

Code No: 126UA

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, April - 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) Define various data types [2]
- b) What are structured array? Give examples. [3]
- c) Discuss about probability function. [2]
- d) Calculate clear statistics for random variables. [3]
- e) Explain about SQL data types. [2]
- f) Describe about R connector. [3]
- g) Explain types of correlation. [2]
- h) What is periodogram? Give example. [3]
- i) What are the problems related to a project? [2]
- j) Explain Smart Utilities. [3]

**PART - B**

(50 Marks)

- 2 a) Describe working of data sets with their syntax and examples. [5+5]
- b) Discuss how R windows structure is useful to environment. [5+5]

**OR**

- 3 a) What are outliers combining datasets. Explain. [5+5]
- b) State about time management and work. [5+5]

- 4 a) Calculate probability for  $n*(n-1)$  functions [5+5]
- b) Explain random variables [5+5]

**OR**

- 5 a) Explain the clear summary about the probability and data. [5+5]
- b) Explain Teamwork communication and time management. [5+5]

6. Write a program in SQL to evaluate the program "COMMAND". [10]

**OR**

- 7 a) Differentiate between data integrity and data manipulator. [5+5]
- b) How data base connector is used to R-integrity? [5+5]

- 8.a) Differentiate between regression and correlated analysis.  
b) Explain about Heteroscedasticity.

[5+5]

OR

- 9.a) Distinguish between forecasting and regression.  
b) Explain about model of multi regression system.

[5+5]

- 10.a) Explain about Automated mechanism design.  
b) Write an optimality function for a close loop system.

[5+5]

OR

11. Explain about Individual rationality (IR) constraints and Incentive compatibility (IC) constraints

[10]

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