

Paper Id:

110725

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

**Time: 3 Hours****Total Marks: 70****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 2 x 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 x 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 x 1 = 7**

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

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