PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF MANAGEMENT
MID TERM EXAMINATION - NOV 2023

Semester : Semester V - 2021
Course Code : BBB3030
Course Name : Sem V - BBB3030 - Application of Business Analytics
Program : BBA

Date : 3-NOV 2023
Time : 9:30AM - 11:00AM
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. How does diagnostic analytics differ from descriptive analytics?

(CO1) [Knowledge]

2. What is the focus of financial analytics?

(CO1) [Knowledge]

3. List two types of Marketing Analytics.

(CO1) [Knowledge]

4. Can you identify common issues that lead to poor data quality?

(CO2) [Knowledge]

5. How would you use data visualization tools to better interpret complex data sets?

(CO2) [Knowledge]

PART B

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

6. Demonstrate how to create a DataFrame from a 2D NumPy array. The array should have dimensions 2x3 with numbers 1 to 6. Label the columns as 'A', 'B', 'C'.

(CO2,CO3) [Application]

7. Create a Python program to calculate the sales commission for employees in a retail store. The commission is determined based on the following conditions:
a. If the sales amount is below $5,000, the commission rate is 2%.
b. If the sales amount is between $5,000 and $10,000, the commission rate is 5%.
c. If the sales amount is above $10,000, the commission rate is 7%.
Also explain
d. What is the purpose of using `if-else` statements in Python?

(CO3,CO2) [Application]

PART C

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

8. Create a Python program that helps a retail store manager keep track of the available stock for different products. Your program should:
a. Use a list to store the names of 5 different products.
b. Use another list to store the respective quantities of these products.
c. Use a `for` loop to iterate through the list and display the products that have low stock (less than 5 items).
In addition to the code, answer the following theoretical questions:
Theoretical Questions:
d. What is the purpose of using a `for` loop in Python?
e. How can `for` loops be beneficial in a business context?

(CO1,CO2,CO3) [Application]