

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-IV • EXAMINATION – SUMMER • 2014

Subject Code: 2640013

Date: 03-06-2014

Subject Name: Cloud Computing

Time: 10:30 am - 01:00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Define Cloud Computing. Explain major deployment models for cloud computing each with example. **07**
- (b)** Describe Amazon EC2 and Amazon S3 with their important features. **07**
- Q.2 (a)** (i) To give n processors, the user expects speed to be increased by n times. Is it always true for parallel processing paradigm? Justify your answer. **04**
- (ii) State different pricing models for cloud computing? Explain all with examples. **03**
- (b)** (i) Which system architecture is used by BitTorrent? Explain that system architecture with example. **04**
- (ii) Is Utility-oriented computing a vision of cloud computing? Justify your answer with example? **03**
- OR**
- (b)** (i) How is cloud development different from traditional software development? **04**
- (ii) Explain with example term “No up-front commitments”. How is it use as benefit of CSCs? **03**
- Q.3 (a)** (i) Which type of web service is given below? Which methods can be possible to invoke in this type of web service? **04**

Programmer can translate text from one language to another language by sending an HTTP GET request to given URI/Format of Google Translate API.

GET <https://www.googleapis.com/language/translate/v2?key=INSERT-YOUR-KEY&source=en&target=gu&q=Hello%20Student>

If the request succeeds, the server responds with a 200 OK HTTP status code and JSON data properties.

- (ii) What is quality of service (QoS) monitoring in a cloud computing? **03**
- (b)** What do you mean by Virtualization? Which are Functions enabled by managed execution of Virtualization? Explain each with Example. **07**
- OR**
- Q.3 (a)** (i) How can any webmaster improve the performance of their web server using CDN? Also mention at least three free CDN service provider. **04**
- (ii) Which type of features are expected for a virtual marketplace? **03**
- (b)** Describe High-level system architectural framework for green cloud computing. **07**
- Q.4 (a)** (i) What is Amazon SWF? Which steps are involved in developing a workflow with the AWS Flow Framework? **04**
- (ii) How many workflow types, activity types, and domains can user register with Amazon SWF? **03**

- (b) (i) Which type of strategies for retrying activities used in Amazon SWF? **04**
(ii) What are the different ways to access Amazon SWF? **03**
- OR**
- Q.4** (a) (i) Explain use of Execution Context in Amazon SWF. **04**
(ii) Describe following annotations of SWF. **03**
1) @Execute
2) @Signal
3) @Activities
- (b) (i) Explain in detail Amazon SWF Timeout Types for workflow and activities. **04**
(ii) Which region is Amazon SWF available in? **03**
- Q.5** (a) (i) Explain AWS Flow Framework for Java Replay Behavior. **04**
(ii) What is registration in SWF? Explain annotation WorkflowRegistrationOptions in detail. **03**
- (b) Explain with examples of distributed object frameworks (DOF). **07**
- OR**
- Q.5** (a) (i) Explain generated client-side interfaces and the classes in Amazon SWF for workflow. **04**
(ii) What are workers and deciders in Amazon Simple Workflow Service? Define with Example. **03**
- (b) What is parallel processing? Explain Hardware Architecture of Parallel Processing with Example. **07**
