## PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

## **BSc DEGREE EXAMINATION MAY 2017**

(Third Semester)

## **Branch-BOTANY**

**BIOSTATISTICS** Time: Three Hours j Maximum : 75 Marks SECTION-A (20 Marks) Answer ALL questions ALL questions carry EQUAL marks (10 x2 = 20)What do you mean by population? Give an example. 1 2 Write any two sources of secondary data. 3 Define classification. Give any two uses of diagrammatic representation. 4 Find Arithmetic mean for the following data. 5 40 50 55 78 58 60 73 35 43 48 Write the formula for median if the data is raw data. 6 Find Quartile deviation ad its coefficient if  $Q_v = 251$  and  $Q_3 = 262$ . 7 Write formula for mean deviation for continuous data. 8 Define correlation. 9 Write the two regression equation. 10 SECTION - B (25 Marks) Answer ALL Questions ALL Questions Carry EQUAL Marks (5x5 = 25)11 a Explain the sampling method. OR b Define Biostatistics and write some biological variable. 12 a Explain the different parts of lable. b Draw less than Ogive curve for the following table: Marks: 0-10 10-20 20-30 30-40 40-50 50-60 9 5 15 30 18 13 a Write the characteristic of good average. b Calculate Median and mode for the following data: size of shoes : 5 5.5 6 6.5 7 7.5 8 Frequency :10 16 28 15 30 40 14 a Calculate the mean deviation from the following data: Class interval: 2-4 4-6 6-8 8-10 Frequency: 3 4 2 1 OR b Calculate standard deviation from the following data: .Class: 10-20 20-30 30-40' 40-50 60-70.0 - 1050-60

Frequency:

8

12

17

14

9/

1

11BOU1	1
Cont	

15 a Explain the types of correlation.

OR

b Calculate the correlation coefficient between the height of father and son from the given data: •

Height of father: 64 65 66 67 68 69 70

(in inches)

Height of son / :• 66 67 65 68 70 68 72 (in inches)

## SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks  $(3 \times 10 = 30)$ 

- Write about any two methods of collecting primary data.
- Explain different types of classification.
- Find the mean, median and model ages of married women at the first child birth:

Age at the bird of

First child: 13 14 15 16 17 18 19 20 21 22 23 24 25

No. of married

women: 37 162 343 390 256 433 161 355 65 85 49 46 40

19 Calculate the coefficient variation of the drugs used to certain treatment" and find which drug is more efficient during the treatment:

Drug A: 4 8 4 15 10 IE 9

Drug B : 12 8 3 15 6 4 10

20 Calculate two regression equations '

x: 42 44 58 55 89 98 66

y: 56 49 53 58 65 76 58' ' ' ' '

**Z-Z-Z** END

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