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PRESIDENCY UNIVERSITY BENGALURU

**SET-A**

SCHOOL OF COMMERCE

**END TERM EXAMINATION – MAY/JUNE 2024**

**Semester :** Semester II - 2023

**Course Code :** BSE1020

**Course Name :**  Data Analysis using Software

**Program :** B.Sc. Economics

**Date :** June 13, 2024

**Time :** 9:30 AM - 12:30 PM

**Max Marks :** 100

**Weightage :** 50%

**Instructions:**

1. *Read all questions carefully and answer accordingly.*
2. *Question paper consists of 3 parts.*
3. *Scientific and non-programmable calculator are permitted.*
4. *Do not write any information on the question paper other than Roll Number.*

**PART - A**

**ANSWER ANY 5 QUESTIONS 5Q X 2M = 10M**

* 1. State a difference between R and Python.
  2. Describe cells.
  3. In what way does the hlookup function help in analyzing data in excel?
  4. State the use of excel solver.
  5. Define a dummy variable.
  6. State when to use logit regression model.
  7. SPSS more powerful than Excel-Justify the statement.

(CO1) [Knowledge] (CO2) [Knowledge] (CO3,CO2) [Knowledge] (CO3) [Knowledge] (CO4) [Knowledge] (CO5,CO4) [Knowledge] (CO5) [Knowledge]

**PART - B**

**ANSWER ANY 5 QUESTIONS 5Q X 10M = 50M**

* 1. Outline the steps involved in creating a bar chart in Excel.

(CO1) [Comprehension]

* 1. You need to calculate the summary statistics of the following variables in Stata. You also need to calculate the skewness and kurtosis also along with the other statistics. How will you proceed?

(CO2) [Comprehension]

* 1. Suppose that we want to analyze how personal income is affected by:
     1. years of work experience
     2. postgraduate education

Specify a linear regression model and interpreter the role of the dummy variable.

(CO3) [Comprehension]

* 1. Elucidate on the few core features of SPSS
  2. Outline the ways of interacting with R.

(CO3) [Comprehension] (CO4) [Comprehension]

* 1. Differentiate between statistic and parameter and evaluate the two main methods to make inferences in statistics.

(CO5) [Comprehension]

* 1. Mention the full form of NumPy and also explain the steps to create NumPy array in Python.

(CO5) [Comprehension]

**PART - C**

**ANSWER ANY 2 QUESTIONS 2Q X 20M = 40M**

* 1. Explain the steps required to create any 2 types of graphs in SPSS.
  2. Elucidate on the steps to import data to SPSS.

(CO2) [Application] (CO3) [Application]

* 1. Explain the ways in which different types of maps can be generated for data analysis.

(CO5) [Application]