

UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
SECOND YEAR FIRST SEMESTER EXAMINATION IN BSC HONS (MLS)-2020
MLSMB 2133 MEDICAL BACTERIOLOGY
PAPER II

Date: 22.06.2022

Time: 2 Hours

ANSWER ALL SIX QUESTIONS.

1.
 - 1.1 List five virulence factors of *Streptococcus pyogenes* which contribute to the pathogenesis of the infection **(10 Marks)**
 - 1.2 Briefly describe the possible complications caused by *Streptococcus pyogenes* infection **(60 Marks)**
 - 1.3 Describe a laboratory test used to differentiate the *Staphylococcus spp* from *Streptococcus spp.* **(30 Marks)**

2.
 - 2.1 Explain the underlying principle of each biochemical test mentioned below and give two bacteria which give positive reaction
 - 2.1.1 Urease test **(20 Marks)**
 - 2.1.2 Citrate test **(20 Marks)**
 - 2.1.3 Indole test **(20 Marks)**
 - 2.2. Name five culture media used for bacterial culture and mention their uses. **(40 Marks)**

3.
 - 3.1 Name two gram negative bacteria which cause human infections. **(10 Marks)**
 - 3.2 List the infections caused by the bacteria you mentioned in 3.1. **(35 Marks)**
 - 3.3 Name the bacteria which cause tuberculosis **(05 Marks)**
 - 3.4 Briefly describe two microbiological tests which are commonly used to diagnose tuberculosis. **(50 Marks)**

4. Write short notes on

4.1 Infections caused by *Chlamydia trachomatis*

(40 Marks)

4.2 Scrub typhus

(30 Marks)

4.3 *Haemophilus influenzae*

(30 Marks)

5.

5.1 Name three anaerobic bacteria and mention the infections caused by each. **(30 Marks)**

5.2 Briefly describe the mode of transmission of each of the bacteria

mentioned in 5.1

(30 Marks)

5.3 Name the aetiological agent of typhoid fever

(05 Marks)

5.4 List four specimens used to diagnose typhoid fever.

(10 Marks)

5.5 Briefly describe the preventive measures for typhoid fever

(25 Marks)

6.

6.1 Describe two different disk diffusion methods carried out in antibiotic susceptibility testing in routine microbiology laboratories.

(60 Marks)

6.2 Briefly write on MIC method (Minimum Inhibitory Concentration) for antimicrobial activity

(40 Marks)