School of Computing Science and Engineering B.Tech CSE

ETE - Jun 2023

Time: 3 Hours Marks: 50

Sem II - MSCS1280 - INTRODUCTION TO DATA SCIENCE

Your answer should be specific to the question asked Draw neat labeled diagrams wherever necessary

1.	Write down the main advantages of using functions in R.	K3 CO4 (2)
2.	Provide examples of applications of data science in real-world scenarios.	K2 CO1 (2)
3.	Mention the limitations of simple linear regression.	K4 CO3 (2)
4.	Write short note on importance of normal distribution in data science.	K1 CO2 (2)
5.	Define the importance of Plot () function.	K4 CO5 (2)
6.	Describe data visualization and explain any two data visualization tools available in the market.	K6 CO5 (6)
7.	Explain simple linear regression. Write equation for simple linear regression model.	K4 CO3 (5)
8.	Discuss the concept of rank and null space in linear algebra.	K3 CO1 (5)
9.	Describe skewness and its significance. Karl Pearson's coefficient of skewness is 1.28, its mean is 164 and mode 100, find the standard deviation.	K4 CO2 (8)
10.	Explain the concept of control structures in R. Provide examples of different types of control structures and how they are used in programming.	K5 CO4 (8)
11.	Discuss the concept of regression in data science. Explain the difference between simple linear regression and multiple linear regression, and provide examples of their usage.	K5 CO6 (8)