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| **C:\Users\ADMIN\Desktop\j.png** | **JAIPURIA INSTITUE OF MANAGEMENT, INDORE**  Post Graduate Diploma in Management |
| **Course Title: Business Intelligence for Decision Making, (Course Code: 40823)**  **Re-End-Term Examination, Term - IV (October, 2024)** | |
| **Time Duration: 2 Hours Total Marks: 40** | |

***General Instructions*:**

1. *Answer the questions as directed. The break-up of the marks is given wherever necessary.*
2. *Marks against each question are indicated to its right.*
3. *For question 1 (SQL Questions), please paste the query in the MS Word file and write the analysis accordingly. The analysis of PowerBI visualization will also be written in the same MS Word file in which SQL queries are pasted.*
4. *Please save the MS Word and PowerBI Dashboard with your Full Enrollment NO.*
5. *Two files need to be uploaded in total:*
6. *MS Word file with SQL query screenshots with analysis(Q1) and PowerBI Visualization analysis(Q2).*
7. *PowerBI Dashboard file.*
8. *Do not write on the question paper except your roll number.*

Q1. Two CSV files, **stores** and **details\_stores**, will be provided; all the queries will be run based on these two files on the MySQL workbench. The ABC e-commerce company has customers in various countries around the globe, they have products in three segments consumer, corporate, and Home furnishing in terms of markets they operate in five markets Asia, Africa, Europe, LATAM, and USCA. To make some decisions based on quantity, sales, and profit, they need some information. (**7X3 marks)**

**The Column description is mentioned below:**

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| **Field** | **Field Information** | **Description** |
| Product ID | ProductID | Unique ID of each product |
| Ship Date | ShipDate | The date on which the product is shipped to the customer |
| Order Date | OrderDate | The date on which the product is ordered by the customer |
| Ship Mode | Shipmode | The shipping modes opted for by customers like Standard class, same day, first class, etc. |
| Segment | Segment | There are segments of products like corporate, home furnishing, and consumer |
| Country | Country | The country from where the product is ordered |
| Market | Market | The market of products like Asia, Africa, etc. |
| Category | Category | Under each Segment, there are some specific categories of products |
| Sub-Category | Sub-Category | Under each category, there are some sub-categories also exist |
| Product Name | ProductName | The name of the product |
| Sales | Sales | The amount of sales done by selling each product |
| Quantity | Quantity | Quantity of products sold |
| Discount | Discount | Discount percentage (Decimal) given on product |
| Profit | Profit | Profit earned |

**Each part carries 3 marks;**

1. Extract orders placed in different ship modes (number) and comment on which ship mode is more popular among the customers
2. Summarize which order dates are more important in terms of several orders placed, and list the top 5 such dates.
3. Derive the average sales (decimal point 2) as per different countries. Comment.
4. Which segment has placed more orders in terms of quantity? Comment
5. Analyse the profitability of different markets.
6. Explain sales generated by different product categories.
7. Analyse the overall ABC e-commerce organization based on the above queries and data provided in both the CSV files, which market would you like to focus more on advertising in terms of money spent and explain the reason for the same.

Q2. As per the above-mentioned used ABC eCommerce organization data, prepare a dashboard to analyze the data and explain the overall position of the organization in different countries under different categories.

**Each part carries 3 marks excluding 1 mark for data preparation (18+1=19)**

The data preparation before going to work on PowerBI visuals- **1 mark**

1. Analyze the profitability of different countries
2. Which customer segment this organization should target more and why?
3. Analyse is same-day delivery is a more popular shipping mode among customers or not.
4. Comment which category of product has the lesser time of delivery
5. Which sub-category of products is more vibrant in terms of generating higher sales Comment.
6. Design a visual that helps ABC e-commerce organization to understand its profitability under various parameters like category, sub-category, shipping mode customer segment, etc.