

9. Briefly explain :

- (a) Features of Cassandra.
- (b) CRUD operations in Cassandra.
- (c) Data Types of Cassandra.

Roll No.

3451

**B. Tech. 5th Semester (CSE-AI & ML)
Examination – December, 2022**

BIG DATA & ANALYTICS

Paper : PCC-DS-306-G

Time : Three hours]

[Maximum Marks : 75

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt five questions in all, selecting one question from each Section. Question Number 1 is compulsory.

1. Describe the following :

15

- (a) Discuss various challenges with Big Data.
- (b) Explain the difference between Data warehouse and Big Data.
- (c) Define various NoSQL databases briefly.

- (d) What are the various characteristics of Data ?
- (e) Difference between Hadoop and SQL.
- (f) Difference between RDBMS and Hadoop.

SECTION – A

- 2. (a) Explain various characteristics of Big Data. What are the various challenges of Big data ? 8
- (b) How is the Hadoop environment different from the data warehouse environment ? Explain. 7
- 3. Discuss the following : 15
 - (a) Business Intelligence Vs. Big Data
 - (b) Distributed file systems
 - (c) Evolution of Big Data

SECTION – B

- 4. (a) What is Hadoop ? Explain its architecture in detail. 10

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- (b) What are the feature and advantages of Hadoop ? Briefly describe. 5
- 5. Describe the following : 15
 - (a) Four classification of analytics
 - (b) NewSQL, SQL Vs. NoSQL Vs. NewSQL
 - (c) Terminologies used in Big Data

SECTION – C

- 6. (a) What is MongoDB ? Explain its various features and its data types. 8
- (b) What are CRUD operations in MongoDB ? Explain. 7
- 7. Explain Hadoop YARN Architecture in detail. 15

SECTION – D

- 8. What is Hive ? Discuss features of Hive. Explain its architecture in detail. 15

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