Code No.: IT701PC | R20 | H.T.No. | | | 8 | R | | | | | |

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

[Time: 3 Hours]   **[Max. Marks: 70]**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 20 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   (20 Marks)

1. a) What is Data Management? [2M]
   b) Write short note on Randomized Block Design? [2M]
   c) How NoSQL is faster than SQL? [2M]
   d) List out various Data Analytics tools? [2M]
   e) Explain Blue Property Assumptions? [2M]
   f) What do you mean by Linear Regression? [2M]
   g) Explain the concept of Over fitting? [2M]
   h) Discuss about ARIMA model? [2M]
   i) What is the importance of Data Visualization? [2M]
   j) How to visualize complex Data and Relations? [2M]

PART-B   (50 Marks)

2. Explain about Designing Data Architecture in detail And data cleaning process.s [10M]
   OR
3. a) Explain GPS and signal data in detail. [5M]
   b) What is data quality? Why is outlier mining important? [5M]

4. a) Distinguish between Scala and Impala? [5M]
   b) What are the various ways to handle missing data? [5M]
   OR
5. Explain Various Data Modelling Techniques [10M]

6. a) Write a short note on Least Square Estimation? [5M]
   b) Explain Analytical applications to business domains? [5M]
   OR
7. a) Elaborate in detail about Logistic Regression? [5M]
   b) Give a brief note on Regression estimates types and models? [5M]

8. a) Differentiate Supervised and Unsupervised learning? [5M]
   b) Explain various measures of Forecast accuracy? [5M]
   OR
9. What is Time Series Analysis? Discuss how it is important for business. [10M]

10. Explain different visualization techniques in detail? [10M]
    OR
11. Explain various tools to visualize high dimensional data? [10M]

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