

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2023

B.Tech- VI Semester (CSE/IT)

COURSE CODE(CREDITS): 19B1WCI635(2)

MAX. MARKS: 35

COURSE NAME: Architecting Distributed Cloud Application

COURSE INSTRUCTORS: : Dr.Rajni Mohana

MAX. TIME: 2 Hours

*Note. All questions are compulsory. Marks are indicated against each question in square brackets.*

- Q1) Discuss the differences in service integration and management between SOA (Service-Oriented Architecture) and microservices, and analyze how these differences influence the overall architecture of an application? (7 marks). [CO1,CO4]
- Q2) How does the process of replicating data across data centers impact the availability and reliability of data? (7 marks) [CO2,CO3]
- Q3) What distinguishes a container from a virtual machine (VM) and what is the purpose of a container orchestrator in the management of containers? . (7 marks) [CO1,CO2]
- Q4) What security measures are typically implemented in data storage services to protect sensitive data? Discuss encryption, access controls, and other security practices in data storage environments. (7 marks) [CO2,CO3]
- Q5) How can a service be gracefully shut down in a distributed system? (7 marks) [CO2,CO3]