Model Questions

Module 1

1. What are the different components in OpenStack logical architecture?
2. Differentiate between private cloud and public cloud.
3. Explain the deployment model of Cloud in detail.
4. Which are the different service models of cloud.
5. Explain the architecture of Neutron.
6. Explain logical and conceptual model design of openstack.
7. Explain Telemetry and its three projects.
8. How to OpenStack works?
9. Which are the different components of nova compute service.
10. Which are the core resources of Neutron.
11. Why we use schedulers in OpenStack.
12. Differentiate between Swift and Glance.
13. Explain Cinder and its use in OpenStack.
14. Give a short note on tokens in openstack.
15. Write Short note of the use of
    a. Message Queue
    b. Database
    c. Heat-Orchestration
16. List and explain the different components in OpenStack Architecture.
    a. Explain the provisioning of VM in OpenStack using a diagram
    b. Describe the best practices used in Physical mode design

Module 2

1. Explain clustering, types and advantages with figure.
2. Which are the services of controller nodes?
3. Explain the architecture of Keystone or Which are the different Keystone service providers.(both has the same answer)
4. Give short note on
    a. nova conductor services,
    b. nova scheduler services and
    c. nova API services.
5. Explain Telemetry services in detail (should include ceilometer, aodth, gnocchi, alarms, events and the data collections agents if its asked as an essay)

Module 3

1. Explain compute service components.
2. What is hypervisor? Its two types.
3. Give short notes on Docker and its advantages.
4. Give short note on Magnum Project, its components and its working.
5. What is segregation and its types.
6. Give short note on CPU and Memory overcommitment.
7. Which are the two different types of storage instances?
8. Explain the steps in Nova Scheduling Process.

9. Explain service recovery in openstack.
10. Differentiate between Empheral and persistent storage.
11. Difference between object storage from traditional NAS/SAN based storage.
12. Which are the advantage of Swift?
13. Explain Swift architecture.
14. List the components of Swift.
15. Explain swift hierarchy.
16. Explain Swift ring.
17. Give short note on erasure coding.
18. List out different swift network.
19. Explain the steps in deploying Swift.
20. Explain Cinder and its components.
21. Explain cinder storage operations.
22. Explain cinder backend drivers and scheduling.
23. How to deploy cinder?
24. Explain the components of Manila.
25. How to use the share service in manila.
26. Advantages of cinder and swift.
27. What is Ceph? Explain its components.
28. ExplainCRUSH.
29. Explain copy on write in ceph.
30. Explain the steps in deploying Ceph.

Module 4

1. Architecture of neutrons ne
2. Which are the types of neutron plug-in.
3. Give a short on neutron agents.
4. What are virtual networks and explain two types.
5. Differentiate bt tunnel based and Vlan network.
6. Give a short on virtual switch and types.
7. Which are three network type in virtual network topologies.
8. Give short on ml2 plug-in.
9. Which are the steps in creating vritual network and subnets.
10. Explain virtual routers.
11. Explain the process of configuring the routing service in virtual routers.
12. Explain the two method for connecting virtual machine to the external world.
13. How do you implement the network security in openstack.
14. Explain firewall as a service
15. Explain the creation of firewall policies and rules.

Module 5

16. Which are the component of heat.
17. Which are three sections of environmental file.
18. Compare terraform which heat.
19. Explain 5 steps in installing terraform.
20. What is ha.
21. What is formula to calculate ha.
22. Explain the following

23. Fail over
24. Fall back
25. Switch over
26. Loading balancing
27. Which are the four levels of ha.
28. Explain ha dictionary.
29. Differentiate btw active active and active passive deployments in ha.
30. Which are two different load balancing mode define by ha proxy.
31. Which are Algorithms which determine the server in backend to be selected for load.
32. Explain the 5 architecture in ha database.
33. Explain the steps in implementing ha in database.

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