CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–I–Semester End Examinations (Regular) - December- 2025
BIG DATA ANALYTICS
(CSE)

[Time: 3 Hours]   **[Max. Marks: 60]**

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 10 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A   (10 Marks)

1. a) What are the benefits of Big data analytics?   [1M]
   b) List any two Applications of Big data.   [1M]
   c) What is the role of cloud computing in Big data?   [1M]
   d) Write any Open source Technologies for Big data.   [1M]
   e) What is Hadoop? Explain its main purpose.   [1M]
   f) Explain the need for Hadoop in Big data processing.   [1M]
   g) What are the main advantages of using Hive?   [1M]
   h) What is the role of Data Node in Hadoop?   [1M]
   i) What are the different types of analytics?   [1M]
   j) How does R handle large datasets?   [1M]

PART-B   (50 Marks)

2. List and Explain characteristics of big data. Illustrate by considering an example of E-commerce how big data is used.   [10M]

OR

3. Elaborate the significance of the four V's with examples in the context of Big Data.   [10M]

4. With neat diagram, explain Hadoop main components and ecosystem components.   [10M]

OR

5. What are the major steps in implementing a Mobile BI solution? Explain in detail.   [10M]

6. Explain the steps involved in moving data in and out of Hadoop.   [10M]

OR

7. Describe MapReduce Execution steps with a neat sketch.   [10M]

8. With a neat diagram, describe HDFS architecture and flow steps.   [10M]

OR

9. Discuss the features of Hadoop HDFC and also Explain the functions of Name Node and Data Node.   [10M]

10. What are some popular machine learning techniques? Explain with examples.   [10M]

OR

11. a) Compare Mobile Analytics with Big data.   [5M]
    b) Explain social media Analytics.   [5M]

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