

Roll No



**PRESIDENCY UNIVERSITY
BENGALURU**

SET A

**SCHOOL OF MANAGEMENT
END TERM EXAMINATION - JAN 2024**

Semester : Semester V - 2021

Course Code : BBB3003

Course Name : Essential statistics for Business Analytics

Program : BBA

Date : 08-JAN-2024

Time : 1:00 PM - 4:00 PM

Max Marks : 100

Weightage : 50%

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 2M = 10M

1. Mention any two differences between Questionnaire Vs Schedule. (CO1) [Knowledge]
2. Indicate the types of Classification of Data. (CO2) [Knowledge]
3. What is hypothesis? (CO3) [Knowledge]
4. Calculate Arithmetic Mean for the following data by **Direct method**

45	65	38	80	70	95
----	----	----	----	----	----

(CO4) [Knowledge]
5. If $r = 0.8$, and $N = 16$. Find out the Probable Error (P.E.) (CO5) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS

5 X 10M = 50M

6. Statistics as "Numerical statement of facts in any department of enquiry placed in relation to Each other". Who is the father of Statistics? Explain the functions statistics. (CO1) [Comprehension]

7. Classification helps organize large sets of data into meaningful categories or classes. This structural order makes it easier to manage, retrieve, and analyze information systematically. Explain the various types of classification of data

(CO2) [Comprehension]

8. Sampling techniques are crucial in various fields, including statistics, market research, quality control, and scientific research. The importance of sampling techniques lies in their ability to provide a representative subset of a population, enabling researchers to draw conclusions about the entire population without having to study every individual or element. Sampling is a technique used in statistics to select a subset of individuals or items from a larger population. Discuss the various sampling techniques for selection of a sample from the population.

(CO3) [Comprehension]

9. Find out standard deviation from the following data

Age in years:	0-10	10--20	20- 30	30-40	40-50
No of persons:	18	30	22	10	6

(CO4) [Comprehension]

10. Correlation is a statistical measure that describes the extent to which two variables change together. It quantifies the strength and direction of a linear relationship between two variables. The importance of correlations lies in its applications across various fields and its ability to provide valuable insights. Explain the various types of correlation

(CO5) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS

2 X 20M = 40M

11. Calculate Quartile Deviation (Q D) from the following data.

Profits:	0-10	10-20	20-30	30-40	40-50	50-60
No. of Companies	5	12	20	16	5	2

(CO4) [Application]

12. Find out two regression equations

X	6	2	10	4	8
Y	9	11	5	8	7

(CO5) [Application]