

Total No. of Questions :4]

SEAT No. :

P9027

Oct - 22 /TE /Insem - 646

[Total No. of Pages : 1

T.E. (Computer Engineering)(Honors/Minors)

DATA SCIENCE AND VISUALIZATION

(2019 Course) (Semester - I) (310501)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q.1 or Q. 2, Q. 3 or Q. 4.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data if necessary.

- Q1)** a) Explain different steps involved in Data Science process in detail. [8]
b) Define the terms Data Science and Big Data. Elaborate how Big Data plays an important role in data science? [7]

OR

- Q2)** a) Explain Supervised and Unsupervised Machine Learning with suitable example. [6]
b) How is Machine Learning related to Date Science? Elaborate in detail. [5]
c) What is exploratory Data Analysis in Data Science process? Explain with suitable example. [4]
- Q3)** a) What is Simpson's Paradox. Illustrate with appropriate example. [6]
b) Define the term Normal Distribution associated with probability. [5]
c) Consider example of tossing 3 coins simultaneously and if X is the random variable associated with number of heads. write Probability distribution function. [4]

OR

- Q4)** a) Define Central Tendencies (Mean, Median and Mode) with examples. [6]
b) What is Bayes Theorem? How it is used to solve classification problem in machine learning. Illustrate with suitable example. [5]
c) Define the terms related to data science. [4]
i) Correlation
ii) Standard Devition

