

PGDM / PGDM(IB) 2016-18  
Marketing Research & Analytics

(Set-A)

DM-437/IB-415

Trimester – IV, End-Term Examination: September 2017

Time allowed: 2 hrs

Max Marks: 50

Roll No: 16DM053

**Instruction:** The paper has 3 questions. Question 1 is compulsory. Answer any one from the next two questions. The problems have to be solved on the monitor provided to you. All relevant syntax and metrics of the solutions with final interpretations will have to be mentioned in the answer sheet.

Each question carries 25 marks.

Q1. Why Logistic regression is required when the dependent variable is dichotomous? Describe the Logistic regression model and how you would solve it using Excel non-linear engine? Consider the data set 'Logistic-1' with status as dependent variable, age and experience as independent variable. Interpret the outcome. ↙ 19,

Q2.

- a) How the revenue from a film can be predicted using from the revenue of 1<sup>st</sup> week and 2<sup>nd</sup> week using nonlinear multi start engine? Solve the problem on forecasting from dataset 'Data-2 week for forecasting with minimizing the total mean absolute deviation. Interpret the solution
- b) Suppose quarterly software sales are given which depend on quarterly PC shipments to the market. Write down the model to forecast sales. Consider the data "scan\_Pro-swsales\_data\_SqErr" with minimizing square error. Interpret the solution.

OR

Q3. What is two-way lift? How you develop the matrix of two-way lift and how it is used for optimizing the store layout using Evolutionary algorithm? Use the data "mba-14-1001" to develop the two-way lift matrix. Optimize the store layout of all 14 variables in two rows facing each other. Interpret the solution.