

Roll No



**PRESIDENCY UNIVERSITY
BENGALURU**

**SCHOOL OF ENGINEERING
END TERM EXAMINATION - JUN 2023**

Semester : Semester IV - 2021

Course Code : CSE2013

Course Name : Sem IV - CSE2013 - Cloud Computing

Program : B.Tech - All Programs

Date : 12-JUN-2023

Time : 9.30AM - 12.30PM

Max Marks : 100

Weightage : 50%

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS

10 X 2 = 20M

1. Mention the steps involved in CGL- MapReduce. (CO4) [Knowledge]
2. Mention the core technologies of cloud. (CO1) [Knowledge]
3. Define the two distinct tasks in MapReduce. (CO4) [Knowledge]
4. Mention the benefits of virtualization in cloud computing. (CO2) [Knowledge]
5. What is Cluster computing? (CO1) [Knowledge]
6. Define Virtual server. (CO3) [Knowledge]
7. Mention the common logical units of cloud data storage. (CO3) [Knowledge]
8. What are the three-common agent-based implementation formats in cloud usage monitor? (CO3) [Knowledge]
9. What is the use of container in cloud computing? (CO4) [Knowledge]
10. Draw the structure of machine reference model. (CO2) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS

5 X 10 = 50M

11. Raushan who had startup to analyze videos. He needs a lot of storage as videos consume quite a bit of disk. Additionally, need ample computational power, possibly running applications concurrently. He discovered some very good tools to facilitate development in Windows but the deployment will be more efficiently handled in the Linux environment. All the pointers say that I need to move to Docker and Container. Help raushan to choose the best service which is suitable and explain why.
(CO4) [Comprehension]
12. Compare the mechanisms of SLA monitor and audit monitor in cloud infrastructure. How do these mechanisms enable organizations to seamlessly scale their resources across different environments?
(CO3) [Comprehension]
13. Our organization plans to run the academic activities using cloud computing. While exploring the benefits of cloud services, we find that the efficiency and flexibility may be achieved, but the security aspect is the big question mark. Suggest the solution with hashing and digital signature role in cloud security mechanism with diagram.
(CO3) [Comprehension]
14. Aman plans to virtualize his company resources based on different levels of virtualization. Help him by explaining the virtualization at different level with neat sketch.
(CO2) [Comprehension]
15. Distinguish between public cloud and private cloud.
(CO1) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS

2 X 15 = 30M

16. A national bank requires high security, privacy, and reliability cloud deployment services, allowing only authorized persons to access resources. You suggest the best suited deployment model for these requirements and discuss. Distinguish with other deployment models.
(CO2,CO1) [Application]
17. Enumerate the two types of Encryptions. Justify the working of Encryption if there is a malicious intermediary, trying to retrieve data from an encrypted message with a neat diagram.
(CO3,CO4) [Application]