

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

[AHS 0222]

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

Sub. Code: 2828

**ALL M.Sc. COURSES AND M.OPTOM, EXCLUDING M.Sc. BIOSTATISTIC,
M.Sc. EPIDEMIOLOGY AND M.Sc. PUBLIC HEALTH.**

**FIRST YEAR
PAPER I – PRINCIPLES OF EPIDEMIOLOGY, RESEARCH METHODOLOGY,
BIOSTATISTICS AND MEDICAL ETHICS
*Q.P. Code : 282828***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on: (2 x 20 = 40)

1. Define Epidemiology. What are the uses of Epidemiology? Describe various study designs, key features and relative advantages and disadvantages of each design.
2. What is 'Protocol Writing' in Research? What are the common components in protocol? Write a sample protocol.

II. Write Short Notes on: (10x6 = 60)

1. Natural history of disease.
2. Measures of association.
3. Steps involved in designing a questionnaire.
4. Operations Research.
5. ICMR guidelines and IEC (Institutional Ethics Committee).
6. What is Blinding? List the types of blinding with brief note on each.
7. What is Odds Ratio? Explain briefly its application.
8. Measures of central tendency.
9. Alpha and Beta errors.
10. Bioethics.

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

[AHS 0522]

MAY 2022

Sub. Code: 2828

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M.Sc. EPIDEMIOLOGY AND M.Sc. PUBLIC HEALTH.**

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BIostatistics AND MEDICAL ETHICS**

Q.P. Code : 282828

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Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Describe the various methods of sampling in detail.
2. Is single Research design suitable for all studies? Why? Describe the types of epidemiological designs in detail. Write the advantage and disadvantage of each study design.

II. Write Short Notes on:

(10x6 = 60)

1. Outbreak investigation.
2. Differentiate: Primary Data against Secondary Data.
3. Non-parametric tests.
4. Bias.
5. What is range, standard deviation and normal distribution?
6. Validity and Reliability of Instrument.
7. Ethics in Research.
8. Steps involved in testing Hypothesis.
9. Confidence intervals and p values.
10. How will you determine optimal sample size?

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

[AHS 1022]

OCTOBER 2022

Sub. Code: 2828

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