

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- FEB-2023

COURSE CODE(CREDITS): 19B1WCI635(2)

MAX. MARKS: 15

COURSE NAME: Architecting Distributed Cloud Application

COURSE INSTRUCTORS: Dr.Rajni Mohana , Dr. Jagpreet Sidhu

MAX. TIME: 1 Hour

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*Note: All questions are compulsory. Marks are indicated against each question in square brackets. Each Questions Carry equal marks*

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Q1) a) Explain the difference between a distributed system and a parallel system. [CO1,CO2]

b) Discuss the various types of communication patterns used in distributed systems.

Q2) What are some of the key differences in the integration and management of services in SOA and microservices, and how do these differences impact the overall architecture of an application? [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? .[CO1,CO2]

Q4) What is the purpose of Cluster DNS in a distributed system and what advantages can be gained from utilizing a service reverse proxy? [CO1, CO4]

Q5) What are the key challenges when making a transition from an in-process call to a network request in a distributed system? .[CO2,CO3]