

B.Sc. MEDICAL LABORATORY TECHNOLOGY**SECOND YEAR****PAPER IV – MICROBIOLOGY – I AND PARASITOLOGY, ENTOMOLOGY***Q.P. Code: 725019***Time: Three Hours****Maximum: 100 Marks****Answer all questions****I. Elaborate on:****(3 x 10 = 30)**

1. Enumerate intestinal nematodes. Describe the life cycle, pathogenicity and laboratory diagnosis of hook worm.
2. Describe the morphology, pathogenesis and lab diagnosis of *Staphylococcus aureus*.
3. Name the different types of media and explain their uses with suitable examples.

II. Write notes on:**(8 x 5 = 40)**

1. Laboratory diagnosis of malaria.
2. Adjustment of the microscope to see a wet and dry preparation. Give example.
3. Briefly discuss polymerase chain reaction and their applications in clinical practice.
4. Structure and functions of Immunoglobulin G.
5. Electron microscope –principle, types and uses.
6. Bacterial flagella –parts, arrangements and demonstration.
7. Rapid plasma regain test –principle, advantages and disadvantages.
8. Delayed hypersensitivity –pathogenicity, types with examples.

III. Short answers on:**(10 x 3 = 30)**

1. Tube coagulase test-Principle and use.
2. Catalase test.
3. Mention three vector borne diseases.
4. NIH swab.
5. Advantage and disadvantage of an iodine mount.
6. Lacto phenol cotton blue staining.
7. Tyndalisation.
8. What are the different types of bacteria based on oxygen requirement?
9. Name three spore forming bacteria.
10. Koch's postulates.
