Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.P.T. Degree Examination - OCT-2019

Time: Three Hours Max. Marks: 80 Marks

RESEARCH METHODOLOGY & 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 Two)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Define probability. Explain the important sampling distributions.
- 2. A sample of 40 bankers with work related chronic neck pain revealed the following data.

Neck disability Index	0-20	20-40	40-60	60-80	80-100
(NDI)					
Number of workers	7	8	12	9	4

Calculate mean, median and mode.

3. Explain the problems encountered by researches in India.

SHORT ESSAYS (Answer any Eight)

 $8 \times 5 = 40 \text{ Marks}$

- 4. Explain the characteristics of good research.
- 5. Explain the stratified random sampling technique.
- 6. Explain about divergence from normality.
- 7. Explain the basic principles experimental design.
- 8. Write about processing and analyzing data.
- 9. Explain the method of collecting primary data. Add note on its merits and demerits.
- 10. How will you draw a pied diagram? Explain with suitable example.
- 11. Explain the role of computers in physiotherapy research.
- 12. Explain the steps in testing of hypothesis.
- 13. Explain the steps in testing of hypothesis.

SHORT ANSWERS $10 \times 2 = 20 \text{ Marks}$

- 14. Histograms.
- 15. Sampling units.
- 16. Randomized controlled trials.
- 17. Convenience sampling.
- 18. Artificial research.
- 19. One tailed and two tailed test.
- 20. Any two objective of research.
- 21. Necessity of defining research problem.
- 22. Frequency polygon.
- 23. Level of significance.
