PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BA DEGREE EXAMINATION DECEMBER 2018
(Third Semester)

Branch – **ECONOMICS**

STATISTICAL METHODS – I

Time : Three Hours Maximum : 75 Marks

SECTION-A (20 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 x 2 = 20)

Define the following:

1 Statistics.
2 Sampling design.
3 Tabulation.
4 Ogives.
5 Dispersion.
6 Range.
7 Skewness.
8 Kurtosis.
9 Scatter Diagram.
10 Regression.

SECTION - B (25 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

11 a What are the limitations of Statistics?

OR

b Explain the methods of collecting primary data.

12 a What are the parts of a table?

OR

b Write a note on Histogram.

13 a Calculate the standard deviation from the data given below:

Size of item	3.5	4.5	5.5	6.5	7.5	8.5	9.5
Frequency	3	7	22	60	85	32	8

OR

b Write a short note on Lorenz curve.

14 a Explain the concept of moments.

OR

b Calculate Karl Pearson's coefficient of skewness from the data given below:

X	1	2	3	4	5	6	7
Y	10	18	30	25	12	3	2

15 a What are the types of correlation?

OR

b Calculate Spearman's coefficient of rank correlation for the following data:

X	53	98	95	81	75	61	59	55
Y	47	25	32	37	30	40	39	45

SECTION - C (30 Marks)
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

16 Explain the various methods of selecting a sample.

17 Describe the four types of classification.

18 Find Mean, Median and Mode for the following data.

Wages (Rs)	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64
No of Workers	31	47	59	78	104	113	81	60	52	25

19 Calculate Karl Pearson's coefficient of skewness for the following data.

Marks	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50
No of Students	8	16	30	45	62	32	15	6

20 Compute the regression equations for the following data.

X	80	45	55	56	58	60	65	68	70	75	85
Y	82	56	50	48	60	62	64	65	70	74	90

Z-Z-Z END