Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

****

**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April / May – 2017**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **14CS3011** | **Duration :** | **3hrs** |
| **Sub. Name :** | **CLOUD COMPUTING SERVICES** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Define cloud computing. Explain the cloud computing reference model with suitable diagram. | CO1 | 15 |
| b. | What are the challenges ahead in cloud computing? | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | Write seven characteristics and benefits of cloud computing. | CO1 | 14 |
| b. | Define Virtualization. What are the benefits of virtualization? | CO1 | 6 |
|  |  |  |  |  |
| 3. |  | What are the elements of parallel computing? Explain in detail with necessary diagrams. | CO1 | 20 |
| (OR) | | | | |
| 4. |  | Explain the cloud reference model with necessary diagrams. | CO1 | 20 |
|  |  |  |  |  |
| 5. |  | What are the types of clouds? Explain each types with necessary diagrams and write about the users of each types of cloud. | CO1 | 20 |
| (OR) | | | | |
| 6. |  | With suitable diagrams explain the following openstack services – Keystone, RabbitMQ, Ceph, Swift, Glance, Cinder, Celiometer. | CO1 | 20 |
|  |  |  |  |  |
| 7. |  | Write the steps to deploy openstack in three nodes. Draw the reference architecture. | CO1 | 20 |
| (OR) | | | | |
| 8. |  | Karunya University has decided to setup a private cloud. Write in detail the requirements and recommendations. Generate the list of devices to be procured. Draw the architecture diagram and explain how it will be accessed by all users without any downtime. | CO1 | 20 |
|  | | **Compulsory:** |  |  |
| 9. |  | In a deployed SUSE Cloud 6 write the steps / procedures to create a project with name “univeristy examination” and create two users, staff as admin and student as Member in it. Launch an instance “exam” and write how it can be accessed from external network. | CO1 | 20 |