

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – April 2014

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

RESEARCH METHODOLOGY & BIostatISTICS (RS-3 & RS-4)

Q.P. CODE: 2713

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. Enumerate the problems encountered by researchers in India.
2. Define mean, median and mode. Discuss the merits and demerits of mean, median and mode.
3. What is a test of hypothesis? Explain the need for tests of hypothesis in physiotherapy.

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

4. What are the features of a good research design?
5. What is stratified random sampling technique? Explain the procedure of selection of samples using stratified random sampling.
6. Define coefficient of variation. Explain the circumstances under which this is used as a measure of dispersion.
7. What is normal distribution? Mention its important properties.
8. Describe briefly the different methods of data collection.
9. Explain the role of computers in Physiotherapy research.
10. Briefly explain the basic principles of experimental designs.
11. With the help of a suitable illustration describe how pie diagram can be drawn for the discrete data.
12. Explain the techniques of developing measurement tools.
13. What are the underlying assumptions of one-way analysis of variance. Explain briefly under what circumstances ANOVA is applied in data analysis.

SHORT ANSWERS**10 x 2 = 20 Marks**

14. Distinguish between inclusive and exclusive method of class intervals in frequency distribution.
15. Distinguish between standard deviation and standard error.
16. What is sampling frame?
17. Distinguish between qualitative and quantitative variables. Give one example to each.
18. Define level of significance and confidence level.
19. Define the probability of an event.
20. What is target population? Give an example.
21. What is randomization?
22. What is the necessity of defining the research problem?
23. What is sampling distribution?