

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022  
(Third Semester)

Branch – BOTANY

**BIOLOGICAL DATA ANALYSIS**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 The study of collection, analysis and interpretation of data is called  
(i) Bio chemistry (ii) Biophysics  
(iii) Biology (iv) Bio statistics
- 2 Data collected directly from the population is called  
(i) Primary data (ii) Secondary data  
(iii) Principal data (iv) Tertiary data
- 3 SD stands for  
(i) Standard deviation (ii) Sum of deviation  
(iii) Sample deviation (iv) Statistics deviation
- 4 Positive correlation is called  
(i) Inverse correlation (ii) Direct correlation  
(iii) Total correlation (iv) Correlation co-efficient
- 5 What will be the name of the data obtained from direct personal interview?  
(i) Duplicate (ii) Copy  
(iii) Informant (iv) Original

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a. Write short notes on quantitative data  
OR  
b. Define Bio statistics.
- 7 a. Sketch the Graphic presentation of Data.  
OR  
b. Explain primary data and its merits.
- 8 a. Explain Geometric mean.  
OR  
b. Calculate the mode from the following data recorded on numbers of tillers Per Plant .

| SL.NO          | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|----------------|----|----|----|----|----|----|----|----|----|----|
| No. Of tillers | 10 | 24 | 27 | 12 | 24 | 24 | 18 | 15 | 30 | 20 |

Cont...

- 9 a. Describe the rank correlation.  
OR  
b. Outline the standard error.
- 10 a. Bring out the uses of regression analysis.  
OR  
b. Solve the Regression analysis.

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Describe the application of statistics in Bio science  
OR  
b. Examine the samples and sampling methods.
- 12 a Highlight the process of collection of data.  
OR  
b. Categorise the methods of tabulation.
- 13 a Discover the measures of central Tendency.  
OR  
b Discuss about quartile deviation. Add a note on its merits and demerits.
- 14 a Write essay on students 't' test.  
OR  
b. Describe the Chi – square test .
- 15 a. Discuss the regression equation.  
OR  
b. Summarise the Vital statistics.

Z-Z-Z

END