## **PC-142**

## SEAT No. :

[Total No. of Pages : 2

[Max. Marks : 30

## [6360]-151

## T.E. (Computer Engg.) (Insem.) DATA SCIENCE AND VISUALIZATION (Honors) (2019 Pattern) (Semester - I) (310501)

Time : 1 Hour]

Instructions to the candidates

- Answer 0.1 or 0.2, 0.3 or 0.4. 1)
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- Assume suitable data, if necessary. *4*)

What is Exploratory Data Analysis in Data Science process? Explain with *Q1*) a) suitable example. [6]

- b) What is Unsupervised Machine Learning? Elaborate with suitable example and enlist its applications. [5]
- Differentiate between the Structured data and Unstructured data. c) [4]  $\Theta R$
- Calculate the mean, median, mode of the following data and comment on *Q2*) a) skewness of data. 17, 16, 25, 23, 22, 23, 28, 25, 25.
  - Define Big data? Elaborate how Big Data plays an important role in Data b) Science? [5]
  - IOL. Define the term supervised Machine Learning and its applications. [4] c)
- Define Central tendencies with examples. **03**) a)
  - Mean i)
  - ii) Median
  - iii) Mode
  - Define the statistical terms. b)
    - Co-variance i)
    - ii) Standard deviation.
  - Describe the terms Normalization and Standardization in detail. [4] c)

OR

*P.T.O.* 

[6]

[5]

Define the terms with appropriate examples. [6] **Q4**) a) Continues Distribution i) with example is a construction with the cons Normal Distribution ii) [5] Explain Min-Max Normalization with Example. [4] out and and with a static mark

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