

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

[AHS 0423]

APRIL 2023

Sub. Code: 5019

**B.Sc. MEDICAL LABORATORY TECHNOLOGY**  
**SECOND YEAR (Regulations 2010-2011 & 2018-2019 onwards)**  
**PAPER IV – MICROBIOLOGY-I & PARASITOLOGY, ENTOMOLOGY**  
*Q.P. Code: 725019*

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:** **(3 x 10 = 30)**

1. Define Hospital Acquired Infections. Describe in detail the Standard Precautions.
2. Enumerate Intestinal Nematodes. Describe the Life cycle, Clinical Features and Lab Diagnosis of *Ascaris lumbricoides*.
3. Describe in detail Bacterial Cell. Add a note on Gram's Staining.

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

1. Anaerobic Culture methods.
2. Monoclonal Antibodies.
3. Lab diagnosis of *Entamoeba histolytica*.
4. Autoclave.
5. Mechanisms of Autoimmunity.
6. Transduction.
7. Cyclops.
8. Principles and Uses of Dark Field Microscope.

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

1. Types of Acquired Immunity with examples.
2. Type I hypersensitivity Reactions with examples.
3. Name three Bile Stained Eggs.
4. Three steps in Polymerase Chain Reaction.
5. Koch's Postulates.
6. Pasteurization.
7. Name three Antigen Presenting Cells.
8. Define – Endemic, Epidemic and Pandemic.
9. Name three infections transmitted by Mosquitoes.
10. Name three Arthropod Borne diseases.

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