Course Code: 20MCA265

Course Name: CLOUD COMPUTING

Course Outcome 1 (CO 1):

- 1. List and explain various components of Nova compute service.
- 2. Explain the neutron architecture?
- 3. Briefly describe keystone identity management.
- 4. What are the different components in OpenStack logical architecture?
- 5. Differentiate between private cloud and public cloud.
- 6. List and explain the different components in OpenStack Architecture.
- 7 a. Explain the provisioning of VM in OpenStack using a diagram
 - b. Describe the best practices used in Physical mode design
- 8. Define cloud computing and its service models?
- 9. What are the main components of Neutron architecture? Explain each
- 10. Explain OpenStack cloud architecture and any 4 service components.
- 11. Explain Nova compute service and its basic components.

Course Outcome 2 (CO 2):

- 1. Explain the telemetry services in OpenStack.
- 2. Explain the steps involved in bringing up a working OpenStack Ansible on the deployment host.
- 3. Explain the steps in network configuration
- 4. Explain asymmetric clustering and symmetric clustering.
- 5. List out the functionalities handled by the cloud controller
- 6 Explain the keystone architecture
- 7 Explain the steps involved in running OpenStack playbooks
- 8 Explain clustering and its types used in OpenStack.
- 9 What is the service provided for image management in OpenStack? Explain it.
- 10.Describe Keystone service and its service providers.

11. Explain the working of Ansible playbooks.

Course Outcome 3 (CO 3):

- 1. Explain briefly swift architecture
- 2. Briefly explain how data is handled in the cluster by swift
- 3. What is meant by CPU over commitment?
- 4. Briefly explain docker containers.
- 5. Compare object storage with NAS/SAN based storage
- 6. Explain in detail the multiple services involved in launching an instance
- 7. Explain the steps in deploying swift service
- 8 Write a short note on Cinder block storage service and its components.
- 9 What are the approaches available for segregating cloud services?
- 10.Write a comparison about Nova Docker driver and OpenStack Magnum project for hosting an application.
- 11. Describe Swift architecture.

Course Outcome 4 (CO 4):

- 1. Explain steps in associating a floating IP to a virtual machine.
- 2. Briefly explain the steps in creating a virtual network with two subnets
- 3. Briefly explain Linux bridge-based connectivity?
- 4. Describe the steps in connecting two networks using a virtual router.
- 5. Write a short note on firewall as a service
- 6. Explain the architecture of neutron in detail
- 7. Explain the categorization of neutron virtual networks in detail
- 8 Write a short note on Neutron plugins and its categorization.
- 9 Explain two type of Neutron subnet port connectivity
- 11. How to implement virtual network in OpenStack and also explain two categories of implementation.
- 12 Explain implementation of network security in OpenStack

Course Outcome 5 (CO 5):

- 1. Briefly explain the major components in heat?
- 2. Explain the different metrics that can be measured in a highly available infrastructure?
- 3. Explain the need for Service level agreement
- 4. List the HA levels in OpenStack.
- 5. Explain the purpose of HA proxy.
- 6. Explain stacking in OpenStack
- 7. Explain in detail steps involved in setting a database with high availability
- 8.Describe HA and its levels in OpenStack.
- 9. Differentiate Terraform and Heat in OpenStack orchestration.
- 10.Explain Heat orchestration in OpenStack.
- 11. Describe about HA proxy and its load balancing features.