PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BA DEGREE EXAMINATION DECEMBER 2019
(Third Semester)

Branch - **ECONOMICS**

STATISTICAL METHODS -1

Time: Three Hours Maximum: 75 Marks

SECTION-A (10 Marks!
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10x1 = 10)

Statistics is considered as
(i) An art (ii) Science
(iii) Both art and science (iv) None of these

Cluster sampling, stratified sampling and systematic sampling are types of
(i) Direct sampling (ii) Indirect sampling
(iii) Random sampling (iv) Non random sampling

Data classified on the basis of weight is
(i) Quantitative (ii) Qualitative
(iii) Chronological (iv) All of the above

4 The lower limit of the class interval 10-20 is
(i) 15 (ii) 10
(iii) 20 (iv) 0

5 The value which divides the series into two equal parts is
(i) Quartiles (ii) Deciles
(iii) Median (iv) Mode

6 The square root of variance is
(i) Standard deviation (ii) Range
(iii) Quartile deviation (iv) Mean deviation

7 When co-efficient of skewness is zero, the distribution is
(i) J-shaped (ii) U-shaped
(iii) Symmetrical (iv) None of these

8 Kurtosis defines peaked ness of curve in region which is
(i) Around mode (ii) Around mean
(iii) Around medium (iv) Around variance

9 The value of correlation coefficient is
(i) More than one (ii) Less than one
(iii) Between+1 and-1 (iv) Always zero

10 The term regression was first used by
(i) Spearman (ii) Gabon
(iii) Karl Pearson (iv) Grammer

SECTION - B (25 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5x5 = 25)

11 a Bring out the limitations of statistics.

OR

b Elucidate the sources of secondary data.

12 a Distinguish between diagrams and graphs.

OR

b Put forth the uses of tabulation.

13 a Calculate mean deviation from the following data:

x:	0-3	3-6	6-9	9-12	12-15	15-18	18-21
f:	2	7	10	12	9	6	4

OR

b What is an average? Point out its uses.

14 a Explain the concept of Kurtosis.

OR

b Compute Bowley's coefficient of skewness from the given data,

x:	20	40	60	80	100	120	140
f:	5	3	4	10	6	3	4

15 a Differentiate linear correlation from non-linear correlation.

OR

b Find the regression equation of X and Y from the following data

X:	1	2	3	4	5	6	7	8	9
Y:	9	8	10	12	11	13	14	16	15

SECTION -C (40 Marks!

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5x8 = 40)

16 a Explain the scope of statistics.

OR

b Describe the random sampling methods.

17 a Discuss the types of classification.

OR

b From the following data draw a histogram and the frequency polygon.

X:	0-50	50-100	100-150	150-200	200-250	250-300
Y:	12	18	27	20	17	6

18 a Calculate mean and median from the following data.

X:	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
F:	4	12	40	41	27	13	9	4

OR

b State the different methods of measuring dispersion.

19 a Describe the important measures of relative skewness.

OR

b Calculate Karl Pearson's coefficient of skewness from the following data

Class:	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency:	5	6	11	21	35	30	22	18

20 a Calculate the coefficient of correlation from the following data.

X:	9	8	7	6	5	4	3	2	1
Y:	15	16	14	13	11	12	10	8	9

OR

Explain the uses of regression analysis.