

**VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM**  
**(Deemed to be University)**

**B.Sc. (PHYSICIAN ASSISTANT) DEGREE EXAMINATION**  
**August 2019**  
**Second Year**

**MICROBIOLOGY**

Time: Three hours

Maximum: 75 marks

**I. Write an essay on any ONE of the following: (1 x 20 = 20)**

1. Describe the structure and organelles in bacteria. Add a note on the difference between Gram positive & Gram negative bacteria with suitable diagrams.
2. Write the various methods of sterilization. Add a note on moist heat sterilization.

**II. Write short notes on any TWO of the following: (2 x 10 = 20)**

3. Write about Hospital acquired infections
4. Write notes on different types of bacterial culture media.
5. Aggultination reactions
6. Write about the classification of fungal diseases and list out the causative agents.

**III. Write short answers on any SEVEN of the following: (7 x 5 = 35)**

7. Write the structure of Hepatitis virus. Add a note on the different types of Hepatitis virus.
8. Write the mode of transmission of Rabies virus, Add a note on its structure
9. Write about any two autoimmune disorders
10. Write the Principle and procedure involved in Gram staining technique
11. Name three antiviral agents and its mode of action
12. Write the pathogenesis of Treponema
13. Lab diagnosis of enteric fever
14. T Cell receptors
15. Write the pathogenesis of Tetanus
16. Write the treatment and prophylaxis of Tuberculosis