

## Term End Examination

Dec 2023

### CET4001B - Bigdata Technologies

Question Paper ID: 028923

<b>Faculty/School</b>	Engineering and Technology	<b>Term</b>	Sem-V
<b>Program</b>	TYBTech CSE/Minor in CSE	<b>Duration</b>	1 Hours 30 Minutes
<b>Specialization</b>		<b>Max. Marks</b>	40

Read the instructions provided for every question properly before attempting the answer.

**Section - 1** : contain(s) **10** question(s) and each question carries **5** mark(s). You can answer any **8** questions out of **10**.

Click **Finish** only after completion of the Exam.

#### Section - 1 (8 X 5 Marks)

Answer any 8 questions

1	The computing power of big data analytics how it is beneficial in the following context a) Improving Healthcare and Public Health b) Improving and Optimizing Cities and Countries c) Improving Science and Research	5 marks	CO1	Analysing
2	Explain the Key features of Big Data Analytics Systems as compared to normal OLTP Systems	5 marks	CO1	Remembering
3	What are different types of NoSQL Databases. 1. Create a Student_info collection and add fields to it that are appropriate for the collection (name, age, city, percentage, course, etc.) 2. Insert a single document and multiple documents into a collection. 3. Returns all documents from a collection and returns all fields for the documents. 4. Assume there are 2 documents with name as Jyoti, update city value for both. 5. Displays the document whose name starting with R and ending with I	5 marks	CO1, CO4	Applying
4	What is aggregation pipeline in MongoDB. Elaborate any five aggregation pipeline operators.	5 marks	CO2	Understanding

5	Discuss Hadoop Ecosystem and various Components	5 marks	CO2	Understanding
6	Define DataNode. How does NameNode tackle DataNode failures?	5 marks	CO3	Understanding
7	Given a document, we want to count the occurrences of any word . Write MapReduce Execution Details. Assume suitable document example	5 marks	CO4	Applying
8	Enlist and explain the components of Apache Spark?	5 marks	CO3	Understanding
9	Explain architecture of HBase	5 marks	CO3	Understanding
10	Justify with examples the need for filtering in big data visualization.	5 marks	CO5	Understanding

END OF QUESTION PAPER