Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 50418

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2024.

Fifth/Sixth Semester

Computer Science and Engineering

CCS335 — CLOUD COMPUTING

(Common to: Computer Science and Design/Computer Science and Engineering
(Artificial Intelligence and Machine Learning)/Computer Science and Engineering
(Cyber Security)/Computer and Communication Engineering/Artificial Intelligence
and Data Science/Computer Science and Business Systems/Information Technology)

(Regulations 2021)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1.   List any four design challenges in Cloud computing.

2.   What is cloud in cloud computing?

3.   Identify the role of Hypervisor in virtualization.

4.   What is hardware virtualization?

5.   How is OS virtualization implemented?

6.   Differentiate between containers and virtual machines and write one use case
      to each.

7.   What do you mean by open cloud ecosystem?

8.   Write the procedure to deploy the application in Google App Engine.

9.   What is hyperjacking attack?

10.   What is IAM in cloud? What are the challenges in IAM?

PART B — (5 × 13 = 65 marks)

11. (a) Draw and explain about NIST Cloud Reference Model.

Or

(b) Compare between Cloud Deployment model and Cloud Service model.

12. (a) Mention the levels of virtualization and explain its implementation details.

Or

(b) What is Hypervisor? Draw and explain working of Type I Hypervisor.

13. (a) Write short notes on Desktop, Network and Storage virtualization. Differentiate between block level storage virtualization and file level storage virtualization.

Or

(b) Describe about Docker Compose and Docker Swarm.

14. (a) Discuss Amazon AWS and MS Azure.

Or

(b) Draw and explain the architecture of Eucalyptus.

15. (a) List the virtualization System-Specific Attacks and explain any two of them.

Or

(b) Write a detailed note on cloud security.

PART C — (1 × 15 = 15 marks)

16. (a) How to Create, Implement and Run a Container Using Docker? Write the steps and commands used.

Or

(b) Differentiate between openNebula and openStack. Explain how openStack can be used to build cloud.

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