

Time: 3 Hours

Max. Marks: 75

Note: This question paper contains two parts A and B
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A

- (25 Marks)
1. a) Differentiate between parallel and distributed computing Paradigms. [2]
 - b) Define Virtual Machines and with neat diagrams explain VM Primitive operations. [3]
 - c) Define PaaS and give any application/enterprise run by using PaaS. [2]
 - d) Write a short note on desired features of a Cloud. [3]
 - e) Explain briefly Public Cloud and Infrastructure Services. [2]
 - f) Explain Virtual Machine life cycle with a neat diagram. [3]
 - g) What are the benefits and obstacles for Cloud Mashups? [2]
 - h) Explain the applications of cloud. [3]
 - i) Write a short note on SLA Management. [2]
 - j) Write a short note on the current state of the Data Security in the Cloud. [3]

PART-B

- (50 Marks)
2. a) Write a short note on Performance Metrics and Scalability Analysis of Distributed systems. [5+5]
 - b) Explain the role of Fault Tolerance and System Availability in Distributed Computing System. [5+5]

OR

3. a) Explain the basic Cluster Architecture with a neat diagram. [5+5]
- b) Write a short note on Fault-Tolerant Cluster Configurations. [5+5]

4. a) Explain the challenges faced by SaaS paradigm in Cloud Computing. [5+5]
- b) Explain the three Integration Methodologies used for cloud integration. [5+5]

OR

5. a) Explain the four Enterprise Cloud Adaption Strategies using fundamental cloud drivers. [5+5]
- b) Write a short note on Porter's five forces market model. [5+5]

6. a) Explain various Migration techniques used in Virtual Machine Migration. [5+5]
- b) Explain Aneka framework architecture with a neat diagram. [5+5]

OR

7. a) Explain Comet-Cloud Architecture with a neat diagram. [5+5]
- b) Write a short note on importance of Quality and Security in Cloud. [5+5]

8. a) Write a short note on basic principles of cloud computing. [5+5]
- b) Explain briefly the Layers Enhancements for Federation (RESERVOIR Architecture). [5+5]

OR

9. a) Write a short note on Traditional Approach to SLA Management. [5+5]
- b) Write a short note on the need for Cloud Mashups and various concepts of Cloud Mashups. [5+5]

10. a) Explain briefly the framework to comprehend the competitive environment in Cloud Computing. [5+5]
- b) Write a short note on Change Management Maturity Model (CMMM). [5+5]

OR

11. a) Explain in detail the idea of "Cloud Computing and Identity" in Cloud Security. [5+5]
- b) Explain how Cloud Computing is different from Outsourcing and Provision of Application Services. [5+5]