Rajiv Gandhi University of Health Sciences, Karnataka
IV Year B.P.T. Degree Examination - 19-Nov-2025

Time: Three Hours **Max. Marks: 80**
Marks

RESEARCH METHODOLOGY AND BIOSTATISTICS (RS5)
Q.P. CODE: 2751

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

LONG ESSAYS (Answer any One) **1 x 10 = 10 Marks**

1. Define sample and population. Explain any two random sampling techniques in detail.

2. The abduction range of motion of a sample of subjects with Subcromial impingement syndrome revealed the following data.

Range of motion	90-100	100-110	110-120	120-130	130-140	140-150	150-160
Number of subjects	4	6	10	16	12	8	4

   Calculate mean, median and mode.

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

3. Explain the objectives of research.
4. Discuss the features of good research design.
5. Explain about important scaling techniques with suitable example.
6. Differentiate the questionnaire and schedule method of data collection.
7. Explain about procedure of hypothesis testing.
8. Explain the important types of research.
9. Guidelines for the various measures of central tendency.
10. Discuss about student t-distribution and its application.
11. Give brief account of variable and levels of measurement.
12. Role of computers in physiotherapy practice.

SHORT ANSWERS **10 x 3 = 30 Marks**

13. Parameter and estimate.
14. Histogram.
15. Cross sectional study.
16. Cluster sampling.
17. Level of significance and power of the test.
18. Hypothesis.
19. Statement of research problem.
20. Kurtosis.
21. Independent and dependent events.
22. Measures of dispersion.

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