

Tribhuvan University  
**Institute of Science and Technology**

2073

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Bachelor Level/ Fourth Year/ Seventh 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.*

**Attempt all Questions**

**(10 x 6= 60)**

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

