CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
II–B.TECH–II–Semester End Examinations (Supply) -June- 2025
INTRODUCTION TO DATA ANALYTICS
(CSD)

[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) Why Data Analytics is so important?   [2M]
   b) What is the difference between error data and noisy data?   [2M]
   c) What is the role of Data Analytics?   [2M]
   d) Write short notes on different data types and variables.   [2M]
   e) What are the advantages and Limitations of Linear Regression?   [2M]
   f) What is Univariate Analysis?   [2M]
   g) Define Arima Model.   [2M]
   h) List some Supervised Learning Techniques.   [2M]
   i) What do you mean by Data Visualization? Brief.   [2M]
   j) Write and brief the different terminologies used in Box Plot.   [2M]

PART-B   (50 Marks)

2. What are primary sources of data? Explain in detail.   [10M]

                              OR

3. Explain about the Data Processing in detail.   [10M]

4. What are the different Analytics Tools for Data Analytics? Explain in detail. [10M]

                              OR

5. Explain in detail about the Missing Imputations.   [10M]

6. Explain in detail about the OLS Regression with the inclusion of Error term. [10M]

                              OR

7. What are the various analytics applications to various Business Domains? [10M]

8. Compare and contrast Supervised & Unsupervised Learning.   [10M]

                              OR

9. Explain the following: [10M]
   i) Pruning in Decision Tree Learning.
   ii) Overfitting and Under fitting.

10. Elaborate in detail about Icon-Based Visualization Techniques.   [10M]

                              OR

11. Explore the Pixel-Oriented Visualization Techniques.   [10M]

                          ****