Roll No. Total No. of Pages: 02

Total No. of Questions: 09

B.Tech.(CSE) (2011 Onwards Elective-III) (Sem.-7,8)

CLOUD COMPUTING

Subject Code: BTCS-912 Paper ID: [A2994]

Time: 3 Hrs.

Max. Marks: 60

# INSTRUCTION TO CANDIDATES:

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

### **SECTION-A**

## Q1) Write briefly:

- a) How does cloud computing differ from Internet?
- b) What is multi-tenancy and its advantage?
- c) What is on-demand self-service and resource pooling?
- d) Differentiate full-virtualization and para-virtualization.
- e) Write any two characteristics of private and public cloud.
- f) What is the role of network manager in IaaS service layer?
- g) Enlist the services that are provided by Amazon.
- h) Why is hypervisor important? What is its role?
- i) Mention the names of phases in SaaS maturity model.
- j) Give any two examples of self-service.

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#### **SECTION-B**

- Q2) What is SaaS in cloud computing? Explain the different categories of SaaS.
- Q3) Why is virtualization important? Describe the characteristics of server virtualization and application virtualization.
- Q4) What is Service-Level Agreement (SLA)? Explain about the security controls classified in cloud computing.
- Q5) Explain the cloud deployment models in detail. Also, outline their advantages and disadvantages while implementing an application.
- Q6) What is a middleware? How does it help to achieve compatibility between different software involved in cloud computing?

### **SECTION-C**

- Q7) Discuss, in detail, identity management and access control that are needed for secure cloud computing.
- Q8) Design the framework of common cloud management platform reference architecture and explain its components.
- Q9) Explain the following:
  - a) Symmetric and Asymmetric Key Encryption
  - b) Windows Azure platform