

April 2025
B.A./B.Sc.
Sixth Semester
DISCIPLINE SPECIFIC ELECTIVE – 3
COMPUTER SCIENCE
Course Code: CSD 6.11
(Cloud Computing)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. (a) What is cloud computing? How does it work? 1+3=4
(b) List and explain three benefits and three drawbacks of using cloud computing. 6
(c) Discuss on “deploying the edge” in cloud computing. 4
2. (a) Explain the service-oriented architecture with an illustration. 6
(b) What is virtualization? Explain any four types of virtualizations. 1+4=5
(c) Differentiate between grid and utility computing with three points. 3

UNIT-II

3. (a) With the help of a diagram, explain the entire architecture of cloud computing. 10
(b) Discuss any four cloud infrastructure components. 4
4. (a) What is hypervisor? Explain type 1 and type 2 hypervisor with illustrations. Write one advantage and one disadvantage for both. 1+6+4=11
(b) Write three differences between cloud computing and traditional computing. 3

UNIT-III

5. (a) What are cloud service models? 1

- (b) Explain the services provided by IaaS. Write four advantages of using IaaS. 4+4=8
- (c) Differentiate between PaaS and SaaS with five points. 5
6. (a) Explain all the five cloud deployment models. 10
- (b) Write four differences between public, private, and hybrid cloud. 4

UNIT-IV

7. (a) Write a short note on data centers. 2
- (b) List and explain the benefits of having cloud management. 4
- (c) What is SLA? Explain the different types of SLA. 1+7=8
8. (a) What is meant by cloud scalability? Explain the three types of cloud scalability with diagrams. 1+6=7
- (b) Write any seven components of a good SLA. 7

UNIT-V

9. (a) What is the security planning to be considered before deploying resources to the cloud? 4
- (b) Explain the CSA stack model with a diagram. 7
- (c) Explain the three cloud security principles in brief. 3
10. (a) List and explain any five data security issues or any five data privacy issues in the cloud. 5
- (b) What is AaaS? Explain all the authentication methods provided by AaaS. 1+8=9