# JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA <br> PGDM / PGDM (M) / PGDM (SM) 

FIFTH TRIMESTER (Batch 2022-24) END TERM EXAMINATIONS, JANUARY 2024

## SET - 1 (Group 2)

| Course Name | Business Intelligence for Decision Making | Course Code | $\mathbf{2 0 8 2 3}$ |
| :--- | :--- | :--- | :--- |
| Max. Time | $\mathbf{2}$ hours | Max. Marks | $\mathbf{4 0}$ MM |

## INSTRUCTIONS:

a. Please do write the answers for questions 1-3 in a word document and upload it on Moodle.
b. Q4 to be done on Power desktop (in PBIX format) and should be uploaded on Moodle.
c. For Q1 please try to be crisp and the answer shouldn't exceed more than 50 words
d. For Q2 and Q3 do write down the SQL codes along with the answer number

Q1. Elaborate the relationships in Power BI? List the type of relationship when we connect tables with unique value to tables with repeating values?
(Marks: 2)
Q2. Construct an SQL query to find out the Country wise Total Population in the following "Population_Data" table and arrange the result in decreasing order of the "Population" column:
(Marks: 3)

| Country | Population |
| :---: | :---: |
| India | 10000 |
| Malaysia | 20000 |
| South Africa | 15000 |
| Malaysia | 30000 |
| South Africa | 10000 |
| India | 40000 |
| India | 60000 |

Output should be like the below table :

| Country | Population |
| :---: | :---: |
| India | 110000 |
| Malaysia | 50000 |
| South Africa | 25000 |

Q3. Construct SQL queries for the following two Tables according to the mentioned scenarios: Information:

| Associate ID | Associate Name | Associate Salary | Associate City |
| :--- | :--- | :--- | :--- |
| A1 | Swati | 10000 | Delhi |
| A2 | Rohan | 20000 | Gujarat |
| A3 | Sameer | 25000 | Uttar Pradesh |
| A4 | Raj | 40000 | Kerala |

## Department:

| Associate ID | Associate Department |
| :--- | :--- |
| A4 | Marketing |
| A3 | HR |
| A1 | Research |
| A2 | Analytics |

1) Formulate SQL query to drag Associate Name and Associate City from "Information" table.
(Marks: 1)
2) Formulate SQL query to find out the Associate Department from the "Department" table which is having Associate ID as "A3".
(Marks: 1)
3) Develop an SQL query to join "Information" and "Department" tables and drag all columns of "information" table.
(Marks: 4)

## Q4. Case Study:

You are the data analytics consultant of DEF Ltd., a major staffing company in Malaysia. ABC Ltd. signed a contract with your organization. The business analytics director of ABC wants to perform a financial reporting audit (Period : Oct-2022 to Sep-2023) for his organization. The director connects with the CFO of DEF Ltd. and provides the necessary data on which the auditing will be done. As the starting procedure of the audit the director of ABC Ltd. wants DEF Ltd. to perform all the required analytics in order to decrease the sample size for testing. The CFO of DEF Ltd. wants you to perform these analytics on Power BI to make the deliverables more precise and presentable. The CFO asks you to perform the following analytics on Power BI :

Make 2 tabs in the name as "General Overview" and "Journal Profiling".
Instructions for making "General Overview" tab:

1) Design a Text Box with header of the tab along with the audit period. (Marks: 2)
2) Evaluate the card for unique count of "Journal IDs", sum of "Total Debit Amount" and sum of " Total Credit Amount", slicer of "Month Year"(only month name and year).
(Marks: 8)
3) Assess the unique count of Journal IDs as per amount in USD in the form of a stack column chart. (Take 1 USD $=4.60$ South African Rand)
(Marks: 4)
4) Estimate the delay in the entries entered after the FRP due date with the formation of Table along with a "Delay" column created by a DAX Query.
(Marks: 3)
5) Conclude all the base data in the form of Raw table at the bottom of the tab.
(Marks: 1)

## Instructions for making "Journal Profiling" tab:

1) Design a Text Box with header of the tab along with the audit period. (Marks: 2)
2) Compare the count of automatic and manual Journal IDs with the help of measures in the form of a table.
(Marks: 4)
3) Simplify the debit amounts of round entries according to the posting month-year in ascending order in the form of a percentage bar chart.
(Marks: 4)
4) Conclude all the base data in the form of Raw table at the bottom of the tab.
(Marks: 1)
