B.TECH.
(SEM VII) THEORY EXAMINATION 2022-23
CLOUD COMPUTING

Time: 3 Hours   *Total Marks: 100*

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1.   **Attempt *all* questions in brief.**   **2 x 10 = 20**

   (a) Compare parallel computing and distributed computing.
   (b) What are the service models available in cloud computing?
   (c) Express the levels of virtualization.
   (d) Illustrate Web services.
   (e) Differentiate Public cloud and Private cloud.
   (f) List out the characteristics of SaaS.
   (g) List the security issues in cloud.
   (h) Define security governance.
   (i) List the functional models of GAE.
   (j) What is the use of cloud Watch in Amazon EC2?

SECTION B

2.   **Attempt any *three* of the following:**   **10x3 = 30**

   (a) Describe in detail about major Deployment Models and services for cloud computing.
   (b) Illustrate the three major components of virtualized environment.
   (c) Give the diagram of Cloud Computing Reference Architecture. Illustrate in detail about the Conceptual Reference Model of cloud.
   (d) Illustrate the following in detail
       i. Demand-Driven Resource Provisioning
       ii. Event-Driven Resource Provisioning
   (e) Elaborate HDFS concepts with suitable illustrations.

SECTION C

3.   **Attempt any *one* part of the following:**   **10x1=10**

   (a) Describe in detail about cloud computing reference model with diagram.
   (b) List out and discuss the innovative characteristic of cloud computing.

4.   **Attempt any *one* part of the following:**   **10x1=10**

   (a) Describe in detail about the REST a software architecture style for distributed systems.
   (b) Analyze the pros and cons of virtualization in detail.

5. **Attempt any *one* part of the following:**   **10x1=10**

    (a) List and discuss the principles for designing public cloud, private cloud and hybrid cloud.

    (b) Describe Cloud deployment models with neat diagrams.

6. **Attempt any *one* part of the following:**   **10x1=10**

    (a) Describe the Secure Software Development Life Cycle with neat diagram.

    (b) Explain in detail about security monitoring and incident response.

7. **Attempt any *one* part of the following:**   **10x1=10**

    (a) Describe the following in detail
        i.   Google Cloud Infrastructure
        ii. GAE Architecture

    (b) Illustrate any five web services of Amazon in detail.