

# Rajiv Gandhi University of Health Sciences, Karnataka

## IV Year B.P.T. Degree Examination - 07-Jun-2024

**Time: Three Hours**

**Max. Marks: 80 Marks**

### **RESEARCH METHODOLOGY AND BIOSTATISTICS (RS-5)**

**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 research and describe in detail the various research design process and add a note on feature of good research design
2. Define a sample and describe in detail different types of sample design and the criteria for selecting the sample

#### **SHORT ESSAYS (Answer any Eight)**

**8 x 5 = 40 Marks**

3. Explain the procedure of tabulation of data
4. Explain the role of computers in physiotherapy research
5. Explain the characteristics of normal probability curve
6. Write a note on importance of computers in Physiotherapy Research
7. Define hypothesis. Explain briefly the basic concept concerning testing of hypothesis
8. Explain the difference between descriptive and inferential statistics
9. Describe briefly the various methods of diagrams and histograms used in data analysis
10. Describe the criteria for good samples and what is sample design error?
11. Describe briefly the measurement scales used in research and add a note on errors in measurement
12. What is research problem and steps involved in review of literature?

#### **SHORT ANSWERS**

**10 x 3 = 30 Marks**

13. What is sampling frame?
14. Difference between mean, median and mode
15. List the difference between nominal and ordinal scale
16. List the difference between prospective and retrospective study
17. List the difference between one tailed and two tailed hypothesis
18. What is type I and type II error
19. What is Skewness of data?
20. Write a note of ANOVA
21. What is case control study?
22. List four problems faced by researches in India

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