Code No.: AD404PC

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CMR ENGINEERING COLLEGE: : HYDERABAD UGC AUTONOMOUS

II-B.TECH-II-Semester End Examinations (Regular) - August- 2023 FUNDAMENTALS OF DATA SCIENCE (AI&DS)

[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) b) c) d) e) f) g) h)	List the benefits of the data science. Give a note on facets of data. What is the variability of qualitative data? What is relative frequency in data science? What is data handling in Python? Which Python is best for data analyst? Write the Z scores. How do you describe a normal curve?	[2M] [2M] [2M] [2M] [2M] [2M] [2M] [2M]
i) j)	Difference between the line plots and scatter plots. Give a note on geographic data.	[2M] [2M] [2M]
2.	Discuss the exploratory data analysis. OR	(50 Marks) [10M]
3.	Explain the presenting and building applications.	[10M]
4.	Describe the cumulative frequency distribution. OR	[10M]
5.	Elaborate the frequency distributions of nominal data.	[10M]
6.	Explain the data manipulation with pandas. OR	[10M]
7.	Discuss the hierarchical clustering.	[10M]
8.	Explain the standard error of estimate multiple regression formula. OR	[10M]
9.	Illustrate the multiple regression equations.	[10M]
10.	Explain the functions of matplotlib for visualization in Python. OR	[10M]
11.	Discuss the three dimensional plotting.	[10M]