Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 90249

M.C.A. DEGREE EXAMINATIONS, APRIL/MAY 2022.

Second Semester

MC 4203 - CLOUD COMPUTING TECHNOLOGIES

(Regulations 2021)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is a Distributed system?

2. Define Reliable FIFO-Ordered Multicast.

3. List the Characteristics of Cloud Computing.

4. Differentiate Parallel and Distributed Computing

5. Indicate the Architectural design Challenges in cloud computing

6. List the various cloud service Models.

7. Compare Type 1 and Type 2 Hypervisor

8. Summarize the steps of VM live migration

9. Define Microservices

10. Identify the core components of DevOps

PART B — (5 × 13 = 65 marks)

11. (a) Explain the steps involved in calling a remote procedure with Example. (13)

Or

(b) Explain Lamport's Logical clock in distributed systems with Example. (13)

12. (a) Describe the distributed architectural models in Cloud Computing. (13)

Or

(b) Explain in detail about any two open-source cloud software that manages virtual infrastructure. (13)

13. (a) Explain the NIST architecture of Cloud Computing with neat diagram. (13)

Or

(b) (i) List the Innovative Applications of Internet of Things (4)

(ii) List and explain the services provided by the cloud (9)

14. (a) Describe the implementation levels of virtualization

Or

(b) Describe the architecture and modules of Google App Engine and Amazon web services

15. (a) Discuss in detail the Design patterns of Microservices (13)

Or

(b) Discuss DeveOps Lifecycle? Definitions, Key Components, and Management Best Practices

PART C — (1 × 15 = 15 marks)

16. (a) Explain how will you build and deploy a microservice with example?

Or

(b) Explain how virtualization of CPU, Memory and IO devices done in Cloud computing.

———————