

MCA Sem.-3
Cloud Computing
December-2025

Time : 3.00 Hours]

[Max.Marks : 50

Instructions:

- Write both the Sections in the separate answer book.
- Both Sections having equal weightage.
- Draw Diagrams wherever necessary.
- Make Assumptions wherever necessary.

SECTION – I

- Q-1.** Explain the following terms. **05**
- What is Cloud Computing?
 - Define Multi-region deployment.
 - What is resource pooling?
 - Define dedicated servers.
 - Cloud Elasticity
- Q-2.** Attempt the followings. **10**
- Explain various deployment models of Cloud Computing.
 - Differentiate between cloud data centers and traditional data centers.
- OR**
- Q-2.** Attempt the followings. **10**
- Discuss tenancy at Different Level of Cloud Services.
 - What's the difference between IAAS, PAAS and SAAS in cloud computing?
- Q-3.** Attempt the followings. **10**
- Define scaling. Discuss various levels of scaling.
 - Discuss various goals of load balancing.
- OR**
- Q-3.** Attempt the followings. **10**
- Discuss various challenges to be addressed in cloud native file system.
 - Discuss about Resource Provisioning Approaches.

SECTION - II

- Q-4.** Explain the following Terms. **05**
- Capacity planning
 - Load balancing
 - Map Reduce
 - Database-As-A-Service
 - Network Pool
- Q-5.** Attempt the followings. **10**
- Explain different Security Control Types of Cloud Computing.
 - Define “serverless cloud computing” and discuss its use cases.
- OR**
- Q-5.** Attempt the followings. **10**
- What are some best practices for securing data in the cloud?
 - Discuss any two open source Distributed Computing Tools for Management of Distributed Systems.
- Q-6.** Attempt the followings. **10**
- Explain various perspectives on SaaS development in cloud computing.
 - Explain the role of Container Services and Notification Services in detail.
- OR**
- Q-6.** Attempt the followings. **10**
- Discuss various challenges need to be considered while software development in cloud environment.
 - Discuss Microservices with its characteristics.

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