

**R18**

Code No: 155AT

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech III Year I Semester Examinations, February - 2022**

**DATA ANALYTICS**  
(Common to CSE, IT)

Time: 3 hours

Max. Marks: 75

**Answer any five questions**  
**All questions carry equal marks**

---

1. Market researchers have used four experimental designs for generating primary data. Describe them in detail. [15]
2. Explain about data quality and data preprocessing. [15]
3. Demonstrate the various steps involved in data analytics and discuss the tools and environment needed for analytics. [15]
4. Explain how data imputation can be performed. [15]
- 5.a) Discuss the best unbiased linear estimator property of regression.  
b) Demonstrate ordinary least square estimation. [7+8]
6. Elucidate analytical applications to various business domains. [15]
- 7.a) What is ETL? List the commercially available ETL tools.  
b) Demonstrate ARIMA for time series data. [7+8]
8. How to perform visualization of the data using a hierarchical partitioning into subspaces? Explain with examples. [15]

---ooOoo---