Printed Page 1 of 1 Sub Code: RCS075

Paper Id: 110725

Roll No:

B. TECH. (SEM VII) THEORY EXAMINATION 2019-20 CLOUD COMPUTING

Time: 3 Hours Total Marks: 70

Notel. AttempltSectiohfsequianeymissidgtahenhoosenitably.

SECTION

1. Attemphhuestionbrief.

 $2 \times 7 = 14$

- a. What is Cloud Eco System?
- b. Differentiate between distributed Computing and Cloud Computing.
- c. Explain Grid Computing.
- d. Explain Hybrid Cloud.
- e. Differentiate between public and private cloud.
- f. What do you mean by full virtualization?
- g. What are the major challenges faced in cloud?

SECTION B

2. Attempt any three of the following:

 $7 \times 3 = 21$

- a. Illustrate the cloud adoption discussing its several policies.
- b. What is a Hypervisor? Explain in detail with necessary illustrations.
- c. What is the difference between process virtual machines, host VMMs and native VMMs.
- d. What are cloud security challenges? How is security provided to data at various stages in context of cloud?
- e. Explain the characteristics and type of virtualization in Cloud Computing.

SECTION C

3. Attempt any one part of the following:

 $7 \times 1 = 7$

- (a) How Cloud Computing provides scalability and fault tolerance?
- (b) Explain Virtua LAN(VLAN) and Virtual SAN(VSAN) in cloud computing.

4. Attempt any one part of the following:

 $7 \times 1 = 7$

- (a) Explain the Cloud Computing security architecture using suitable block diagram.
- (b) What is the importance of a virtual machine? What role do they play in cloud computing?

5. Attempt any *one* part of the following:

 $7 \times 1 = 7$

- (a) What are the major functionalities of Hadoop API?
- (b) Explain the Cloud management and Services Creation Tools?

6. Attempt any *one* part of the following:

 $7 \times 1 = 7$

- (a) What do you understand by service oriented architecture (SOA)? How does it support cloud computing?
- (b) Draw the architecture and explain the importance of workflow management systems in cloud.

7. Attempt any *one* part of the following:

 $7 \times 1 = 7$

- (a) Identify NIST cloud computing reference architecture with a neat schematic diagram.
- (b) Explain the migration of memory, files and network resources in detail.