PAPER ID-411004

Roll No: ☐☐☐☐☐☐☐☐☐☐☐☐☐

B. TECH.
(SEM VII) THEORY EXAMINATION 2021-22
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. Define the significance of cloud computing.
   b. Describe the two applications of Cloud Computing.
   c. Explain the role of Internet in Cloud Computing.
   d. Formulate the relation between mean time to failure (MTTF) and mean time to repair (MTTR).
   e. Discuss the term para-virtualization.
   f. Explain the benefits ofDistributed Cloud Computing.
   g. Define the Service Oriented Architecture.

SECTION B

2. **Attempt any *three* of the following:**　　　　　　7 x 3 = 21
   a. Describe Rapid Elasticity.
   b. Summarize any one of the following two layers in details.
      a. Application layer, b. Resource layer
   c. Describe PaaS design for cloud computing.
   d. Analyze the resource provisioning and resource provisioning methods for Cloud computing.
   e. Evaluate four levels of federated services and its applications for cloud computing.

SECTION C

3. **Attempt any *one* part of the following:**　　　　7 x 1 = 7
   (a) Summarize the Infrastructure as a Service in cloud computing?
   (b) Summarize characteristics of cloud computing.

4. **Attempt any *one* part of the following:**　　　　7 x 1 = 7
   (a) Describe types of Virtualizations.
   (b) Summarize the concept of Systems of Systems for cloud computing.

5. **Attempt any *one* part of the following:**　　　　7 x 1 = 7
   (a) Explain the Cloud management and Services Creation Tools?
   (b) Summarize the SaaS design for cloud computing.

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) Analyze the perspective of global exchange of cloud resources and its security overview in details.

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) Describe in detail the open stack – federation in the cloud – four levels of federation