

PGDM / PGDM (IB), 2015-17
Marketing Research and Analysis
Subject Code: DM-533/ IB-510
Trimester – V, End-Term Examination: December 2016

Time allowed: 2 hrs 30 min

Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. In case of rough work please use answer sheet.

Section - A

Attempt any 3 out of 5 questions from this section. Each question carries 5 marks .

- Q A1 How the variables are standardized in cluster analysis?
- Q A2 Discuss the process of setting up of solver model for Cluster Analysis.
- Q A3 You want to forecast the total revenue from a movie. Discuss the process.
- Q A4 How maximum likelihood is estimated in a logistic regression?
- Q A5 How frequency of a customer is ranked?

Section B

Attempt any 2 out of 4 questions from this section. Each question carries 10 marks.

- QB1 Explain Three-way lifts with example and its process of optimization.
- Q B2 What is RFM analysis? How you decide to contact a customer based on RFM analysis?
- Q B3 How could the ADBUDG curve be used to determine optimal allocation of advertising for different Suzuki car models?
- Q B4 Discuss the process of three-cluster analysis of cities based on following variables:
 - a) Unemployment rate
 - b) Per capita income
 - c) Median age
 - d) Percentage of digital literacy

Section - C

Compulsory Case Study (15 Marks)

Suppose 3000 square feet is to be allocated between seasonal and non-seasonal items. You are to allocate at least 600 floor space square feet to each type of item. Estimated profit as function of floor space is given.

| space in square feet | seasonal Sales | non-seasonal sales |
|-------------------------|-------------------|-----------------------|
| 500 | 357770.9 | 1056381.404 |
| 750 | 438178 | 1217454 |
| 1000 | 505964.4 | 1346422.145 |
| 1250 | 565685.4 | 1455793.415 |
| 1500 | 619677.3 | 1551719.389 |

- What type of relationship exists between floor space and sales? 3 marks
- What is the procedure of determining the parameters of the function? 6 marks
- Discuss the process of allocation of floor space to each type of item. 6 marks