



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.															
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Make-up Examinations - December 2025

Date: 05-01-2026

Time: 09:30am - 12:30pm

School: SOE	Program: B. Tech & Allied Courses	
Course Code: CSE3002	Course Name: Big Data Technologies	
Semester: MK	Max Marks: 100	Weightage: 50%

CO - Levels	CO1	CO2	CO3
Marks	30	40	30

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.

10Q x 2M=20M

1.	Explain the difference between structured, unstructured, semi structured, and quasi-structured data.	2 Marks	L2	CO1
2.	Compare and contrast traditional data management approaches with Big Data approaches.	2 Marks	L2	CO1
3.	Identify the advantages and limitations of No-SQL databases in handling Big Data.	2 Marks	L1	CO1
4.	Explain the architecture of HDFS and the roles of Name Node and Data Node.	2 Marks	L2	CO1
5.	Explain do Combiners and Partitioners improve the efficiency of MapReduce jobs?	2 Marks	L2	CO1
6.	Describe the architecture of YARN and the roles of its various components.	2 Marks	L2	CO2
7.	Identify the different data types supported by Hive, and how are they used?	2 Marks	L1	CO2

8.	List and describe the common Hive DML (Data Manipulation Language) commands.	2 Marks	L1	CO2
9.	List the commands used for creating and listing tables in HBase.	2 Marks	L1	CO2
10.	Describe the commands for scanning, counting, and truncating tables in HBase.	2 Marks	L1	CO2

Part B

Answer the Questions.

Total Marks 80M

11.	a.	Identify and explain three major challenges associated with Big Data.	10 Marks	L2	CO1
Or					
12.	a.	Classify the process of file writing in HDFS.	10 Marks	L2	CO1
13.	a.	Explain the use of Hive for real-time data processing versus batch processing along with the limitations of Hive in handling real-time data, and how can they be addressed?	10 Marks	L2	CO2
Or					
14.	a.	Describe the architecture of HBase and its key components.	10 Marks	L2	CO2
15.	a.	Explain the commands for disabling and enabling tables in HBase.	10 Marks	L2	CO3
Or					
16.	a.	Describe the commands for scanning, counting, and truncating tables in HBase.	10 Marks	L2	CO3
17.	a.	Identify the "Four Vs" of Big Data and how do they contribute to its importance?	10 Marks	L1	CO1
Or					
18.	a.	Outline the main types of No-SQL databases and how do they differ from relational databases?	10 Marks	L1	CO1
19.	a.	Describe the architecture of Hive and its key components.	20 Marks	L2	CO2
Or					
20.	a.	Differentiate between big data and Traditional data.	20 Marks	L2	CO2
21.	a.	Outline the process of reading in HDFS.	20 Marks	L1	CO3
Or					
22.	a.	Describe HDFS Federation and list how the architecture limitations of HDFS architecture are resolved by the same.	20 Marks	L1	CO3