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

MAY 2022

Sub. Code: 2828

(10x6 = 60)

## [AHS 0522]

# 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:		$(2 \times 20 = 40)$

- 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:

- 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?

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