PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022
(Third Semester)

Branch – BOTANY

BIOLOGICAL DATA ANALYSIS

Time: Three Hours   Maximum: 75 Marks
SECTION-A (10 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (10 x 1 = 10)

1) Standard deviation is the square of
　　i) Mode　　　　　　　　　　　　　ii) standard error
　　iii) variance　　　　　　　　　　　iv) regression

2) Correlation and coefficient is a number between
　　i) +1 and +2　　　　　　　　　　　ii) 0 and +1
　　iii) -1 and 0　　　　　　　　　　　iv) -1 and +1

3) Chi square is zero when expected frequency is--------than observed frequency
　　i) Lesser　　　　　　　　　　　　ii) equal
　　iii) double　　　　　　　　　　　iv) greater

4) Range is the denoted by the formulae
　　i) R = L + S　　　　　　　　　　　ii) R = L x S
　　iii) R = L – S　　　　　　　　　　iv) R = L (S)

5) Mean deviation is also called as
　　i) average deviation　　　　　　　ii) positive deviation
　　iii) negative deviation　　　　　　iv) reliable deviation

6) Standard error is the difference between means of the population and its
　　i) Sample　　　　　　　　　　　　ii) groups
　　iii) range　　　　　　　　　　　　iv) progression

7) Degree of freedom is represented as
　　i) df = n +1　　　　　　　　　　　ii) df = n – 1
　　iii) df = n　　　　　　　　　　　　iv) df = 1 +1

8) Goodness of fit is a test associated with
　　i) Chi-sqaure　　　　　　　　　　ii) standard error
　　iii) t test　　　　　　　　　　　　iv) mean

9) T test was devised
　　i) pearson　　　　　　　　　　　　ii) gosset
　　iii) wanning　　　　　　　　　　　iv) fisher

10) correlation analysis is the study of relationship between how many variable
　　i) one or two　　　　　　　　　　ii) two or more
　　iii) less than two　　　　　　　　　iv) no variables

SECTION - B (35 Marks)
Answer ALL Questions
ALL Questions Carry **EQUAL** Marks   (5 x 7 = 35)

11. a. Write a brief note on biostatistics.
Or
    b. Explain Variable and its types.

12. a. Outline Primary data and its significance.
Or
    b. Write short notes on Manifold classification.

13. a. Give a brief note on the significance of time series graphs.
Or
    b. Write a brief note on frequency polygon and its uses.

14. a. Briefly explain pie diagram.
Or
    b. Explain assumed mean method and its uses.

15. a. Write a brief note on measure of dispersion.
Or
    b. Explain standard error and its uses.

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

16. Enumerate the different methods of collection of data.

17. Write in detail about tabulation and its various types.

18. Elucidate Measure of dispersion.

19. Write in detail about chi-square test.

20. Write an essay on vital statistics.

Z-Z-Z