

**PES University, Bengaluru**

(Established under Karnataka Act 16 of 2013)

END SEMESTER ASSESSMENT (ESA) - May 2023**UE17CS352 - Cloud Computing****Total Marks : 100.0**

1.a. List out and explain the Features/Characteristics of Cloud Computing
(6.0 Marks)

1.b. Describe with the help of examples the various service model and deployment models of cloud computing
(8.0 Marks)

1.c. List out and explain the REST architectural style with four principles (6.0 Marks)

2.a. Explain Type 2 Hypervisor(Hosted Hypervisor).

(6.0 Marks)

2.b. Explain Shadow page table using neat diagram. What are usually faced challenges in shadow page table

(8.0 Marks)

2.c. Explain Live migration process of a VM from one host to another

(6.0 Marks)

3.a. Explain lustre FS architecture using neat diagram

(8.0 Marks)

3.b. Explain all 4 types of request routing with diagram

(12.0 Marks)

4.a. What is the purpose of leader election in distributed computing?
Explain briefly bully algorithm and modified ring election

(10.0 Marks)

4.b. What is distributed locking? what are the advantages of it?
Explain optimistic and pessimistic locks with neat diagram

(10.0 Marks)

5.a. What is a proxy server? Explain reverse and forward proxies in details with benefits

Also explain cloud bursting

(10.0 Marks)

5.b. Explain any 5 security design patterns in cloud computing

(10.0 Marks)