

(Time: 3 Hrs)

Marks: 80

N.B. : 1. Question no. 1 is compulsory.

2. Solve any Three questions out of remaining Five questions.

- Q1 a What are the main challenges of text analysis? 5
 b Explain the differences between BI and Data Science. 5
 c Write types of variable assigned with R-Objects with example. 5
 d How many sections does a box-and-whisker divide the data into? Explain with example. 5
- Q2 a Explain data science process in detail 10
 b Explain model based clustering. 10
- Q3 a Explain k-NN with suitable example. 10
 b How to achieve and sustain competitive advantage with Data Science? 10
- Q4 a Describe how logistic regression can be used as a classifier 10
 b Write short note on Descriptive statistics in R language 10
- Q5 a Justify the term 'Thinking Data-Analytically, Redux' 10
 b Explain Data Journalism in detail 10
- Q6 a Explain plot() and pairs() function in R. Suppose you are using the plot() function to produce scatterplots of the quantitative variables. When it will produce an error message, 'Error in plot(abc, xyz) : object 'abc' not found?' 10
 b Explain ARIMA model in detail. 10
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