Code No.: DS403PC | R20 | H.T.No. | | | 8 | R | | | | | |

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
II–B.TECH–II–Semester End Examinations (Supply) - February- 2024
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 Data Management?	[2M]
b)	List out Enterprise Requirements.	[2M]
c)	What is data analytics?	[2M]
d)	List various tools used for data analytics.	[2M]
e)	What is variable rationalization?	[2M]
f)	How to calculate a LSE regression line?	[2M]
g)	Define segmentation with an example.	[2M]
h)	Give real-time examples of supervised learning.	[2M]
i)	Specify the dimensionality of Chernoff faces.	[2M]
j)	List out Geometric Projection visualization techniques.	[2M]

PART-B **(50 Marks)**

2.a)	Explain the sources of primary Data.	[5M]
b)	Demonstrate data preprocessing techniques in detail.	[5M]
	OR	
3.a)	Discuss about data preprocessing needs.	[5M]
b)	Explain about tools used for data analytics.	[5M]
4.a)	Demonstrate Missing Imputation methods in detail with examples.	[5M]
b)	Illustrate Data modeling techniques.	[5M]]
	OR	
5.a)	Explain how and where missing imputations are involved in real world scenario.	[5M]
b)	Explain with an example the need for business modeling.	[5M]
6.	Explain about regression and discuss with an example.	[10M]
	OR	
7.	Explain about model fit statistics used for regression with an example and also discuss about model construction.	[10M]
8.a)	Demonstrate linear regression with suitable example.	[5M]
b)	Outline major steps of decision tree classification with a suitable example.	[5M]
	OR	
9.	Explain time series method with an example.	[10M]
10.	Explain Icon Based visualization techniques in detail.	[10M]
	OR	
11.a)	Explain complex data and deduce its relationships.	[5M]
b)	Explain Pixel Oriented visualization techniques.	[5M]

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