

D.K.M.COLLEGE FOR WOMEN (AUTONOMOUS),VELLORE-1.

III B.Sc Biochemistry

Semester : V

Title of the paper: Biostatistics

Subject Code : 15CBC5D

SECTION-A 2 Marks

1. Define biostatistics
2. State the limitation of statistics
3. Define data? What is primary data?
4. What are the sources of secondary data?
5. What are the methods of data representation?
6. What is a bar diagram?
7. What is a histogram
8. Draw a suitable bar diagram for the following data

YEAR	PROFIT Rs.
2005	15000
2006	18000
2007	20000
2008	16000

9. Draw a pie diagram to represent the data

Ocean	Area (million sq.km)
Pacific	70.8
Atlantic	40.3
Artic	28.5

10. What is tabulation of data?

11. What do you understand by central tendency
12. Define median and mode
13. Define range
14. What is quartile deviation
15. Define standard deviation
16. What is harmonic mean
17. What is geometric mean
18. Define hypothesis
19. State the law of statistical regularity
20. What is null hypothesis
21. What is alternate hypothesis
22. Define probability
23. What is meant by dispersion
24. What are the types of distribution patterns
25. Define sample space
26. What is binomial distribution
27. What is normal distribution
28. What is event in probability
29. What is student 't' test
30. What are the methods to study correlation
31. What is a scatter diagram
32. What is perfect positive correlation
33. What is regression analysis
34. What are 'o' give curves?

SECTION -B

5 Marks

1. Explain the questionnaire and schedule method of data collection
2. Explain the graphical representation of data
3. What are the types of diagrammatic representation of data
4. What are the advantages of presenting data through diagram
5. Give an account on classification of data

6. Write short notes on tabulation of data
7. Explain the need and usefulness of diagrammatic representation of data
8. Calculate the mean of the following data

Reg .no	1	2	3	4	5
Marks	40	50	55	78	58

9. Calculate the median of the following data

Marks	70	80	90	100
No.of students	5	15	10	20

10. Give an account on measures of central tendency
11. Compute the spearman's rank correlation of the given data

Biostat	7	2	1	10	8	4	9	6	3	5
Biochem	9	1	2	10	7	6	5	8	4	3

12. What are the merit and demerit of sampling
13. State the different methods to study dispersion
14. Explain the term random sampling and stratified random sampling
15. Explain the importance and need of sampling
16. Give an account on student'T' test
17. Explain normal distribution curve
18. State the properties of binomial distribution curve
19. Calculate rank correlation between the rank given for the following data

SECTION-C

10 Marks

1. Explain various methods of data collection and classification
2. Discuss the methods of presentation data through diagrams and graphs.
3. What is standard deviation? calculate the standard deviation for the following data

Class (X)	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	8	12	17	14	9	7	4

4. Calculate the mean, median, and mode of the following data

X	0-10	10-20	20-30	30-40	40-50
F	3	5	9	3	2

5. Explain various method of sampling

6. Explain chi-square test of goodness of fit

7. Explain various method to study correlation analysis

8. Explain regression analysis

9. Calculate the coefficient of correlation of the following data

X	23	27	28	29	30	31	33
Y	18	20	22	27	21	29	27

10. From the following data calculate the rank correlation coefficient

X	49	34	41	10	17	7
Y	14	14	25	7	16	5

11. What are quartiles how are they used for measuring dispersion

12. Out of 1000 workers in a factory exposed to an epidemic ,700 in all were attacked ,400 has been inoculated and 200 were not attacked .on the basis of this information can it be said that inoculation and attack are independent