

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – I • EXAMINATION – WINTER 2012

Subject code: 715108

Date: 16-01-2013

Subject Name: Cloud Computing

Time: 02.30 pm – 05.00 pm

Total Marks: 70

Instructions:

1. Attempt question 1 which is compulsory and answer any four from the rest questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right hand indicate the marks.

Q. No. 1

- a. Explain any four essential characteristics of a cloud as suggested by NIST. [8 Marks]
- b. Why data replication is important? Discuss two techniques used for data replication. [6 Marks]

Q. No. 2

- a. Explain the advantages and disadvantages of a data center. [8 Marks]
- b. Explain how databases used can affect the cloud performance & solution to this issue. [6 Marks]

Q. No. 3

- a. Explain the power related issues in a data center and how power efficiency can be achieved in a data center. [6 Marks]
- b. What is multi protocol label switching and its advantages to cloud computing. [8 Marks]

Q. No. 4

- a. Explain various security issues related to cloud computing. [7 Marks]
- b. Discuss the benefits offered by a cloud to an organization. [7 Marks]

Q. No. 5

- a. Discuss how TCP makes communication slower. [6 Marks]
- b. What is Portland network architecture? Discuss in details with diagram. [8 Marks]

Q. No. 6

- a. Explain the various techniques suggested for making TCP communication faster. [8 Marks]
- b. Discuss the latency issues faced in a data center or a cloud network. [6 Marks]

Q. No. 7

- a. Discuss various web versions and their differences. [7 Marks]
- b. Describe the internal architecture of a cloud as defined by NIST. [7 Marks]

Q. No. 8

- a. Explain the routing related issues faced in a data center or cloud network and how they can be resolved. [8 Marks]
- b. Explain why cloud computing is not considered suitable for real time applications. [6 Marks]
