

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

[AHS 0122]

JANUARY 2022

Sub. Code: 2602

(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

**DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
FIRST YEAR (Regulation 2014-2015 & 2018-2019)
PAPER II – FUNDAMENTALS OF MEDICAL LABORATORY
TECHNOLOGY AND MICROBIOLOGY
*Q.P. Code : 842602***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Write in detail about the various types of Disinfection and its principles and uses.
2. Describe the cultural characters, biochemical reaction, pathogenesis and laboratory diagnosis of *Mycobacterium tuberculosis*.
3. Describe in detail about the responsibilities of a technician in the maintenance of auto analysers and other laboratory equipments.

II. Write Notes on:

(10 x 5 = 50)

1. Write short notes on code of conduct of medical laboratory personnel.
2. Write about Electron Microscopy and its applications.
3. Write short notes on Sampling errors with reference to phlebotomy.
4. Write notes on Henderson-hasselbalch equation.
5. Discuss about Danger signs.
6. Write details about Autoclave.
7. Write the characteristics and pathogenesis of *Neisseria gonorrhoea*.
8. Write notes on Isolation of viruses in laboratory by tissue culture.
9. Write on *Candida* infection.
10. Write the differences between Nematode, Trematode and Cestode.

III. Short Answers on:

(10 x 2 = 20)

1. Draw the structure of immunoglobulin.
2. Name two diseases caused by spirochete.
3. Write any two Anticoagulants.
4. What is Complement.
5. What is Oxidase Test?
6. How do you prepare 1M solution?
7. What is Buffer?
8. Write about disposal of carcinogenic chemicals.
9. What is random Access Autoanalyser?
10. Write on functions of Pili.
