

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: MTECH
BRANCH: AIML**

**SEMESTER : III
SESSION : MO/2023**

SUBJECT: CS634 BIG DATA ANALYTICS

TIME: 3 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	Discuss the various characteristics of Big Data.	[5]	1 2
Q.1(b)	Draw Big Data Architecture and explain its components.	[5]	1 2
Q.2(a)	Explain the working of MapReduce with diagram.	[5]	2 3
Q.2(b)	Illustrate Key-Value data model and its working.	[5]	3 3
Q.3(a)	How Does Hadoop Read files?	[5]	3 2
Q.3(b)	Define HDFS. Describe namenode, datanode and block.	[5]	3 1
Q.4(a)	What is Capacity Scheduler? How is different from Fair Scheduler?	[5]	2 4
Q.4(b)	Explain Shuffling and Sorting in Hadoop MapReduce?	[5]	4 2
Q.5(a)	Explain HBase Data Model with suitable example.	[5]	5 3
Q.5(b)	What is HBase? How it is different from HDFS?	[5]	3 4

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