

Tribhuvan University  
Institute of Science and Technology  
2073



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. What do you mean by cloud? Describe about the basic characteristics of cloud. [1+5]
2. What type of deployment models can be adopted in cloud computing? Describe each of them with suitable example? [6]
3. Discuss the capabilities that the cloud users can get through Platform-as-a-Service (PaaS). Also mention the key characteristics of PaaS. [3+3]
4. How the Jericho Cloud Cube model dimensions like perimeterised, de-perimeterised and proprietary, open differentiate the cloud formations from each other? [6]
5. What do you mean by Service Oriented Architecture? How can you characterize Service Oriented Architecture? [2+4]
6. What are the Managed Service Providers (MSP)? Discuss the evolution of MSP Model to Cloud Computing [2+4]
7. Define virtualization. What is the role of virtualization in cloud computing? [2+4]
8. What do you mean by an intrusion in a cloud network? How intrusions in cloud networks are detected. [2+4]
9. How data segmentation and credential management ensure host security in a cloud? Explain with suitable example. [6]
10. Write short notes on (**any two**) [3 x 2 = 6]
  - a) Risk Assessment in Cloud
  - b) Role of open source software in cloud computing
  - c) Grid Computing