



**UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
FIRST YEAR FIRST SEMESTER EXAMINATION IN
B.Sc. (HONS) IN MEDICAL LABORATORY SCIENCES-2019**

MLSMT 1132 MEDICAL LABORATORY TECHNOLOGY I

Date: 23.04.2021

Time: 3 Hours

ANSWER ALL EIGHT QUESTIONS.

1.

- 1.1 List the parts of a light microscope and mention the use of each part. (30 Marks)**
- 1.2 Briefly describe the care to be taken while handling a light microscope.(30 Marks)**
- 1.3 Write notes on Class II Biosafety cabinet. (40 Marks)**

2.

- 2.1 Name three blood borne pathogens. (10 Marks)**
- 2.2 Mention the risk groups and the method of transmission of the pathogens mentioned in 2.1. (30 Marks)**
- 2.3 Discuss the factors which influence the risk of infection of blood borne pathogens following an accidental exposure. (30 Marks)**
- 2.4 Briefly discuss how to prevent the occupational exposure of blood borne pathogens in a laboratory. (30 Marks)**

3. 3.1 Explain the working principle of a centrifuge. (30 Marks)

3.2 Briefly explain the different types of rotors used in centrifuges. (30 Marks)

3.3 Give 4 precautionary measures that should be taken before commencing the centrifugation procedure. (20 Marks)

3.4 Briefly describe the steps of serum separation from blood sample. (20 Marks)

4. Write an account on
- 4.1 Storage of chemicals in a laboratory. **(60 Marks)**
 - 4.2 Triple packaging system. **(40 Marks)**
5. Discuss the following standard precautions followed in a laboratory.
- 5.1 Hand hygiene **(40 Marks)**
 - 5.2 Using personal protective equipments **(60 Marks)**
6. Write notes on
- 6.1 Material Safety Data Sheet (MSDS) **(40 Marks)**
 - 6.2 Causes for Fire and electrical hazards in a clinical laboratory. **(60 Marks)**
7. Briefly explain the safe usage and maintenance of the following equipment in a laboratory
- 7.1 Incubator **(25 Marks)**
 - 7.2 Magnetic stirrer **(25 Marks)**
 - 7.3 Analytical Balance **(25 Marks)**
 - 7.4 Water bath **(25 Marks)**
- 8.
- 8.1 Explain the working principle of an autoclave. **(30 marks)**
 - 8.2 Briefly explain the functions of the different parts of an autoclave. **(30 marks)**
 - 8.3 List the uses of an autoclave in a laboratory. **(20 marks)**
 - 8.4 Explain how the autoclaving procedures have been achieved. **(20 marks)**

