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

Question Paper Code : 30145

M.C.A. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 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 remote method invocation (RMI)?

2. Mention some important use cases of ordering and time across industries.

3. What is cloud elasticity?

4. Differentiate parallel and distributed computing.

5. Indicate the economic benefits of Software as a Service (SaaS),

6. Write any four applications of Internet of Things (IoT).

7. Define virtualization and how does it work.

8. What is cloud federation?

9. Write some points about the governance of microservice architectures.

10. What are the key steps to deploy microservices in production?

PART B — (5 × 13 = 65 marks)

11. (a) With a neat sketch, explain about various distributed architecture models.

Or

(b) Explain remote procedure call and remote method invocation with their differences.

12. (a) Write short notes on cloud components: (i) Clients (ii) Data centers (ii) Distributed Servers.

Or

(b) Describe about (i) Applications of cloud computing (ii) Benefits of cloud services.

13. (a) Elaborate the unique features of various cloud models: laaS. PaaS and SaaS by analyzing their pros and cons with different service providers.

Or

(b) Explain about the enabling technologies for the Internet of Things (IoT).

14. (a) Neatly sketch the service oriented architectures and explain them in detail.

Or

(b) Write short notes on Amazon AWS and explain its working nature in detail.

15. (a) Describe about various design patterns of microservices in distributed computing.

Or

(b) Neatly sketch the life cycle of DevOps and explain them in detail.

PART C — (1 × 15 = 15 marks)

16. (a) Elaborate the procedure for installing and creating an Open Stack cloud environment. Suppose if you are going to use Open Stack to support a working models of cloud computing, how will you design an infrastructure for the same.

Or

(b) Explain the design and developmental procedure of Online Railway Reservation System using Google App Engine.

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