

Tribhuvan University
Institute of Science and Technology
2075
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Bachelor Level / Fourth Year / Eight Semester / Science
Computer Science and Information Technology-(CSc.458)
(Cloud Computing)

Full Marks: 60
Pass Marks: 24
Time: 3 hours.

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

Attempt all questions.

1. How cloud computing is different than traditional on premise computing? How properties like elasticity and scalability influence cloud computing? [3+3]
2. How cloud services can be deployed? In which scenario hybrid cloud model is better to deploy? How it can be used in cloud? [1+3+2]
3. What is the use of grid computing? How computing in grid architecture differs from cloud architecture? Explain. [2+4]
4. Mention the characteristics of Software-as-a-Service (SaaS). What implementation issues should be considered in SaaS? [2+4]
5. What computing services are provided under PaaS? Discuss, with example, the concepts of perimeterized and deperimeterized dimensions in Jericho Cube Model. [1+5]
6. What services can be provided under Communication-as-a-Service? Mention the advantages of using Communication as-a-Service Cloud Model. [3+3]
7. How data center virtualization is done? Discuss the various building blocks of data center. [2+4]
8. Define SOA. How cloud services can be benefited by using the concepts of Service Oriented Architecture? [6]
9. Why intrusion detection systems are implemented in cloud networks? How anomaly based intrusion detection system differs from signature based? [3+3]
10. Define recovery point objective. How the geographical redundancy and organizational redundancy are used in cloud disaster recovery? [2+4]