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

PRESIDENCY UNIVERSITY

GAIN MORE KNOWLEDGE
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Bengaluru

Mid Term Examinations - October 2026

Date: 05/10/2026 **Time:** 02:00 PM - 03:30 PM

Course Code: CBD2000 **Course Name:** Introduction to Big Data

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

CO - Levels	CO1	CO2
Marks	44	46

PART A: Answer Following Questions. 10 M

Q.N.	Questions	M	CO	BT
1	**Define Velocity with an example**	2	CO1	BT1
2	**List any four differences between Big Data and Traditional Data.**	2	CO1	BT1
3	**What is the default replication factor in HDFS? What is rack awareness?**	2	CO2	BT2
4	**What is Avro? What is schema evolution?**	2	CO2	BT2
5	**What is incremental import in Sqoop?**	2	CO2	BT2

PART B : Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
6	**Differentiate Big Data from Traditional Data with suitable examples.**	10	CO1	BT1
7	**Discuss the applications of Big Data in different sectors.**	10	CO1	BT1

PART C: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
8	**Explain the major challenges of Big Data**	10	CO1	BT1
9	**A retail company has sales data in MySQL, website clickstream logs and customer reviews with product images. Classify the data types and explain the challenges in storing and processing them.**	10	CO1	BT2

PART D: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
10	**Explain the concepts and features of HDFS**	10	CO2	BT2
11	**Explain file storage and data replication in HDFS with the replica placement policy.**	10	CO2	BT2

PART E: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
12	**Compare Sqoop and Flume. Design a data ingestion solution for a bank that has customer data in Oracle and ATM/app logs generated continuously.**	10	CO2	BT2

PTO (Please Turn Over)

13	**Hadoop cluster: 20 DataNodes × 4 TB, replication factor 3, block size 128 MB. (a) Effective storage capacity (b) Blocks and replicas for a 10 GB file (c) DataNode failure (d) NameNode failure.**	10	CO2	BT2