**BDTM: Big Data Tools for Managers**

**2nd Internal Question Paper**

**Version-A**

Q1. Create below table with data and demonstrate JOIN operation in SQL.

Table1 : student

|  |  |
| --- | --- |
| **usn** | **name** |
| 1SI22MBA01 | John Nick |
| 1SI22MBA02 | Bob Smith |

Table 2: student\_marks

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **usn** | **subject** | **marks** |
| 1 | 1SI22MBA01 | sub-1 | 45 |
| 2 | 1SI22MBA01 | sub-2 | 38 |
| 3 | 1SI22MBA01 | sub-3 | 25 |
| 4 | 1SI22MBA01 | sub-4 | 49 |

Write MySQL Queries for following:

1. Create student & student\_marks tables with data. [10]
2. Perform INNER Join with two tables. [5]

Q2. Write simple IF conditional statement to variable contains positive value. [5]

For Example Variable: var1 = 10

Q3. Demonstrate List Data structures in Python

1. Create List with elements 10,20,30,40,50,60,70,80,90 [4]
2. Display all the list elements [2]
3. Display the number of elements present in List using len() function [1]
4. Add 100, 101 elements in to the existing list. [3]

Q4. Demonstrate Tuple Data structures in Python

1. Create a Tuple with elements [1]

100,110,120,130,140,150,160,170,180,190, 200

1. Display First element of Tuple [1]
2. Display last element of Tuple [1]
3. Display first 3 elements of tuple [1]
4. Display last 3 elements of tuple [1]

Q5. Demonstrate Pandas package to perform data analysis for IPL dataset.

Step 1: Write below code to read data from Internet and IPL dataset will be loaded into data variable, use data variable name to perform below operations.

**import pandas as pd**

**data = pd.read\_csv("https://bit.ly/3V0H3Ox")**

1. Display Shape of panda DataFrame [1]
2. Display all the columns names with its data types [2]
3. Display quick summary of dataset [2]
4. Display top 10 records [2]
5. Display last 10 records [2]
6. Display all the values of COUNTRY column [2]
7. Count frequency of COUNTRY values [2]
8. Display unique COUNTRY values [2]