

[LN 1018]

OCTOBER 2018

Sub. Code: 2862

**M.Sc. BIostatistics Exams  
First Year  
(New Regulation)  
Paper II – Epidemiology and Design of Experiments**

*Q.P. Code : 282862*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Explain in detail of various study designs used in Epidemiology.
2. Discuss the various processes to carry out Meta analysis.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Describe the term mortality and morbidity and state any two rates in each and its use.
2. Measure the cause of death.
3. Write a note on sensitivity, specificity and predictive values in terms of diagnostic procedure.
4. Summarize multiple and parallel test.
5. Evaluate models and types of pedigree diagram.
6. Outline the basic concepts of human genetics.
7. Explain Hardy Weinberg equilibrium and its application.
8. Write short notes on genetic epidemiology.
9. Describe single and double blind trial.
10. Discuss total and partial confounding in a  $2^3$  factorial Experiment.

\*\*\*\*\*