

# Rajiv Gandhi University of Health Sciences

## M.D. Homoeopathy Degree Examination (Part-I) - OCT-2019

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

### **RESEARCH METHODOLOGY AND BIOSTATISTICS** **(Revised Scheme 5)** **Q.P. CODE: 8001**

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

**Answer All The Questions****10 X 10 = 100 Marks**

1. Discuss the scope of biostatistics and social research in homoeopathic practice with an illustration.
2. For treatment of Coronary Heart Disease
  - a. Design matched case-control study.
  - b. How will you select cases and control for the study.
  - c. Name the method to measure the strength of association for matched case control study.
3. Design a hybrid study for testing the effectiveness of calendula in injuries.
4. Explain mean and standard deviation and its relevance in homoeopathic research.
5. A homeopathic researcher enrolled 100 diabetic patients without renal disease in a prospective cohort study. The results of the first 3 years were as follows:  
Year 1 : 0 cases of renal disease detected out of 92; 8 lost to follow-up  
Year 2 : 2 new cases of renal disease detected out of 80; 2 had died; 10 lost to follow.  
Year 3 : 3 new cases of renal disease detected out of 63; 2 more had died; 13 more lost to follow up.  
Based on the above data calculate the person-time incidence rate (incidence density)
6. Explain cluster sampling with example.
7. Discuss non-probability sampling. Explain the advantages and disadvantages of non-probability sampling in medical research.
8. Discuss the concept of life table with suitable example.
9. Describe analysis of variance. Explain its underlying assumptions.
10. Explain various precaution a homoeopathic researcher should follow while writing a research report.

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