

**D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1****SEMESTER EXAMINATIONS****NOVEMBER - 2018****15CBC5D****ELECTIVE I : BIOSTATISTICS****Time : 3 Hours****Max. Marks : 75****SECTION – A (10 x 2 = 20)****Answer ALL the questions.**

1. What is meant by statistical data?
2. Define classification of data.
3. What are the applications of geometric mean?
4. The following are the weights in g of 9 boxes:  
80, 100, 85, 90, 110, 120, 150, 135, 140. Calculate the range.
5. Define null hypothesis.
6. State the law of statistical regularity.
7. What is the probability of drawing a queen from a pack of playing cards?
8. What is Goodness-of-fit test?
9. Differentiate between correlation and regression.
10. Mention the significance of scatter diagram.

**SECTION – B (5 x 5 = 25)****Answer any FIVE of the following questions.**

11. Explain the scope of statistical methods.
12. Compute the mean and median for the following data of weight of a species of frog:  
Weight in g: 16, 11, 8, 10, 14, 16, 9, 9, 13 and 12.
13. Explain merits and demerits of sampling.
14. Describe the types of probability distributions.
15. What is Karl Pearson's Coefficient of Correlation? Explain its interpretation.
16. A pair of dice is rolled twice. Calculate the probability of getting either a 7 or an 11 on each roll.
17. Describe the necessity of sampling.
18. Explain the collection of data.

**SECTION – C (3 x 10 = 30)****Answer ALL the questions.**

19. (a) Elaborate on diagrammatic and graphical representation of statistical data.

(Or)

- (b) Calculate the standard deviation for the following data of length (mm) of an aquarium fish:

Length in mm	0-6	6-12	12-18	18-24	24-30
No. of fish	4	8	16	9	3

20. (a) Describe various methods of sampling.

(Or)

(b) Explain t - Test.

21. (a) What is regression analysis? What are its biological applications?

(Or)

(b) Explain the measures of dispersion.

\* \* \* \* \*