Roll No: | | | | | | | | | | | |

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY

Presidency University Act, 2013 of the Karnataka Act No. 41 of 2013 | Established under Section 2(f) of UGC Act, 1956
Approved by AICTE, New Delhi | Approved By BCI
Bengaluru

Mid Term Examinations - October 2026

Date: 05/10/2026 **Time:** 09:30 AM - 11:00 AM

Course Code: CSD1705 **Course Name:** Cloud Computing for Data Science

Semester: Sixth Semester **Max. Marks:** 50 **Weightage:** 50%

CO - Levels	CO1	CO2
Marks	34	56

PART A: Answer Following Questions. 10 M

Q.N.	Questions	M	CO	BT
1	Define resource pooling in cloud computing.	2	CO1	BT1
2	Explain the Shared Responsibility Model in cloud security.	2	CO1	BT2
3	Illustrate streaming ingestion with one suitable application.	2	CO2	BT3
4	Identify any two components of AWS Glue.	2	CO2	BT1
5	Differentiate between object storage and block storage.	2	CO2	BT2

PART B : Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
6	Explain the architecture of cloud storage and explain the security mechanisms used to protect stored data.	10	CO1	BT2
7	Analyze the differences between Public Cloud, Private Cloud, and Hybrid Cloud based on ownership, accessibility, scalability, security, and cost.	10	CO2	BT2

PART C: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
8	Distinguish between AWS Glue, Google Cloud Dataflow and Azure Data Factory and determine suitable use cases for each.	10	CO2	BT2
9	Analyze batch and streaming ingestion and illustrate their suitability for different applications.	10	CO2	BT3

PART D: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
10	Design a basic data pipeline for processing data from IoT sensors and explain the role of each pipeline component.	10	CO2	BT3
11	Analyze Hadoop and Spark based on their processing mechanisms, speed and use cases in cloud environments.	10	CO2	BT3

PART E: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT

12	Explain how virtualization and containers support efficient resource utilization in cloud computing. Illustrate your answer with suitable examples.	10	CO1	BT2
13	Design a suitable cloud computing architecture for a data science application that requires data storage, application execution, networking, and security. Identify the major components and explain their roles.	10	CO1	BT2