

Code No.: DS513PE

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CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
III-B.TECH-I-Semester End Examinations (Supply) - May- 2023
INTRODUCTION TO DATA SCIENCE
(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.

PART-A

(20 Marks)

1. a) What is data science and its benefits? [2M]
- b) Explain the role and stages of data science. [2M]
- c) What are the goals of data science? [2M]
- d) How to retrieve the data in data science? [2M]
- e) Write about descriptive statistics. [2M]
- f) What is exploratory data analysis in data science? [2M]
- g) What are the methods of model development? [2M]
- h) What are the different models in data analytics? [2M]
- i) What is model evaluation in data science? [2M]
- j) Write about cross validation. [2M]

PART-B

(50 Marks)

2. Explain evolution stages in data science. [10M]
- OR**
3. What are the applications of data science in various fields? [10M]
4. Explain in detail about data collection strategies. [10M]
- OR**
5. Explain data integration and transformation with an example. [10M]
6. What is mean and standard deviation in descriptive statistics? [10M]
- OR**
7. What is the difference between skewness and kurtosis? [10M]
8. How is model evaluation done by using data visualization? [10M]
- OR**
9. What is residual plot and provide relevant example? [10M]
10. What is training error and generalization error in data science? [10M]
- OR**
11. What is overfitting and underfitting in data science? [10M]
