

M.D. (HOMOEOPATHY) DEGREE EXAMINATION  
PART – I (For candidates admitted from 2016-2017 onwards)  
COMMON TO ALL BRANCHES  
PAPER II - RESEARCH METHODOLOGY AND BIO-STATISTICS  
*Q.P. Code : 443002*

Time : Three Hours

Answer all questions

Maximum : 100 Marks

**I. Elaborate on:**

(2 x 20 = 40)

1. Define cohort studies. Discuss the types of cohort studies in details.
2. Discuss Chi-square as a non-parametric test with suitable example.

**II. Write notes on:**

(10 x 6 = 60)

1. Discuss the scope of biostatistics and social research in homoeopathic practice.
2. As a homoeopathic researcher if you are conducting qualitative research mention various levels of measurement for enumerating the following
  - a. Pain of rheumatism
  - b. Number of villagers using homoeopathic medicine.
3. Explain randomized controlled trial using rhus tox, ledum pal and rutagrav for small joint pains.
4. Design a qualitative study using any homeopathic drug and mental health.  
A homoeopathic researcher administered a drug 'X' to twenty patients. The following table shows the number of hours 20 patients slept following the administration of the drug 'X'.

7	10	12	4	8	7	3	8	5	16
12	11	3	8	1	1	13	10	14	14

From the above data

- a. Construct a frequency distribution table
  - b. A histogram
  - c. Calculate mean, median, mode, range for number of hours patient slept following administration of the drug.
5. Discuss Mean, standard deviation and variance with suitable example.
  6. Explain sampling design with suitable example.
  7. Explain the advantages and disadvantages of probability sample.
  8. Discuss any two non-parametric tests with appropriate example.
  9. Discuss the significance of report writing. Explain the steps in writing a research report.
  10. Discuss informed consent. Why is it necessary for medical research?

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