Sl.No.: M21451 Sub. Code: 1010221

VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM

(Deemed to be University)

MBBS DEGREE EXAMINATION – August 2019 SECOND YEAR

MICROBIOLOGY - PAPER I

Time: Three hours Maximum: 80 marks

Answer ALL questions Draw diagrams wherever necessary

SECTION - A

I. Write essay on : $(1 \times 10 = 10)$

1. Describe in detail the antigen-antibody reactions and the phenomenon, mechanism and the applications of precipitation reaction with example.

II. Write short notes on:

 $(4 \times 5 = 20)$

- 2. Contributions of Robert Koch.
- 3. Types of culture media.
- 4. Write a note on bacterial cell wall with suitable illustration.
- 5. Define sterilization and enumerate various physical methods of sterilization.

III. Answer briefly:

 $(5 \times 2 = 10)$

- 6. Classify bacteria based on arrangement of flagella.
- 7. Name two capsulated bacteria.
- 8. Draw the structure of immunoglobulin.
- 9. Toxins of Escherichia coli.
- 10. Microscopic characteristics of Vibrio cholera.

SECTION - B

I. Write essay on : $(1 \times 10 = 10)$

11. Describe the morphological characteristics, antigenic structure, clinical features and laboratory diagnosis of Treponema pallidum.

II. Write short notes on:

 $(4 \times 5 = 20)$

- 12. Write a short note on the principle and uses of fluorescent microscope in medical Microbiology.
- 13. Write a note on laboratory diagnosis of clostridium tetani.
- 14. Describe the different types of toxins produced by Staphylococcus aureus.
- 15. Bacillary dysentery.

III. Answer briefly:

 $(5 \times 2 = 10)$

- 16. Classify streptococci.
- 17. Illustrate the microscopical appearance of Neisseria species.
- 18. Mention two morphological characteristics of Mycoplasma.
- 19. Define satellitism.
- 20. List the clinical types of leprosy.