B.Tech. (Computer Science & Information Technology)

8th Semester (G-Scheme) Examination, July–2022

BIG DATA ANALYSIS

Paper– PCC-CSE-404-G / PCC-IT-403-G

Time allowed : 3 hours]   [Maximum marks : 75

Note: Attempt *five* questions in all, selecting at least **one** question from each section. **Question No.1 is compulsory.** All questions carry equal marks.

1. Explain the following:

    (a) Big Data

    (b) Map Reduce

    (c) YARN

    (d) Data Mart

    (e) ETL

    (f) Six V in big data   6×2.5=15

Section–A

2. Define the different techniques in big data analytics.   15

3. Discuss the following in detail

    (i) Conventional challenges in big data   8

    (ii) Nature of Data.   7

Section–B

4. What is Big data platform? Describe the main features of a big data platform in detail. 15

5. Define HDFS. Describe name node, data node and block. Explain HDFS operations in detail. 15

Section–C

6. (i) Compare Traditional DBMS and Big Data Management Systems. 8

   (ii) Describe any five real life applications of Big Data. 7

7. What is Real Time Analytics? Discuss their technologies in detail. 15

Section–D

8. (i) What is Hadoop? Explain its components. 5

   (ii) How do you analyse the data in hadoop. 10

9. What is Real-Time Analytics? Discuss their technologies in detail. 15