Code No.: AI614OE | R20 | H.T.No. | | | 8 | R | | | | | |

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
III–B.TECH–II–Semester End Examinations (Regular) - May- 2023
DATA ANALYTICS AND VISUALIZATION
(CSC)

[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)	Write about the role of manage the data for analysis in Data Management?	[2M]
b)	Why Data Analytics is so important?	[2M]
c)	Write the applications of Modeling in Business.	[2M]
d)	List the different data types and variables available in Data Analytics.	[2M]
e)	What is the importance of Regression in Analytics?	[2M]
f)	What are the advantages of Logistic Regression?	[2M]
g)	How is Segmentation different from Regression?	[2M]
h)	Explain what is Overfitting.	[2M]
i)	Define Data Visualization?	[2M]
j)	How the Pie Chart represented?	[2M]

PART-B **(50 Marks)**

2.a)	Explain about the design data architecture in Data Management?	[5M]
b)	Demonstrate data pre-processing in Data Management?	[5M]
	OR	
3.	Explain in detail about Data Quality.	[10M]
4.a)	Give an overview of Data Modeling Techniques.	[5M]
b)	Explain the various steps involved in Analytics.	[5M]
	OR	
5.	Explain about the application of modeling in Business Analytics.	[10M]
6.	Determine the purpose of Least Square Estimation in Regression in detail.	[10M]
	OR	
7.	Explain in detail about	
a)	Model fit Statistics.	[5M]
b)	Model Construction in Logistic Regression.	[5M]
8.	Compare and Contrast Supervised & Unsupervised Learning.	[10M]
	OR	
9. a)	Discuss about various Measures of Forecast Accuracies.	[5M]
b)	Explain about Feature Extraction.	[5M]
10.	Explore in detail about the different Geometric Projection Visualization Techniques.	[10M]
	OR	
11.	Explain about the Hierarchical Visualization Techniques.	[10M]

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