CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
II–B.TECH–II–Semester End Examinations (Supply) - February- 2023
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)	What is conceptual model?	[2M]
b)	Define outlier.	[2M]
c)	Define data analytics.	[2M]
d)	What is categorical data? Give example.	[2M]
e)	Define dependent and independent variable.	[2M]
f)	Define linear regression.	[2M]
g)	What is supervised learning?	[2M]
h)	List the applications of Time series methods.	[2M]
i)	Define data visualization.	[2M]
j)	Write the drawbacks of pixel-oriented visualization technique.	[2M]

PART-B   (50 Marks)

2.	Explain about the design of data architecture with a neat sketch.	[10M]
	OR	
3. a)	Discuss various sources of data.	[5M]
b)	How to manage the outliers in data? Explain.	[5M]
4.	Discuss applications of modeling in business.	[10M]
	OR	
5.	Explain Missing Imputation methods in detail with examples.	[10M]
6.	What is least square estimate? Illustrate its importance in regression modeling.	[10M]
	OR	
7.	Apply logistic regression to demonstrate binary classification.	[10M]
8.	Explain decision tree classification with example.	[10M]
	OR	
9.	How do you forecast using STL? Explain with example.	[10M]
10.	Briefly explain various data visualization techniques.	[10M]
	OR	
11.	Explain the challenges in visualizing complex data and relations and suggest suitable mechanisms to address them.	[10M]

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