



School of Computer Science Engineering

Fall Semester 2024-2025

Continuous Assessment Test – I

Programme Name & Branch: B.TECH (All Branches)

Course Name & code: AWS Solutions Architect - BCSE355L

Exam Duration: 90 Min.

Slot : F1 + TF1

Maximum Marks: 50

Q.No.	Question	Max Marks
1.	A multinational corporation is planning to expand its IT infrastructure globally. Discuss how the principles of cloud computing and the design of a major cloud provider's global infrastructure could address the company's needs for scalability, reliability, and low-latency access for its international user base.	10
2.	A large e-commerce platform is experiencing rapid growth and needs to ensure its infrastructure can handle varying workloads securely. Propose a design for the system that would allow the platform to scale efficiently while maintaining strong security practices.	10
3.	Cloud architects often face the challenge of managing fluctuating workloads. AWS provides a solution that automatically adjusts the number of computational resources based on predefined conditions. Explain this service in detail with neat diagram.	10
4.	In the context of AWS storage solutions, there exists a service designed for long-term data archival with retrieval times ranging from minutes to hours. This service is often used for compliance and backup purposes. Identify this service and discuss its cost-effectiveness compared to other storage options.	10
5.	Load distribution is a critical aspect of high-availability architectures. AWS provides a service that automatically distributes incoming application traffic across multiple targets, such as EC2 instances. Explain this service and how it enhances the reliability and fault tolerance of applications in the cloud.	10