

# Rajiv Gandhi University of Health Sciences, Karnataka

II Semester Bachelors in Hospital Administration Degree Examination - 22-May-2025

Time: Three Hours

Max. Marks: 80

## 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. Define Statistics. Discuss the uses of statistics
2. Define Median. Calculate median for the following data

Age	20-25	25-30	30-35	35-40	45-50	>50
No. of patients	100	150	200	50	25	5

3. What is correlation? Calculate correlation between X and Y and interpret the results

X	10	12	8	6	12	10
y	20	25	15	15	15	25

### SHORT ESSAYS (Answer any Eight)

**8 x 5 = 40 Marks**

4. Mention advantages and disadvantages of diagrams
5. Mention different types of graphs. Explain construction of histogram. How to construct frequency curve?
6. What is an "Average"? Mention merits and demerits of arithmetic mean
7. What do you mean by measures of dispersion? Mention different types of measures of dispersion
8. Calculate mean deviation for the data regarding age of 8 patients  
Age (yrs): 40, 50, 60, 30, 20, 40, 30, 60
9. Explain different types of correlation
10. Explain components of time series
11. Discuss utilities of time series analysis
12. Discuss various steps in construction of index number
13. Discuss uses and limitations of index number

### SHORT ANSWERS (Answer any ten)

**10 x 2 = 20 Marks**

14. Two examples for quantitative data
15. Tabulation
16. Multiple bar diagram
17. Frequency distribution

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18. Inclusive and exclusive class interval
19. Quartile deviation and coefficient of quartile deviation
20. Rank correlation
21. Regression equations
22. Mean = 40 and standard deviation = 4, find coefficient of variation
23. Price index no
24. Fisher index no
25. Mention two advantages of time series analysis

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