[Time: 3 Hours] [Max. Marks: 100]

Research Methodology and Biostatistics (Revised Scheme 5) O.P. CODE: 8001

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

Answer All The Questions

 $10 \times 10 = 100 \text{ Marks}$

- 1. Discuss various levels of measurement.
- 2. The state government has commissioned you to find the effectiveness of ferrum phos to improve anaemia among antenatal mothers.
 - a) How will you select the case and controls for the study?
 - b) Discuss the disadvantages of case-control studies.
- 3. Define hypothesis. Explain the steps involved in testing hypothesis.
- 4. Explain various types of errors while testing a single population proportion.
- 5. Discuss conflict of interest in any health research.
- 6. Define population and Sample for a research. Explain the characteristics of a good sample design.
- 7. Discuss non-probability sampling. Explain the disadvantages of non-probability sample in medical research.
- 8. Discuss Chi-square as a non-parameteric test with suitable example.
- 9. Discuss analysis of variance. Describe briefly the technique of analysis of variance for one-way (single factor).
- 10. List and explain various precaution a homoeopathic research should follow while writing a research report.
