



Time: Three Hours

Max. Marks: 80 Marks

**BIO STATISTICS (RS)**

**Q.P. CODE: 3234**

**(QP contains two pages)**

Your answers should be specific to the questions asked  
Draw neat, labeled diagrams wherever necessary

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. The following data on blood glucose level among the of 60 subjects reported to diagnostic centre. Calculate mean, median and mode.

Blood glucose level	85-95	95-105	105-115	115-125	125-135	135-145
Number of subjects	4	10	14	18	8	6

2. Fit the regression equation of BP on age for the following data and estimate the probable BP for the subject aging 52 years.

Age (years)	30	32	40	44	50	55	60	66	70
BP	120	122	130	134	140	145	150	156	160

3. Define time series. Explain the method of moving average and least square method.

**SHORT ESSAYS (Answer any Eight)**

**8 x 5 = 40 Marks**

4. Discuss the basic concepts of biostatistics.
5. Explain the cumulative frequency curves.
6. SBP among the 10 individuals were 132, 136, 140, 142, 135, 138, 125, 126, 124 and 132. Calculate the variance.
7. How will you draw a Pie diagram? Explain.
8. Define correlation. Write a note on Karl Pearson method of correlation.
9. "Arithmetic mean is a good average"- justify your answer.
10. Discuss the method of constructing index numbers.
11. Give a brief account of average price relatives.
12. Define seasonal variation. Explain the ratio to trend method.
13. Enumerate the uses of time series.

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## SHORT ANSWERS (Answer any ten)

10 x 2 = 20 Marks

14. How will draw a Pie diagram? Explain.
15. Histogram.
16. Comparative bar diagram.
17. Coefficient of variation.
18. Quartiles.
19. Dispersion.
20. Qualitative data.
21. Properties of regression.
22. Fisher's method of index number.
23. Problem in the analysis in time series.
24. Any two uses of index numbers.
25. Mathematical models of time series.

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