cost through a RESTful http API. And they are not related to OpenStack - Swift Service

1. **Is this statement true:**

**Swift can be implemented as a standalone storage system or it can be a part of a cloud compute environment.**

The correct answer is true

Explanation for correct answer:

* Yes, this statement is true. Swift can be implemented as a standalone storage system or it can be a part of a cloud compute environment.

Explanation for Wrong answer:

* No, this statement is true. Swift can be implemented as a standalone storage system or it can be a part of a cloud compute environment.

1. **Which of the following component manages the mapping of containers or folder within object storage?**
   1. **Object servers**
   2. **Container servers**
   3. **Account servers**
   4. **Message Queue**

The correct answer is option b – **Container servers**

Explanation for correct answer:

* Containers manages the mapping of containers or folder within object storage. It also keeps track of available objects on the storage.

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Explanation for Wrong answer:

* Option a – Object server holds the actual objects, such as files, video, MP3, any unstructured data, the object server holds on the storage nodes.
* Option c - Account Servers manages accounts defined with object storage. It also keeps track of containers available on the storage.
* Option d – Message queue acts as a broker to handle interactions between services, currently based on RabbitMQ.

1. **Is this statement true:**

**Swift Ring will decide the actual location of the object.**

The correct answer is true

Explanation for correct answer:

* Yes, this statement is true. Swift Ring will decide the actual location of the object. And in Swift we have three components, account, container, and object.

Explanation for Wrong answer:

* No, this statement is true. Swift Ring will decide the actual location of the object. And in Swift we have three components, account, container, and object.

1. **\_\_\_\_\_\_\_\_ server accepts OpenStack Object storage API and raw http requests to upload files, modify metadata and create containers.**
   1. **Client server**
   2. **Proxy server**
   3. **Admin server**
   4. **Database server**

The correct answer is option b – Nova compute node

Explanation for correct answer:

* Proxy server accepts OpenStack Object storage API and raw http requests to upload files, modify metadata and create containers. It also serves file or container listings to web browsers.

Explanation for Wrong answer:

* Option a, c and d is not related to OpenStack Swift Service

**Module 6 – OpenStack – Service Status Check**

1. **In the command line to check status of all the services combined, we need to install the file set named \_\_\_\_\_\_\_.**
   1. **openstack-utils**
   2. **openstack-scheduler**
   3. **openstack-swift**
   4. **openstack-compute**

The correct answer is option a – openstack-utils

Explanation for correct answer:

* In the command line to check status of all the services combined, we need to install the file set named OpenStack utils on controller node.

Explanation for Wrong answer:

* Option b, c and d are incorrect, because In the command line to check status of all the services combined, we need to install the file set named OpenStack utils on controller node. And these options are not related to OpenStack – Service Status Service

1. **Is this statement true:**

**We can check the status of all the services through command line as well as using Horizon dashboard**

The correct answer is true

Explanation for correct answer:

* Yes, this statement is true. We can check the status of all the services through command line as well as using Horizon dashboard.

Explanation for Wrong answer:

* No, this statement is true. We can check the status of all the services through command line as well as using Horizon dashboard.

1. **Which of the following command will list all the services along with the status of each of the services?**
   1. **object-status**
   2. **openstack-status**
   3. **account-status**
   4. **service-status**

The correct answer is option b – **openstack-status**

Explanation for correct answer:

* openstack-status is the command which will list all the services along with the status of each of the services.

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Explanation for Wrong answer:

* Option a, c, and d are not related to OpenStack. openstack-status is the command which will list all the services along with the status of each of the services.