Roll No



PRESIDENCY UNIVERSITY BENGALURU

SCHOOL OF ENGINEERING END TERM EXAMINATION - JUN 2023

Semester: Semester VI - 2020 Date: 7-JUN-2023

Course Code: CSE2013 **Time**: 9.30AM - 12.30PM

Course Name: Sem VI - CSE2013 - Cloud Computing

Program: B.Tech - All Programs

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.

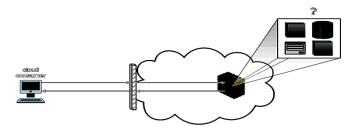
PART A

	ANSWER ALL THE QUESTIONS	(10 X 2 = 20M)
1. What is public cloud?		(CO1) [Knowledge]
2. Define cluster computing		(CO1) [Knowledge]
3. Explain briefly two forms o	f encryption.	(CO3) [Knowledge]
4. What is the use of MRDrive	er in CGL mapreduce?	(CO4) [Knowledge]
5. Define virtualization.		(CO2) [Knowledge]
6. What is ABI?		(CO2) [Knowledge]
7. Why cloud uses audit mon	itor?	(CO3) [Knowledge]
8. Why automated scaling list	tener is required in cloud?	(CO3) [Knowledge]
9. What is system level virtua	lization	(CO2) [Knowledge]
10. What are the resources i	ncluded in laaS	(CO1) [Knowledge]

ANSWER ALL THE QUESTIONS

 $(5 \times 10 = 50M)$

- 11. Cloud infrastructure mechanisms are foundational building blocks of cloud environments that establish primary artifacts to form the basis of fundamental cloud technology architecture. With this perspective, discuss the following cloud infrastructure mechanisms.
 - a) Logical Network Perimeter
 - b) Identify the following diagram and explain the following infrastructure.



(CO3) [Comprehension]

12. Cloud has several properties that make it totally different from other conventional software applications, such as scalability, concurrency, multitenancy, and fault tolerance. So, the programming models need to be extended to be supported in cloud. How Cloud Haskell can be used in cloud as extended programming model? Explain its key features.

(CO4) [Comprehension]

13. ATN Part number Catalog company has stored its catalogue in cloud so that customers can request for catalogue to view. How load balancer can be used in this cloud so that requests can be handled properly. Explain the procedures of load balancer.

(CO3) [Comprehension]

14. Docker is a container management service. It is very helpful and beneficial for programmers by making their task very easy. Explain how docker is beneficial for pragrammers in project development and deployment. List and explain docker features and components

(CO4) [Comprehension]

15. Martin, a Team Manager of a software firm has to visit the client base for the delivery of a project. For this purpose, he is in need of unlimited storage, data availability, remote access and virtual desktop infrastructure support. To meet these needs, identify which are virtualization technologies support required? Explain each one of them.

(CO2) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS

(2 X 15 = 30M)

16. An IT startup company ABC got the project from customer for development from customer. But they do not have enough money for the initial investment. But they know that Cloud provides various types of services. Which are the types of services they can take from cloud in different situation of different need?

(CO1) [Application]

17. Cloud has many characteristics like multitenancy, scalability, pay per use, fast response. All these characteristics can be achieved using specialized cloud mecahnisms used in cloud. Which are the mecanisms used for monitoring usage as pay per use, monitoring SLA and auditing? Explain these mecahnisms using diagram and example.

(CO3) [Application]