

2024
B.A./B.Sc.
Sixth Semester
DISCIPLINE SPECIFIC ELECTIVE – 3
COMPUTER SCIENCE
Course Code: CSD 6.11
(Cloud Computing)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. (a) Define cloud computing. What are the pros and cons of using cloud computing? 1+6=7
- (b) Write a short note on the history of cloud computing. 3
- (c) Discuss any one recent trend in cloud computing. 4
2. (a) What is virtualization? Briefly explain all the types of virtualizations. 2+6=8
- (b) Explain grid computing. Describe the topology in grid computing. 2+4=6

UNIT-II

3. (a) List and describe the components of cloud computing infrastructure. 6
- (b) With the help of an illustration, explain the frontend and backend of the cloud computing architecture. 8
4. (a) Write any seven differences between type1 and type2 hypervisors. 7
- (b) Explain the different tasks in cloud management. 7

UNIT-III

5. (a) What are cloud service models? Describe the three types of service models with diagrams. 1+9=10
- (b) Write any four benefits and drawbacks of using SaaS. 4

6. (a) Explain public, private and hybrid cloud deployment models along with their pros and cons. 9
- (b) Differentiate between multi-cloud and hybrid cloud deployment models. 5

UNIT-IV

7. (a) What are data centers? How do they work? 1+2=3
- (b) Why is cloud service management important? Write some cloud service management tasks. 2+6=8
- (c) Briefly explain the types of cloud scalability. 3
8. (a) What is meant by SLA? Explain the three types of SLA. 1+6=7
- (b) Write any three properties of a good SLA. 3
- (c) List the differences between cloud elasticity and cloud scalability. 4

UNIT-V

9. (a) What is meant by cloud security? Explain the cloud security principles. 1+6=7
- (b) What is cloud storage? What are managed and unmanaged cloud storage? 1+2=3
- (c) Write a note on broker cloud storage. 4
10. (a) What do you understand by data security and data privacy? Write any two issues in data security as well as in data privacy. 2+4=6
- (b) List and discuss any four authentication methods in the cloud. 4
- (c) With the help of a diagram, explain the working of SSO. 4