Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER–IV • EXAMINATION – WINTER • 2014

Subject Code: 2640013 **Date: 06-12-2014**

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 Write Short note (any 7) **14**

(i) Amazon Elastic Block Store
(ii) AWS cloud Formation
(iii) RMI
(iv) SOA
(v) Emulation
(vi) Amazon Machine Image
(vii) SLA
(viii) Federated Cloud
(ix) Amazon SWF Timeout Types

Q.2 (a) Explain cloud computing Reference Model. What are the characteristics and benefits of cloud computing? **07**

(b) What do you mean by Virtualization? Explain the taxonomy of virtualization techniques. **07**

OR

(b) Describe how cloud computing technology can be applied to Business and Consumer Applications. **07**

Q.3 (a) What is energy efficient computing? Explain the Green cloud-computing Reference Architecture. How DVFS help in Energy Efficient computing? **07**

(b) Explain the difference between conventional application workflow and Amazon SWF workflow? **07**

OR

Q.3 (a) (i) Explain the role of Promise<T>, data convertor and marshaling while data exchange between Activities and Workflows. **04**

(ii) Explain Amazon SWF Timeout Types? **03**

(b) Explain the architectural styles of distributed computing **07**

Q.4 (a) (i) Explain the following annotations of SWF **03**

1. @NoWait
2. @Execute
3. @Workflow

(ii) Explain the difference between Full Virtualization, Para-virtualization and Hardware assisted Virtualization. **04**

(b) Explain the role of Activity worker, workflow worker and Workflow Starter with example. **07**

OR

Q.4 (a) Explain Error Handling Mechanism in Amazon AWS Flow Framework. **07**

(b) List and explain various barriers to cloud adoption. **07**

Q.5	**(a)**	Write Short Note: (i) Java Reply Behavior for AWS Flow Framework. (ii) Daemon Tasks.	**07**
	(b)	Explain the role of predecessor and contributor technologies in the evolution of cloud computing.	**07**

OR

Q.5	**(a)**	Explain worker Threading Model in Amazon AWS Flow Framework in detail.	**07**
	(b)	Explain the Hardware Architectures of cloud computing.	**07**

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