PES University, Bengaluru

(Established under Karnataka Act 16 of 2013)

END SEMESTER ASSESSMENT (ESA) - May 2023

UE18CS352 - Cloud Computing

Total Marks : 100.0

1.a. Describe with the help of examples the various service models and deployment models of cloud computing.   (7.0 Marks)

1.b. Explain any five Characteristics of Cloud Computing.   (5.0 Marks)

1.c. Explain in detail Cloud Architecture with diagram.   (8.0 Marks)

2.a. Explain in detail Bare Metal virtualization and Host based virtualization with a diagram.   (10.0 Marks)

2.b. Explain why DevOps is Needed? How is DevOps different from traditional software development and Operations process?   (6.0 Marks)

2.c. Write the difference between virtual machine and Docker container?
                                                                                        (4.0 Marks)

3.a. Explain GlusterFS file system architecture with a neat diagram   (8.0 Marks)

3.b. Explain Leader based replication technique.   (5.0 Marks)

3.c. (i)Explain Linearizability with compare-and-set operation.
(ii)Explain 3 desirable properties of the CAP theorem   (7.0 Marks)

4.a. Explain briefly Bully Algorithm and Modified Ring election.   (10.0 Marks)

4.b. What are the types of failure in designer perspective?   (5.0 Marks)

4.c. What is failover? Explain the two types of architecture to perform failover.

(5.0 Marks)

5.a. Explain reverse proxy and forward proxy.   (10.0 Marks)

5.b. What is the need of cloud security? Explain Physical and Virtual Cloud Security Requirements.   (10.0 Marks)