**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, November 2022**

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|  | **4BT7119** | Roll No. | Total Printed Pages: 2 |
| **4BT7119** |  |
| B. Tech. IV Year VII- Semester (Main/Back) End Semester Examination, November 2022  **(CC)** | |
| **BCC07102 : Cloud Deployment** | | | |

# Time: **3** Hours. Total Marks: **60**

Min. Passing Marks: **21**

Attempt **five** questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Use of following supporting material is permitted during examination for this subject.

# **1.--------------------------Nil--------------------** **2.------------------Nil-----------------------**

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|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | Articulate private cloud with OpenStack and how the popular open source programme lets customers to effortlessly consume computing, justify the given statement with appropriate sketches and examples? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Analyze in detail with related examples the various components of OpenStack. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.2** | **(a)** | Articulate private cloud with OpenStack also discussed in detail the role of API consistency across versions of openstack. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Build the installation and configuration of OpenStack Components. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **UNIT-II (CO2)** |  |  |
|  |  |  |  |  |
| **Q.3** | **(a)** | Mention in steps and illustrate in detail with related sketch and examples the term glance as a registry of images. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | For what Nova is used for in openstack, elaborate in detail with appropriate sketch and examples. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.4** | **(a)** | Differentiate between Image management and instance management | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Mention the name with details of Network component used in openstack. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **UNIT-III (CO3)** |  |  |
|  |  |  |  |  |
| **Q.5** | **(a)** | Elaborate in detail with appropriate sketch and example the working of storage in OpenStack also justify that how block storage provide infrastructure for managing volume and interact with OpenStack instance. | **(6)** | **Applying** |
|  |  |  |  |  |
|  | **(b)** | Mention the command with appropriate details for creating a volume in OpenStack component which manages block storage. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.6** | **(a)** | Mention and illustrate in detail about OpenStack block storage service name and how can you get a list of all objects in test container? | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  |  |  |  |
|  | **(b)** | Mention and illustrate in detail about Cinder types relating it with LVM or plugin drivers for additional storage also with an appropriate sketch the details of scheduler ,api ,backup ,AMQP etc. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **UNIT-IV (CO4)** |  |  |
|  |  |  |  |  |
| **Q.7** | **(a)** | What is orchestration and how it is related to deploying infrastructure in OpenStack, elaborate in detail with appropriate sketches and examples? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | List and illustrate in detail about Web interface in orchestration relating it with OpenStack Automation. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.8** | **(a)** | Comment briefly on Autoscaling instances with heat in relation with OpenStack automation? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | A Cloud user working in Bangalore based MNC company has a task to configure FWAAS in internal network of the private cloud. Write down with proper explanation all the related steps to be followed to do this for completing the mentioned task and also mention the concept of Volumes used in Open Stack. | **(6)** | **Applying** |
|  |  |  |  |  |
|  |  | **UNIT V (CO5)** |  |  |
|  |  |  |  |  |
| **Q.9** | **(a)** | Mention and elaborate in detail the major requirements for our OpenStack monitoring approach and How Kibana is related to Openstack Monitoring? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | How would you get a list of all virtual machines, elaborate in detail? | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.10** | **(a)** | How Nagios is installed and Why Openstack community has gained popularity? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | How would you search for the Identity Service configuration files in a configuration directory hierarchy? | **(6)** | **Remembering** |