CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–I–Semester End Examinations (Regular) - November- 2024
DATA ANALYTICS AND VISUALIZATION
(CSM)

[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) Discuss the need of Data Analytics.   [2M]
   b) Define Data Management.   [2M]
   c) List out the Applications of Modeling in Business.   [2M]
   d) Demonstrate the classification of Data.   [2M]
   e) What are the Blue Property Assumptions?   [2M]
   f) Make use of the Least Square Estimation.   [2M]
   g) Discuss the Advantages of Decision Trees.   [2M]
   h) Difference between the Regression and Segmentation.   [2M]
   i) Explain any two visualization tools.   [2M]
   j) Discover the meaning of Data Visualization.   [2M]

PART-B   (50 Marks)

2. Explain data preprocessing in data management.   [10M]

                OR

3. Discuss the process of handling duplicate values in organizational data.   [10M]

4. Demonstrate the importance of business modeling.   [10M]

                OR

5. Compare the techniques for dealing numerical data with categorical data.   [10M]

6. Explain different types of variables used in Regression modeling.   [10M]

                OR

7. Demonstrate linear regression with suitable example.   [10M]

8. Explain in detail of multiple decision trees.   [10M]

                OR

9. Describe the need of tree pruning in decision trees.   [10M]

10. Explain the challenges in visualizing complex data and relations and suggest   [10M]
    suitable mechanisms to address them.

                OR

11. Difference between the different visualization techniques.   [10M]

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