

Sl.No.M21880

Course Code: 2020301

**VINAYAKA MISSION'S RESEARCH FOUNDATION
(DEEMED TO BE UNIVERSITY), SALEM**

M.D. DEGREE EXAMINATION - October 2019

MICROBIOLOGY

PAPER I : GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time: Three hours

Total Marks : 100

Answer ALL questions

SECTION - A

Write essay on : (1 x 20= 20)

1. Describe the mechanism of development of antimicrobial resistance in bacteria. Discuss laboratory methods for detection of the same.

Write short notes on : (5 x 6 =30)

2. Robert Koch.
3. Chemical sterilants.
4. Quality control in a diagnostic microbiology laboratory.
5. Bacterial cell wall.
6. Methods of detection of ESBL in the laboratory.

SECTION - B

Write essay on : (1 x 20= 20)

7. Describe the mechanism and pathogenesis of auto- immune disease. Add a note on diagnosis of systemic autoimmune diseases.

Write short notes on : (5 x 6 = 30)

8. Cytokines.
9. Toll like receptors.
10. Hybridoma technology.
11. Major histocompatibility complex (MHC).
12. Innate immunity.
