PGDM- RM, 2021-23
Retail Analytics
RM - 408
Trimester – IV, End-Term Examination: September 2022

Roll No: _____

Time allowed: 2 Hrs   Max Marks: 40

Instruction: Students are required to write Roll No on the cover page of the Answer Sheet. All other instructions on the question paper / Admit card should be followed meticulously.

Sections	No. of Questions to attempt	Marks	Total Marks
A	4 Questions	4* 5	20
B	Compulsory with 2 questions	2*10	20
			40

SECTION A – (5 marks * 4 questions) = 20 Marks

Q1. How can you eliminate outliers using box-plot?

OR   (CO1)

Determine the outliers of the following two data sets A and B by using z-transformation

A	19	41	29	95	7	30	10	59	40	47	52	34	12
B	11	27	18	23	72	27	27	53	3	45	53	125	x

Q2.   Suppose you want to purchase a smart phone. Develop a pair-wise comparison matrix with 4 attributes and find its consistency ratio.

OR   (CO2)
Write the different steps to develop and solve AHP.

Q3. In a transactional database, Milk has been transacted 440 times, Bread has been transacted 310 times and both have been transacted 180 times. Find the followings

   a. Conf(Milk-> Bread)
   b. lift((Bread->Milk)

<div align="center">OR   (CO3)</div>

Define support, confidence and lift of two products A and B from a transactional database.

Q4. How maximum likelihood is estimated in logistic regression?

<div align="center">OR   (CO3)</div>

How a logistic regression is different from simple regression?

<div align="center">Section B   (CO4)</div>

Q5. Determine all two-product lifts for the file **marketbasket-1.xls**. Using lift, optimise   store layout.

Q6. The file **logistic.xls** gives the age of customer subscribe or do not subscribe a magazine. How does the age influence the chance of subscribing? Explain through logistic regression.