USN | | | | | | | | | | | 16LNI151/SCE14/SCN31/SCS23/SIT22/SSE251

Ph.D./M.S.(Engg.) by Research Degree Examination, April/May 2024
Cloud Computing

Time: 3 hrs. Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

1 a. What is cloud computing? Explain briefly cloud computing delivery models and deployment models. **(10 Marks)**

b. Explain components of Windows Azure with a neat diagram. **(10 Marks)**

OR

2 a. Explain the services of google in cloud computing environment in terms of SAAS. **(06 Marks)**

b. Explain the components of open source cloud platform: Eucalyptus. **(08 Marks)**

c. What is service level agreement? Explain its objectives. **(06 Marks)**

Module-2

3 a. Define strong Coordination Model and Weak Coordination model. Explain the differences between them. **(10 Marks)**

b. Define Workflow schema. With a neat diagram, explain the life cycle of a workflow. **(10 Marks)**

OR

4 a. With a neat diagram, describe the phases involved in the workflow of GrepTheweb application. **(10 Marks)**

b. Describe the shared hierarchical namespace organization of zookeeper along with operations that the API provides to the zookeeper services. **(10 Marks)**

Module-3

5 a. Explain briefly about the Virtual Machine Monitor (VMM), and their types. **(10 Marks)**

b. Describe about the Xen implementation on X86 Architecture, with its salient features. **(10 Marks)**

OR

6 a. Discuss about the full virtualization and para-virtualization mechanism. List their advantages and limitations. **(10 Marks)**

b. Explain about the impacts of the darker side of virtualization. **(10 Marks)**

Module-4

7 a. Briefly explain the different classes of Cloud Resource Management Policies. **(10 Marks)**

b. Explain Pricing and Allocation Algorithm. **(10 Marks)**

OR

8 a. Develop the pseudo code and the schematics for the "ASCA combinatorial Auction Algorithm". **(10 Marks)**

b. Discuss briefly "Coordination of Specialized Autonomic Performance Managers". **(10 Marks)**

Module-5

9 a. With a neat diagram, explain the Virtual Security Services provided by VMM and dedicated Security VM. **(10 Marks)**

b. Describe in detail Traditional Security Threats, Threats related to system availability and Threats related to Third Party Data control. **(10 Marks)**

OR

10 a. Describe the steps involved for managing SQS services in C#. **(10 Marks)**

b. Explain the steps involved and actions handled in installation of simple notification service on Ubuntu 10.04. **(10 Marks)**

* * * * *