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# 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 — $(10 \times 2 = 20 \text{ marks})$

- 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 — $(5 \times 13 = 65 \text{ marks})$

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 — 
$$(1 \times 15 = 15 \text{ marks})$$

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.