

**PGDM & PGDM (IB), 2020-22**  
**Marketing Analytics**  
**DM-433 / IB-435**  
**Trimester – IV, End-Term Examination: August 2021**

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. Submit both word and excel files.**

No. of Questions to attempt	Marks	Marks
2 out of 3 Questions	25 Marks each	2*25
	<b>Total Marks</b>	<b>50</b>

Q1. Suppose as a manager of *Reliance* chain store (12 stores) you are trying to evaluate performance of each store.

- Select minimum 3 inputs and 3 outputs and gives justification for their selection.
- Take data randomly for all 12 stores and for all variable. Write the model of input oriented constant return to scale.
- Evaluate each store and find their benchmark.

(CILO- 1, 2, 3)

Q2. Consider likelihood of purchase of a Ladies Purse on *Myntra* as dependent variable and age, income, recent purchase (on a scale of 1 - 5, where 5 is the most recent) of the product as independent variables.

- Justify that you can apply logistic regression in this problem.
- Take data randomly for a sample size of hundred and discuss the process of logistic regression
- Find the model

(CILO- 1, 2, 3)

Q3. As the Marketing Manager of Tata Starbus ( School minibus), you are interested to understand the purchase behavior of your customers i.e. School owners or School management in Uttarakhand where there are very few service stations for light Commercial Vehicles (LCVs).

The 100 school owners surveyed by you have the following option to choose from: SML Isuzu, Force Traveller, Eicher & Ashok Leyland, part from Tata Starbus.

The criteria considered while purchasing the above were: Mileage, fuel type, maintenance cost, seating capacity, volume occupied by the bus (compatibility with parking space), ease of service and availability of spare parts.

Use AHP analysis as a tool to predict the purchase decision for Tata Starbus under the above circumstances.

- a) You develop the required pair wise comparison matrices by yourself randomly taking 4 criteria and 3 alternatives from above. Show the hierarchical figure of the problem.
- b) Find all local weights and global weights along with consistency ratio to get the best alternative.

(CILO-1, 2)