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SUBJECT CODE NO: - XX-3519
FACULTY OF COMMERCE AND MANAGEMENT
B.Com F.Y (Sem. I)
Examination May / June - 2023
Business Mathematics & Statistics-I

[Time: 3:00 Hours]**[Max. Marks: 80]**

Please check whether you have got the right question paper.

N. B

- 1) Question Number 1 is compulsory.
- 2) Solve any four Question from 2 to 7.

Section - 'A'

- Q1 A) Fill in the Blanks. 05
- 1) The _____ is the Most Frequently Occurring observation.
 - 2) Facts or figures, collected with a definite purpose, are called _____.
 - 3) Median divides the total frequency into _____ equal parts.
 - 4) Average of a data is called _____.
 - 5) value of the Middle -most observation(s) is called _____.
- B) Answer in one sentence. 05
- 1) The measures of dispersion can Never be?
 - 2) Which of the following is an absolute Measure of dispersion?
 - 3) Mean deviation computed from asset of data is always?
 - 4) Median divides the total frequency into which parts?
 - 5) What is primary data?
- C) Select the Most appropriate answer. 05
- 1) Statistics branches include

a) Applied Statistics	b) Mathematical Statistic
c) Industry Statistics	d) Both a and b
 - 2) Statistics are always.

a) Estimated Values	b) Exact Values
c) Constant Values	d) None of these
 - 3) Statistics is defined as the numerical data in.

a) Plural sense	b) Singular sense
c) a & b	d) None of these
 - 4) A descriptive measure computed from population data is

a) Parameter	b) Statistics	c) Constant	d) None of these
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- 5) Statistics has origin in
- a) Latin word status b) Italian word
- c) German word statistic d) None of these

D) State whether the following statements are true or false.

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- 1) Statistics is affected by multiplicity of causes.
- 2) Statistics is numerically expressed.
- 3) Statistics cannot be used in Research.
- 4) Statistics is a Science.
- 5) Statistics are aggregates on facts.

Q2 From the following table calculate Mean, Median & Mode.

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Marks obtained	No. of Students
0-10	5
10-20	8
20-30	7
30-40	12
40-50	28
50-60	20
60-70	10
70-80	10

Q3 Find out co-efficient of Mean deviation by Using mean (\bar{X}) from the following data.

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Class	0-3	3-6	6-9	9-12	12-15	15-18	18-21
Frequency	2	7	10	12	9	6	4

Q4 Find the Matrix 'X' such that $A + X = B$.

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$$\text{If } A = \begin{bmatrix} 5 & 15 \\ 10 & -25 \end{bmatrix} \text{ and } B = \begin{bmatrix} 35 & 25 \\ 10 & 50 \end{bmatrix}$$

Q5 Find the Value of determinant (without Expanding).

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$$\begin{vmatrix} 1 & 1 & 1 \\ 15 & 20 & 25 \\ 32 & 44 & 64 \end{vmatrix}$$

Q6 Calculate the Karl person co-efficient of skewness from the following data.

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Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of student	4	8	11	15	12	6	3	1

Q7 If $A = \begin{bmatrix} 3 & 5 \\ 2 & x \end{bmatrix}$, $B = \begin{bmatrix} 4 & y \\ 2 & 9 \end{bmatrix}$ and $C = \begin{bmatrix} 26 & x \\ 14 & 45 \end{bmatrix}$

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Find the value of x and y

If $2A+5B=C$