PAPER ID-310494

Roll No:

B. TECH
(SEM-VII) THEORY EXAMINATION 2020-21
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.	Why is cloud computing required? List the five characteristics of cloud computing.
b.	Differentiate between parallel computing and grid computing.
c.	What is the role of service-oriented architecture in cloud computing?
d.	List the layer used in layered cloud architecture.
e.	Write steps to ensure virtual machine security in cloud computing.
f.	What do you mean by inter cloud resource management? Write name of its types.
g.	What is distributed computing?

SECTION B

2.   **Attempt any *three* of the following:**   **7 x 3 = 21**

a.	Define cloud computing and explain its evolution with neat diagram.
b.	What do you mean by cloud federation? Explain the four levels and future of federation in details.
c.	What do you mean by cloud storage? Describe its types.
d.	Explain IAM and its advantages & disadvantages. What do you mean cloud computing security? Explain its risks.
e.	Illustrate Web services in details. Why is Web Services required? Differentiate between API and Web services.

SECTION C

3.   **Attempt any *one* part of the following:**   **7 x 1 = 7**

(a)	Demonstrate cloud computing delivery model with advantages and disadvantages.
(b)	What are challenges faced in architectural of cloud computing? Discuss.

4.   **Attempt any *one* part of the following:**   **7 x 1 = 7**

(a)	Define virtualization. Demonstrate implementation level of virtualization.
(b)	Explain virtualization of CPU, Memory, and I/O devices in details.

5.   **Attempt any *one* part of the following:**   **7 x 1 = 7**

(a)	Illustrate NIST Cloud computing reference architecture in details.
(b)	What do you mean by cloud service provider? Explain all the cloud service provider with its feature in details.

6.   **Attempt any *one* part of the following:**   **7 x 1 = 7**

(a)	Describe cloud computing security architecture with neat schematic diagram.
(b)	What do you mean by cloud security governance? Explain key Objectives and challenges of cloud security governance in details.

7.   **Attempt any *one* part of the following:**   **7 x 1 = 7**

(a)	What do you mean by Hadoop and its history? Why it is important? Illustrate Hadoop architecture.
(b)	What do you mean by Google App Engine (GAE) and Open stack? Explain both advantages & disadvantages and open stack components.