

SET A

PGDM (RM)
Retail Analytics
RM-404

Trimester –IV, End-Term Examination: September 2018

Time allowed: 2 Hours and 30 minutes
Max Marks: 50

Roll No: _____

Instruction: Students are required to write models, process, results and interpretations in answer booklet. They are also advised to submit soft copy to the invigilators.

| Sections | No. of Questions to attempt | | Marks |
|----------|-----------------------------|--------------------|-----------|
| A | 1 out of 1 | | 20 |
| B | 2 out of 3 | | 2*15=30 |
| | | Total Marks | 50 |

Section A

1. The “MBA_1.xls” contains sales transactions at XYZs, an upscale grocery store.
- Determine all two-product lifts and list the five largest lifts.
 - Optimize the store layout for those calculated two-way lifts in two rows with same columns

Section B

2. The file “LR_5.xls” contains the following data for several launches of the space shuttle:
- Temperature (degrees Fahrenheit)
 - Number of O-rings on the shuttle and the number of O-rings that failed during the mission

Use logistic regression to determine how temperature affects the chance of an O-ring failure. The *Challenger* disaster was attributed to O-ring failure. The temperature at launch was 36 degrees. Does your analysis partially explain the *Challenger* disaster?

3. Determine the Scan-Pro model for the data “scan-pro1.xls”. Interpret both model and R^2 .
4. The file “RFM_1.xlsx” contains the date and size of transactions for 5000 customers of a mail order catalog company. RFM (recency, frequency, and monetary value) attempts to predict how a customer will perform in the future based on ranking for recency, frequency, and monetary value. Rate each person on a 1–4 scale on each attribute, with a rating of 4 being the best and 1 the worst.