PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Third Semester)

Branch- **ZOOLOGY**

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 : Biological variables.

2   Name the two sources of secondary data.

3   What are the types of classification?

4   Define diagram.

5   Find the median: 57, 58, 61, 42, 38, 65, 66.

6   For a frequency distribution the mean is 78 and median is 72 find the value of mode.

7   Find the Range: 8, 10, 5, 9, 12, 11.

8   Define Quartile Deviation.

9   Write down the types of correlation.

10   Define Regression.

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

1 1 a Explain the concept of sample and population.
                              OR
     b Write down the sources of secondary data.

12 a Distinguish between diagrams and graphs.
                              OR
     b Marks scored by 30 students are given below:
        41, 55, 48, 47, 53, 48, 33, 32,42, 55, 44, 38, 60, 65, 71, 80, 41, 53, 47, 48, 55, 20, 31, 34, 42, 51, 35, 35, 26, 25.
        Convert the raw data into a continuous frequency distribution with the class interval of 10.

13 a   Find the arithmetic mean of the following:

Value:	2	3	4	5	6
Frequency :	10	25	36	25	10

                    OR
     b Calculate median for the following

x:	3	4	5	6	7	8	9	10
f:	1	5	6	7	10	15	10	5

14 a Calculate Mean Deviation from median for the following :
        12, 15,20,28,30, 40, 50

15 a Find the Karl Pearson's coefficient of correlation using the values
        Ex = 225 Ey = 314 Ex² = 5685 Ey²= 11080 Exy = 7767 N = 5.
                    OR
    b Calculate Spearman's rank correlation coefficient for the following data
        X: 85   60   73   40   90
        Y: 93   75   65   50   80

SECTION - C (30 Marks!
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 1 0 = 30)

16   Explain any two methods of collecting primary data in detail.

17   Represent the following data by a Pie diagram
        Item: Food Clothing Recreation Education Rent Misc.
        Expenditure: 87   24   11   13   25   20

18   Calculate mean, median and mode for the following data:
        Class interval: 2-4   4-6   6-8   8-10   10-12 12-14 14-16
        Frequency: 1   3   4   2   5   7   2

19   Calculate Standard Deviation for the following data:
        x: 6   7   8   9   10   11   12
        f: 3   6   9   13   8   5   4

20   Construct the two regression equations for data given below
        X: 10   12   13   17   18
        Y: 5   6   7   9   13

                Z–Z–Z   END