Rajiv Gandhi University of Health Sciences, Karnataka

II Semester Bachelors in Hospital Administration Degree Examination - 29-Oct-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. The following data relates to the age of husbands and wives

Age of husband (yrs)	25	28	30	32	35	36	38	39	42	45
Age of wife (yrs)	20	26	29	30	25	18	26	35	35	46

   a. Obtain the two regression equations and determine the most likely age of the husband when wife's age is 25 years
   b. Determine the most likely age of the wife when husband's age is 30 years

2. Discuss correlation and regression analysis

3. What is graph and diagram? Explain its types with example

SHORT ESSAYS (Answer any Eight) **8 x 5 = 40 Marks**

4. Compute the rank correlation for the following data

X	8	6	1	5	4	2	3	7
Y	7	6	2	8	5	1	2	8

5. Draw histogram and then obtain frequency polygon from histogram

Daily wages (Rs.)	100-150	150-200	200-250	250-300	300-350	350-400
No. of workers	7	19	27	15	12	8

6. What is dispersion? Explain its measures
7. What are the different methods used to construct index number?
8. Describe moving average for fitting trends
9. Write a note on time series
10. Write a note on methods of data
11. Write a note on Laspear's method and Paasche's method
12. Write a note on classification and tabulation of data
13. For the following distribution of heights of students, find the median

Heights (cms)	130-139	140-149	150-154	155-159	160-164	165-169	170-179
No. of students	2	3	11	22	21	17	9

SHORT ANSWERS (Answer any ten) **10 x 2 = 20 Marks**

14. Seasonal variation
15 What is base year and current year?
16. Percentile
17. Weighted averages
18. Define range
19. What is probability?
20. Quartile deviation
21. Coefficient variation
22. Merits and demerits of simple aggregative method
23. What is an average?
24. Define standard deviation
25. Frequency polygon

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