PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2019
(Third Semester)

Branch- **BOTANY**

BIOSTATISTICS

Time : Three Hours   Maximum : 75 Marks
SECTION-A (20 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks   (1 0 x 2 = 20)

1   Define Biostatistics.
2   Write any two sources of secondary data.
3   Write the parts of the table.
4   Write any two uses of diagrammatic representation.
5   Give formula for median. When the data is continuous.
6   Calculate mean for the following data:
       47 49 55 65 23 11 45 99 76
7   Calculate range and co-efficient of range for the following data
       7, 5, 125,20, 55,23,55, 77
8   Write formula for standard deviation.
9   Define Correlation.
10   Write regression equation of Y on X.

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

11   a Explain the concept of sample and population.
                            OR
     b Discuss the sources of secondary data.

12   a Explain any two types of classification.
                            OR
     b Draw histogram and frequency curve for the following data:

Class intervals	58-61	61-64	64-67	67-70	70-73	73-76	76-79
Frequency	2	10	48	64	56	16	4

13   a Write the merits of arithmetic mean.
                            OR
     b Calculate median and mode for the following data.

Marks	4	5	6	7	8	9
No. of Students	8	10	9	6	4	3

Calculate Standard deviation.

x	6	7	8	9	10	11	12
f	3	6	9	13	8	5	4

                            OR
     b Calculate Quartile deviation and its coefficient from the following data.

Weight	60	61	62	63	65	70	75	80
No. of workers	1	3	5	7 .	10	3	1	1

15   a Explain types of correlation with example.

OR

b Calculate Rank correlation coefficient.

Treatment A	55	12	17	15	85	58	78
Treatment B	12	43	15	67	99	22	31

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

16   Discuss any three methods of collecting primary data.

17   Explain different types diagrammatic and graphical representation.

18   Calculate mean, median and mode for the following data.

Class Interval	10-15	15-20	20-25	25-30	30-35	35-40
Frequency	11	20	35	20	8	6

19 Find which treatment is more efficient using coefficient of variation.

Treatment A	4	8	4	15	10	11	9
Treatment B	12	8	3	15	6	4	10

20 Obtain the line of regression Y on X for the following data:

Age (yrs) x	66	38	56	42	72	36	63	47	55	45
Blood Pressure y	145	124	147	125	160.	118	149	128	150	124

Z-Z-Z   END