

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM**

**B.Sc(MEDICAL LAB TECHNOLOGY) DEGREE EXAMINATIONS -August 2019**

**Second Year  
MICROBIOLOGY - I**

Three Hours

Maximum: 75 marks

**SECTION - A**

**I. Choose the Best Answer :**

**(10 x 1 = 10)**

1. Who is the father of chemotherapy  
(a) Robert Koch (b) Louis Pasteur (c) Paul ehrlich (d) Joseph Lister
2. The process by which an article, surface or medium is made free of all microorganism either in the vegetative or spore form is known as:  
(a) Sterilisation (b) Disinfection (c) Asepsis (d) None of theses
3. Temperature and time period used in hot air oven is:  
(a) 160° C for two hours (b) 140° C for two hours  
(c) 160° C for one hour (d) None of the above.
4. Chemical nature of endotoxin is  
(a) Lipopolysaccharide (b) protein (c) Carbohydrate (d) none of the above.
5. Production of diphtheria toxin by bacteria can be demonstrated by  
(a) Subcutaneous test (b) intracutaneous test  
(c) Elek's gel precipitation test (d) All of the above
6. Which of the following Shigella species does not ferment mannitol  
(a) Shigella dysenteriae (b) S. boydii (c) S. sonnei (d) none of the above.
7. Pernicious malaria may occur in  
(a) Plasmodium vivax (b) Plasmodium falciparum  
(c) Plasmodium malariae (d) Plasmodium ovale
8. Hook worm infection occurs by  
(a) Eggs present in food (b) auto infection  
(c) penetration of skin by infective larvae (d) All of the above.
9. Which of the following characteristics are true for viruses  
(a) Obligate intracellular infective agents (b) contain either DNA or RNA  
(c) do not multiply by binary fission (d) All of the above.
10. Which of the following viruses is bullet shaped  
(a) Herpes virus (b) Variola virus (c) Rabies virus (d) Parvo virus

**II. Write Short Answers on any FIVE of the following:**

**(5 x 5 = 25)**

11. Pasteurization
12. Write short notes on types of vaccine

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13. Schick test.
14. Nagler reaction
15. Opportunistic mycoses
16. Write short notes on : categories of biomedical waste
17. Mechanisms of Innate immunity

**III. Write Short Essays on any TWO of the following:**

**(2 x 10 = 20)**

18. Discuss briefly about VDRL
19. Write in detail about common staining Techniques
20. Write short notes on Herpes simplex virus
21. Write in detail about environmental sanitation test.

**IV. Write Essays on any ONE of the following:**

**(1 x 20 = 20)**

22. Write short notes on:
  - (I) Toxin and enzymes of streptococcus pyogens
  - (II) Non – suppurative complications of streptococcus pyogens infections.
  - (III) lancefield grouping and CAMP reaction.
23. Describe the morphology of HIV and laboratory diagnosis of HIV infection.

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(S.No.M21796)



