

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA – SEMESTER V - EXAMINATION –SUMMER-2021

Subject Code: 3650010**Date: 07-08-2021****Subject Name: Big Data Tools (BDT)****Time: 02:30 PM to 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Answer the following questions. **07**
1. Define the term Big Data.
 2. What is NoSQL?
 3. What is NameNode?
 4. Explain Document in MongoDB.
 5. RDD stands for_____.
 6. The full form of Serde is _____.
 7. What is Pig?
- (b)** Do as Directed.
1. Explain the characteristics of Big Data. **04**
 2. Differentiate SQL, NoSQL and NewSQL. **02**
 3. List types of NoSQL Databases. **01**
- Q.2 (a)** Explain Hadoop Ecosystem with all elements of Hadoop. **07**
- (b)** How the CRUD operations are implemented in MongoDB? Explain it with example. **07**
- OR**
- (b)** Explain the concept of Partition and Combiner in MapReduce with java code. **07**
- Q.3 (a)** Explain the concept of Replication and Sharding of MongoDB. **07**
- (b)** Explain Anatomy of file Read and Anatomy of file Write of HDFS. **07**
- OR**
- Q.3 (a)** Explain the data types in Pig. How many types of Execution mode of Pig? Explain Execution mode of Pig. **07**
- (b)** Explain Mapper and Reducer in MapReduce . **07**
- Q.4 (a)** Explain Filter, Foreach, Group, and Limit operator of Pig with suitable example. **07**
- (b)** What is Partition in Hive? Explain Static and dynamic partition with suitable example. **07**
- OR**
- Q.4 (a)** Explain Aggregate and MapReduce function of MongoDB with suitable example. **07**
- (b)** Explain Hive Architecture. **07**
- Q.5 (a)** Write a short note on Mlib, Tensor Flow and Theone. **07**
- (b)** What is Bucketing in Hive? Explain it with example. **07**
- OR**
- Q.5 (a)** Write a note on features of Spark. Explain programming with RDDs with example. **07**
- (b)** Write a Pig Script for Word Count. **07**
