



SCHOOL OF COMPUTER SCIENCE AND ENGINEERING
CONTINUOUS ASSESSMENT TEST - I
FALL SEMESTER 2025-2026

Programme Name & Branch : B.Tech Computer Science and Engineering
Course Code and Course Name : BCSE 408L Cloud Computing
Faculty Name(s) : Dr. Sendhil Kumar K.S, Dr. Siva shanmugam G, Dr Suresh P, Dr Ramesh C,
Dr. Narayana Prasanth, Dr Kanagaraj, Prof. Padma priya R, Dr Anil Kumar K.
Class Number(s) : VL2025260101894, VL2025260101921, VL2025260101902, VL2025260101915,
VL2025260101898, VL2025260101918, VL2025260101911, VL2025260101924, VL2025260101906
Date of Examination : 18/08/2025
Exam Duration : 90 minutes **Maximum Marks: 50**

General instruction(s):

- Answer All Questions
- Course Outcomes:
 1. CO1 Design and develop cloud application and deploy it
 2. CO2 Evaluate the various cloud services and deployment models in the infrastructure

Q. No	Question	M	CO	BL
1.	ABC Software Solutions, a company offering gift-giving advice, utilizes collaborative cloud services to enable real-time online chat between employees and customers. During peak periods such as the holiday season, the company scales up its cloud resources to handle increased traffic. Once the season ends, it scales down the resources, thereby optimizing operational costs. Explain the key characteristics of cloud computing. Describe the cloud pay-per-use model used by ABC Software Solutions with proper justification.	10	CO1	1
2.	You are designated as a Business Analyst for IT Division in a software industry. To expand the business services like software design, software development, and testing for global operations. Your CEO approached you to design a flexible cloud deployment model to serve the above business needs. Discuss in detail the various deployment models and suggest the best model that will suit your business needs.	10	CO1	2
3.	Summarize the need for a fully hardware virtualization environment, which includes storage, network, servers, and virtual machines. Propose a model/framework for fully hardware virtualization to eliminate all single points of failure. Compare and contrast full and para virtualization with suitable examples.	10	CO2	4
4.	ABC Solutions an e-commerce startup company wants to scale its infrastructure quickly to handle increasing customer traffic during a festive sale season. They don't want to invest in physical servers but want full control over their operating systems, storage, and applications. Which cloud service model would be the most appropriate for this situation? Justify your answer by explaining the key characteristics of the chosen model. Additionally, compare its advantages over traditional on-premise hosting solutions.	10	CO2	4
5.	Propose an AWS-based cloud model for ABC Software Company with required deployment diagrams. How AWS services such as EC2, S3, RDS, IAM, CloudWatch can manage and support the various cloud-hosted services to ensure availability, security, and cost-efficiency for your proposed model.	10	CO2	3
