Roll No. $\square$ Total No. of Pages : 02
Total No. of Questions : 09
BBA / BBA (SIM) (Sem-2)
BUSINESS STATISTICS
Subject Code: BBA-201-18
M.Code : 75916

Date of Examination : 07-06-2023
Time : 3 Hrs.
Max. Marks : 60

## INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B consists of FOUR Sub-Sections : Units-I, II, III \& IV.
3. Each Sub-section contains TWO questions each, carrying TEN marks each.
4. Student has to attempt any ONE question from each Sub-section.

## SECTION-A

1. Write briefly :
a) Explain the functions of statistics.
b) What do you understand by frequency distribution?
c) Explain the meaning of population and sample.
d) What is the difference between quartiles and deciles?
e) Elaborate the properties of standard deviation.
f) Explain the concept of sampling distribution.
g) What do you understand by linear and non-linear correlation?
h) Explain the properties of regression coefficient.
i) Elaborate the laws of the probability.
j) Explain the applications of Poisson distribution.

## SECTION-B

## UNIT-I

2. Explain the various probability and non-probability techniques in detail.
3. What are the different sources used for collecting the data in statistics? Elaborate.

## UNIT-II

4. Calculate the value of mode by using the grouping method from the following data :

| Marks | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ | $80-90$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of students | 4 | 6 | 20 | 32 | 33 | 17 | 8 | 2 |

5. What is the difference between :
a) Mean deviation and Standard Deviation.
b) Inter-quartile range and Quartile deviation.

## UNIT-III

6. What do you mean by regression analysis? What is the relationship between correlation and regression coefficient? Also, explain the principle of least square and regression analysis.
7. Calculate the Correlation Coefficient from the following data of marks obtained in Commerce (X) and Economics (Y) :

| $\mathbf{X}$ | 50 | 60 | 58 | 47 | 49 | 33 | 65 | 43 | 46 | 68 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{Y}$ | 48 | 65 | 50 | 48 | 55 | 58 | 63 | 48 | 50 | 70 |

## UNIT-IV

8. It is observed that $80 \%$ of television viewers watch "Master Chef" series. What is the probability that at least $80 \%$ of the viewers in a random sample of five watch this series?
9. What do you understand by the term probability? Explain the various approaches for calculation of probability.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.

