

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

[AHS 1023]

OCTOBER 2023

Sub. Code: 2862

**M.Sc. BIOSTATISTICS
FIRST YEAR (From 2011-2012 onwards)
PAPER II – EPIDEMIOLOGY AND DESIGN OF EXPERIMENTS**

Q.P. Code: 282862

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Define reliability and validity. Explain measures related to reliability of validity. Define and describe use of ROC.
2. Define and explain (a) Randomized controlled clinical trial (b) phases of a trial (c) Key elements of RCT with examples (d) factorial design.

II. Write Short Notes on:

(10x6 = 60)

1. Measures of mortality.
2. Systematic error.
3. Screening for disease.
4. Herd immunity.
5. Observational studies.
6. Critical appraisal.
7. Blinding.
8. Balanced Incomplete Block design.
9. Analysis of Covariance.
10. Segregation analysis.
