Roll No											

PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF MANAGEMENT
MID TERM EXAMINATION - NOV 2023

Semester : Semester III - 2022
Course Code : BBB3003
Course Name : Sem III - BBB3003 - Essentials Statistics for Business Analytics
Program : BBA

Date : 3-NOV-2023
Time : 2:00PM - 3:30PM
Max Marks : 50
Weightage : 25%

Instructions:
(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.
(iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS **(5 X 2 = 10M)**

1. **List** two scholars who laid the groundwork for statistical analysis in the 17th and 18th centuries.
(CO1) [Knowledge]
2. **Name** two statisticians from the 19th and 20th centuries who made significant contributions to the field of statistics.
(CO1) [Knowledge]
3. **Specify** a future trend that is expected to shape the field of statistics characteristics.
(CO1) [Knowledge]
4. **Define** qualitative data.
(CO2) [Knowledge]
5. **Identify** two data collection methods used for qualitative data.
(CO2) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS **(2 X 10 = 20M)**

6. a. What is a dictionary in Python? Explain its syntax with an example where you will convert the dictionary into a Pandas table.

or

b. Answer the following questions in the context of a Python dictionary. Write a programme for each question.

1. How do you create an empty dictionary in Python?
2. How to add an element to the end of a dictionary?
3. How do you remove an element from a dictionary?

(CO2) [Comprehension]

7. What are the different comparison operators in Python? Use comparison operator to extract data with given condition from Pandas DataFrame.

Or

Suppose you have a DataFrame containing sales data for various products. The DataFrame includes columns for `Product_Name`, `Units_Sold`, and `Price`. Write a Python program to extract and display the data for products that have been sold (i) more than 100 units and (ii) cost less than $50.

(CO2) [Comprehension]

PART C

ANSWER THE FOLLOWING QUESTION **(1 X 20 = 20M)**

8. What is NumPy? What is the method of importing the particular method of NumPy? Create 10 random number using Numpy Package.

Or

Assume you are a sales manager for an electronics store, and you have sales data for different products in multiple locations. The dataset includes 'SalesRepID', 'Location', 'Product', and 'MonthlySales'.

- Create a DataFrame with columns 'SalesRepID', 'Location', 'Product', and 'MonthlySales'.
- Use Python's pandas library to calculate the maximum and minimum monthly sales across all sales reps and within each location.

(CO2,CO3) [Application]