

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2022****Subject Code:3170722****Date:20-01-2023****Subject Name:Big Data Analytics****Time:10:30 AM TO 01:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

MARKS

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|------------|---|-----------|
| Q.1 | (a) What is Big data? Explain sources of big data. | 03 |
| | (b) Explain types of Big data. | 04 |
| | (c) Write a short note on Hadoop Architecture. | 07 |
| Q.2 | (a) Explain usage of Map reduce. | 03 |
| | (b) Explain methods of Map reduce of Mapper class. | 04 |
| | (c) Write a short note on HDFS (Hadoop Distributed File System). | 07 |
| | OR | |
| | (c) Define Social networks and Social Network Mining. | 07 |
| Q.3 | (a) Give difference between SQL and NoSQL. | 03 |
| | (b) Explain features and advantages of NoSQL. | 04 |
| | (c) Explain different types of NoSQL. | 07 |
| | OR | |
| Q.3 | (a) Give difference between master-slave model and peer-to-peer model. | 03 |
| | (b) Give difference between DBMS and DSMS (Data Science Management System). | 04 |
| | (c) Explain filtering a stream in detail. | 07 |
| Q.4 | (a) What is Stock Market Prediction? | 03 |
| | (b) What is Hbase and Hive? | 04 |
| | (c) Discuss about How E-Commerce is Using Big Data to Improve Business in detail. | 07 |
| | OR | |
| Q.4 | (a) Explain 5V's of Big Data. | 03 |
| | (b) Give list of HBase Commands. | 04 |
| | (c) What is a Zookeeper? What are the benefits of using a zookeeper? | 07 |
| Q.5 | (a) Why is big data analytics important? | 03 |
| | (b) Explain HIVE data types in brief. | 04 |
| | (c) Explain modules of Hadoop. | 07 |
| | OR | |
| Q.5 | (a) Explain advantages of Big Data Processing. | 03 |
| | (b) Explain different challenges of Big Data. | 04 |
| | (c) Explain Spark Architecture. | 07 |
