



## Term End Examination

Dec 2023

### CET4001B - Big Data Technologies

Question Paper ID: 026667

Faculty/School	Engineering and Technology	Term	Semester V
Program	TY B.Tech CSE	Duration	2 Hours 30 Minutes
Specialization	Core	Max. Marks	70

#### Section - 1 (7 X 10 Marks)

Answer any 7 questions

✓ 1	Discuss how big data analytics is beneficial in the following context: a) Improving Healthcare and Public Health b) Improving Science and Research c) Improving Finance and Banking d) Improving Education sector	10 marks 5-6 marks	CO1	Understanding
2	What is NoSQL? Explain features and types of NoSQL databases.	10 marks	CO2	Remembering
3) 2	Illustrate the working of MapReduce with the help of suitable example.	10 marks 3-4 marks	CO3	Remembering
✓ 4	Discuss and Elaborate <u>Read</u> and <u>Write</u> Operation in HDFS with proper diagram.	10 marks 10 marks	CO3	Understanding
✓ 5	List the Daemon Services in Hadoop and explain each with appropriate diagram.	10 marks	CO3	Understanding
✓ 6	What is <u>Flume</u> ? Explain in detail the steps for injecting stream data with Flume.	10 marks 10 marks	CO4	Remembering
✓ 7	Demonstrate data transfer process of <u>Sqoop</u> with the help of systematic diagram.	10 marks 10 marks	CO4	Applying
8	Explain the following big data visualization methods with diagram: i) Bubble Chart ii) Sunburst iii) Tree map iv) Circle packing v) Parallel Coordinates	10 marks	CO5	Understanding
9	What is <u>D3.js</u> ? Mention the benefits of it and write minimum five modules supported in D3.js.	10 marks 3/4	CO5	Evaluating
10	1. Compare Big Data Visualization Methods based on various factors such large volumes data, data variety and data dynamics. - 5 M 2. Explain the <u>PIG</u> architecture with suitable diagram. - 5 M	10 marks 5 marks	CO4, CO5	Analysing

END OF QUESTION PAPER