PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 07-10-2025   **Time:** 02.00pm to 03.30pm

School: SOCSE	**Program:** B.Tech. ISE, CAI
Course Code: CSE2272	**Course Name:** Cloud Computing
Semester: V	**Max Marks:** 50 **Weightage**: 25%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	26	24			

Instructions:

   (i) *Read all questions carefully and answer accordingly.*

   (ii) *Do not write anything on the question paper other than roll number.*

Part A

Answer ALL the Questions. Each question carries 2marks.   **5Q x 2M=10M**

1	Define Cloud computing. State an example.	2 Marks	L1	CO1
2	Expand EC2 and S3 in detail with respect to AWS.	2 Marks	L2	CO1
3	List the responsibility of Load balancer.	2 Marks	L1	CO1
4	Define Virtualization.	2 Marks	L1	CO2
5	Differentiate between Type-1 and Type-2 hypervisor.	2 Marks	L2	CO2

Part B

Answer the Questions.   **Total Marks 40M**

6.	a.	Explain the NIST cloud reference architecture with the help of the block diagram. Brief about all the actors involved in it.	10 Marks	L2	CO1
		Or			
7.	a.	Compare and contrast the different types of cloud computing services (IaaS, PaaS, SaaS) in terms of user control, cost-effectiveness, scalability, and ease of use. Support your answer with examples of service providers under each category.	10 Marks	L2	CO1

8.	a.	Organizations adopting cloud computing often face challenges in integrating its core technologies such as virtualization, distributed computing, and service-oriented architecture. Discuss how these technologies work together to enable cloud services, and analyze the possible issues an enterprise might encounter when implementing them. Support your answer with suitable examples	10 Marks	L3	CO1
		Or			
9.	a.	Interpret the different deployment models of cloud computing with its advantages and disadvantages.	10 Marks	L3	CO1

10.	a.	Summarize the taxonomy of virtualization. Explain System level virtualization techniques.	10 Marks	L3	CO2
		Or			
11.	a.	Analyze the different levels of virtualization (such as hardware, operating system, server, storage, and application virtualization) in terms of their benefits, limitations, and use cases. Which level of virtualization would be most suitable for a medium-sized enterprise like Nitin's company, and why?	10 Marks	L3	CO2

12.	a.	A small business is considering adopting virtualization to optimize its IT infrastructure. Illustrate all the types of virtualizations that could benefit the business, and explain how each type would improve efficiency.	10 Marks	L3	CO2
		Or			
13.	a.	Demonstrate a Machine Reference Model with Security Class and Rings with diagram.	10 Marks	L3	CO2