

Code No: 116FA**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year II Semester Examinations, December - 2018****INTRODUCTION TO ANALYTICS****(Common to CSE, IT)****Time: 3 hours****Max. Marks: 75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A**(25 Marks)**

- 1.a) What are the challenges in analysis of data? [2]
- b) Justify R has a data analytics software. [3]
- c) List the types of variables available in R. [2]
- d) Define effective communication skills. [3]
- e) What is R connector? [2]
- f) Give the uses of NOSQL databases. [3]
- g) How correlation is used for data analysis? [2]
- h) Expand ANOVA and list its unique features [3]
- i) What type of data analysis is feasible for automating department activities? [2]
- j) Name different business problems related to various businesses. [3]

PART - B**(50 Marks)**

- 2.a) Explain R data frames with example.
 - b) Write a R program for matrix multiplication. [5+5]
- OR**
- 3.a) What are the looping structures available in R?
 - b) How to you find outliers in R? [5+5]
4. What is summarization of data? Explain different types of summarization in R. [10]
- OR**
5. Give an account on probability distribution and its computation in R. [10]
 6. Write a R program to illustrate database connectivity. [10]
- OR**
7. Write about stored procedures in NOSQL. Explain with examples. [10]
 8. Explain regression analysis. Give example. [10]
- OR**
- 9.a) Justify the importance of correlation for prediction.
 - b) Explain OLS regression. [5+5]
10. Write short note on understanding engineering design and manufacturing. [10]
- OR**
11. Compare and contrast the manufacturing and production activities data analysis with respect to technology. [10]