

# Rajiv Gandhi University of Health Sciences, Karnataka

II Semester Bachelors in Hospital Administration Degree Examination - 07-May-2026

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 functions of statistics
2. What is a time series? Calculate the trend values by finding 3-yearly moving averages for the following data

Year	2015	2016	2017	2018	2018	2019	2020	2021	2022
Sales	158	154	167	168	169	170	161	169	167

3. Define correlation. Explain scatter diagram method of ascertaining correlation

### SHORT ESSAYS (Answer any Eight)

**8 x 5 = 40 Marks**

4. Mention advantages and disadvantages of diagrams
5. How to construct frequency curve?
6. What is central tendency? Mention requisites of good measures of central tendency
7. Discuss different types of measures of central tendency
8. Calculate median for the following data  
1000, 1500, 3000, 2500, 3000, 500
9. What do you mean by measures of dispersion? Mention different types of measures of dispersion
10. Calculate standard deviation for the following data  
Time (min): 100, 125, 150, 175, 200
11. Explain scatter diagram
12. Briefly explain steps in construction of index no
13. Calculate Laspeyre's Index number from the following data

Item	$p_0$	$p_1$	$q_0$
A	20	25	10
B	18	24	20
C	30	60	10
D	25	32	10

### SHORT ANSWERS (Answer any ten)

**10 x 2 = 20 Marks**

14. Quantitative and qualitative data
15. Variables

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16. Statistics
17. Pie diagram
18. Frequency polygon
19. Classification
20. Tabulation
21. Mean deviation
22. Karl Pearson correlation coefficient
23. Regression equations
24. Index number
25. Fishers index number

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