

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MD(HOM.) 0222]

**FEBRUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 3002

**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 data. Discuss various types of data and its presentation.
2. Describe cross-sectional study to enumerate the use of arnica Montana for injuries.

II. Write notes on:

(10 x 6 = 60)

1. A homoeopathic researcher identified the efficacy of FerrumPhos in anaemia among adolescent females. The following data was recorded.

Before intervention		After intervention	
Age	Haemoglobin %	Age	Haemoglobin %
14	8	14	12
13	7	13	10
12	10	12	13
14	11	14	13
16	9	16	12
11	8	11	10
12	7	12	10
13	9	13	13

- (a) Compare the results and construct a frequency table
 - (b) Draw appropriate graph for the above data and justify.
2. Explain double blind clinical trials with suitable homoeopathic remedy as an example.
 3. Discuss research design.

4. A Homoeopathic researcher compared the efficacy of chelidonium and lycopodium for cholelithiasis patients. The following are the weights (kgs) and heights (cm) of the 10 subjects in the sample studied.

Weight: 83 99 63 71 65 79 70 69 56 66

Heights: 185 180 173 168 175 183 184 174 164 169

Answer the following questions based on above given data.

- a. For each variable compare the mean, median, variance and standard deviation.
 - b. Which set of measurement is more variable weight or height.
5. Explain variance and standard deviation.
 6. Discuss the steps involved in sampling design.
 7. Discuss non-probability sampling in detail. Explain the disadvantages of non-probability sample in medical research.
 8. Explain the steps in Chi-square test with appropriate example.
 9. Discuss the concept of life table with suitable example.
 10. Describe in brief the layout of a research report with suitable example.
