

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER- VII EXAMINATION-SUMMER 2023****Subject Code: 3170722****Date: 23/06/2023****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.

- Q.1** (a) List various application of big data. **03**
 (b) Explain the difference between structure and unstructured data. **04**
 (c) Define Big Data and also Explain Characteristicis of Big Data. **07**
- Q.2** (a) List various configuration files used in Hadoop Installation. What is use of mapred. **03**
 (b) Explain the difference between structure and unstructured data. **04**
 (c) Discuss Big Data in Healthcare,Trasportation & Medicine. **07**
- OR**
- (c) Discuss Hadoop YARN in detail with failures in classic MapReduce. **07**
- Q.3** (a) Explain advantages and disadvantages of big data analytics. **03**
 (b) Discuss role of Data node and Name node in HDFS. **04**
 (c) Explain working of Hive with proper steps and diagram. **07**
- OR**
- Q.3** (a) Compare Raw oriented and Column Oriented database structures. **03**
 (b) Differentiate: Apache pig Vs Map Reduce. **04**
 (c) Define join and explain types of join. **07**
- Q.4** (a) Difference between master-slave versus peer-to-peer distribution models. **03**
 (b) What is Stream Computing and Sampling Data in a Stream. **04**
 (c) What is Apache Spark? What are the advantages of using Apache Spark over Hadoop? Explain in brief four major libraries of Apache Spark. **07**
- OR**
- Q.4** (a) Write a short note on Decaying Window **03**
 (b) Write a short note on RTAP. **04**
 (c) Explain the HiveQL-Select-Order By with suitable example. **07**
- Q.5** (a) Write application of writing Spark. **03**
 (b) Write difference between MangoDB and Hadoop. **04**
 (c) Define NoSQL and where is it used? (b) i) Document Oriented Database **07**
 ii) Graph based Database.
- OR**
- Q.5** (a) Describe data processing operators in Pig. **03**
 (b) Write differences between NoSQL and SQL. **04**
 (c) What is Zookeeper? List the benefits of it. **07**
