Student Name:_____   Enrollment No._____

NIIT UNIVERSITY

Comprehensive Examination

Course Name: Marketing Analytics   **Course Code:** MKT 623

Academic Year: 2024-25   Semester: July-Dec (Odd)

Date of Examination: 24-Dec-2024   Total pages: 01

Time: 10.30 AM to 01.30 PM   **Total Marks: 30**

Instructions: 1. Each question has an objective and solution to that will determine the marks.
            2. Step marking will be considered.
            3. Refer to the excel sheet for each question againt the title excel sheet.

Q. No.	Questions	Total Marks	Cos
1	You are analyzing the profitability of a company's customer base. Each customer generates a margin of $27 annually, and there are 4,500 customers. The customer retention rate is 55% annually, and the company uses a 10% discount rate to evaluate future cash flows over a 30-year horizon. Based on this information, calculate the Net Present Value (NPV) of the total customer base over the 30-year period. Additionally, determine the Lifetime Value (LTV) per customer.	6	CO-3
2	Find the optimum price for each quarter for the price skimming problem given and find the difference in revenue if we were to use fixed price	6	CO-2
3	Which variables in the customer churn dataset have the most significant impact on customer churn, and why do these factors influence customer behavior?	6	CO-4
4	Given a lead segmentation dataset, build a decision tree model to predict the likelihood of lead conversion. Analyze the factors influencing conversion and provide insights based on the model's outcomes.	6	CO-5
5	Given a dataset for a market basket analysis problem, calculate the lift values for the item pairs listed in the Excel sheet.	6	CO-3

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