

Code No: 5658AZ

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M. Tech II Semester Examinations, July/August – 2021

DATA SCIENCE

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

- 1.a) Differentiate Structured, semi-structured and unstructured data with examples.
- b) Give a brief summary on any two applications of data science. [7+8]
2. Explain Data Science toolkit and its components. [15]
3. Explain the following of statistical measures with suitable example.
 - a) Measures of central tendency
 - b) Measures of distribution
 - c) Skewness and kurtosis. [5+5+5]
4. Explain about data storage and management in detail. [15]
5. Define regression and explain about linear regression and apply linear regression on the given data below:
 $(x,y) = \{(1,2),(2,4),(3,5),(4,6),(7,8)\}$ [15]
- 6.a) What is classification? How is different from clustering?
- b) Illustrate with an example the SVM classification. [7+8]
7. Explain the following:
 - a) Retinal variables
 - b) Data Visualization [7+8]
- 8.a) How do you use Bokeh in Python for Data Visualization?
- b) Explain recent trends in data science. [8+7]

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