25019368

QP CODE: 25019368

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Fourth Semester

B.Sc Bioinformatics Model III

Core Course - BI4CRT12 - BIOSTATISTICS

2017 Admission Onwards

9B4FB890

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What are the limitations of sampling?
2. What is qualitative classification of data?
3. What is Footnote?
4. Define grouped frequency distribution.
5. What is bar diagram and pie chart?
6. Define Average.
7. What are the merits of Geometric mean?
8. Define the term percentiles in partition values.
9. What are the uses of Mean Deviation?
10. Define the term Principle of least square.
11. Define the term Uncertain event.
12. Define conditional probability.

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Distinguish between parameters and statistics.

14. How to prepare Frequency table? Explain.

15. What is the difference between a bar chart and a histogram?

16. Calculate Median

Size	:	5	8	10	15	20	25
Frequency	:	3	12	8	7	5	4

17. What are the merits and demerits of Harmonic mean?

18. Why is Standard Deviation considered to be the best measure of dispersion?

19. What are the use of correlation?

20. A card is drawn from a pack of cards. What is the probability that it is (1) a black card (2) a king (3) a queen (4) a spade king (5) a king or a queen.

21. If P(A) = 1/13, P(B) = 1/4 and P(A $\cup$B) $= 4/13$. Find P(A $\cap$ B).

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain different methods of data collection. Illustrate your answer with imaginary examples.

23. Explain uses, advantages and disadvantages of Diagrams.

24. Find mean, median and mode from the following data.

Marks:	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Freq :	3	10	15	20	12	7	3

25. 1) A speaks truth in 70% cases and B in 85% cases. In what percentage of cases are they likely to contradict each other in stating the same fact.

2) Given A, B, C are independent events P(A) = .3, P(B) =.2 and P(C) = .4. Find the probability for (i) all occuring (ii) none occuring (iii) at least one occuring.

(2×15=30)