

R19

Code No: 763AC

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

MBA III Semester Examinations, February - 2024

DATA ANALYTICS

Time: 3 Hours

Max.Marks:75

- Note:** i) Question paper consists of Part A, Part B.
ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.
iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART - A

(25 Marks)

- 1.a) Define Pivot table, its uses in exploring data. [5]
- b) State measures of location with an example. [5]
- c) What is the use of Linear Discriminant Analysis? [5]
- d) Define Prediction accuracy. [5]
- e) Write advantages and disadvantages of Simulation. [5]

PART - B

(50 Marks)

2. What are various statistical methods for summarizing the data and discuss the role of data in business analytics? [10]

OR

3. Mention different data visualization tools along with examples and brief on data queries with suitable examples. [10]

4. Explain all the Probability sampling techniques along with examples and discuss the measures of variability with an illustration? [10]

OR

- 5.a) Explain discrete distribution function?
- b) For the given dataset calculate the following:
 - i. Range
 - ii. Variance
 - iii. Inter-quartile Range
 - iv. Standard Deviation[5+5]

A	B
20	11
21	16
22	19
25	23
26	25
29	32
33	39
34	46
38	52

QA QA QA QA QA QA QA QA QA QA QA

- 6.a) What is Correlation? Mention its importance?
 b) Find Karl Pearson's coefficient correlation between the values of X and Y for the given data: [5+5]

X	Y
128	80
129	89
130	90
140	95
132	96
135	94
125	80
130	100
132	96
135	100

OR

7. What is Regression? Explain the types and uses of Regression? [10]
 8. Given a set of transactions, we can find the rules that predicts occurrence of an item based on the occurrences of other items in that transaction. [10]

TID	Items
1	Bread, Milk
2	Bread, Diaper, Beer, Eggs
3	Milk, Diaper, Beer, Coke
4	Bread, Milk, Diaper, Beer
5	Bread, Milk, Diaper, Coke

OR

9. Apply Logistics regression for the below data to check if the cell is cancerous or not?

Cell size	3.1	3.2	4	4.01	2.3	3.08	5.0	4.7	3
Yes/No	0	0	1	1	0	0	1	1	0

Yes = 1, No = 0

[10]

- 10.a) Define what if analysis?
 b) Company A has to finish the project within 60 days. A project manager has estimated the project's completion time within 60 days if the work is done at an average pace and the project is not disrupted by any reason.
 Scenario:
 What if the work on the project is disrupted due to bad weather? [5+5]

OR

- 11.a) What is Monte Carlo simulation explain with an example?
 b) Illustrate the decision tree analysis. [5+5]

QA QA QA QA QA QA QA QA QA QA QA