Tribhuvan University
Institute of Science and Technology
2071
✿

Bachelor Level/ Fourth Year/Eight Semester/Science   Full Marks: 60
Computer Science and Information Technology-(CSc.458)   Pass Marks: 24
(Cloud computing)   Time: 3 hours.

Candidates are required to give their answers on their own words as for practicable.
The figures in the margin indicate full marks.

Attempt all questions.

1. How grid computing differs from cloud computing? Justify what the self-service provisioning and multitenancy properties of cloud computing means?   [1+3]

2. Describe the possible services that can be achieved through Infrastructure-as-service (Iaas). [6]

3. What do you mean by Elastic IP Addressing? Describe how Elastic IPs work in cloud services.   ,
                                                                                        [2+4]

4. Discuss about the planning needed for building the Service Oriented Architecture.   [6]

5. What are the Managed Service Providers (MSP)? Discuss the evolution of MSP Model to Cloud Computing.   [2+4]

6. "Virtualization is the key to cloud computing". Justify this statement with proper arguments. Hoe hypervisors are used in cloud computing services?   [4+2]

7. Explain the different types of implementing Network Intrusion Detection Systems in cloud. [6]

8. What can be the impact of disasters in cloud? How geographic redundancy and organizational redundancy ensures disaster recovery in cloud services.   [2+4]

9. Discuss how security architecture and trust architecture ensure security of cloud service networks.
                                                                                        [6]

10. Write short notes on (**any two**)   [3x2=6]
    a. Jericho Cube Model
    b. Role of open source software in cloud computing
    c. Utility Computing

Tribhuvan University
Institute of Science and Technology
2071
✿

Bachelor Level/ Fourth Year/Eight Semester/Science   Full Marks: 60
Computer Science and Information Technology-(CSc.458)   Pass Marks: 24
(Cloud computing)   Time: 3 hours.

Candidates are required to give their answers on their own words as for practicable.
The figures in the margin indicate full marks.

Attempt all questions.

1. How can you define cloud service? Describe the characteristics of a cloud service.   [2+4]

2. Differentiate between each of private, public and hybrid cloud models with suitable examples.   [6]

3. What is the role of Early Detection and Intelligent Log Centralization and Analysis services in Monitoring-as-Service (MaaS) Model?   [6]

4. What are the benefits of using Software-as-Service (SaaS) Model? Briefly discuss about the maturity levels of SaaS architecture.   [2+4]

5. What do you mean by Service Oriented Architecture (SOA)? How cloud services get benefited by SOA?   [2+4]

6. What are the Managed Service Provides (MSP)? Discuss the evolution of MSP Model to Cloud Computing.   [2+4]

7. What is the need of data center virtualization? What are the benefits of data center virtualization?   [6]

8. Explain the different approaches for enforcing host security in a cloud environment. [6]

9. What do you mean by disaster recovery? How recovery point objective differs from recovery time objective?   [2+4]

10. Write short notes on (**any two**):   [3x2=6]
    a. Data Segmentation and Credential Management
    b. Role of open source software in cloud computing
    c. Grid Computing.