

UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
First Year First Semester Examination in BScHons (MLS)-2022
MLSPM 1143 PHYSIOLOGY FOR MLS I
PAPER II

Date: 04.12.2023

Time: 2 hours



Answer all the six questions.

1. Explain the physiological basis of edema in:
 - 1.1 Lymphatic obstruction (50 Marks)
 - 1.2 Right heart failure (50 Marks)

2. Explain the significance of following investigations in clinical practice:
 - 2.1. ESR (25 Marks)
 - 2.2. Bleeding time (25 Marks)
 - 2.3. Total white cell count with differential count (50 Marks)

3. Describe:
 - 3.1. The mechanism of regulation of body temperature in response to cold (50 Marks)
 - 3.2. Excitation- contraction coupling in skeletal muscle (50 Marks)

4.
 - 4.1. List the factors affecting gas exchange in the lungs (20 Marks)
 - 4.2. Briefly explain the physiological basis of reduced PO_2 in pulmonary edema (40 Marks)
 - 4.3. Briefly explain the basis of hypoxia in CO poisoning (40 Marks)

5.
 - 5.1. Explain the factors affecting cardiac output (50 Marks)
 - 5.2. Explain the physiological basis of the changes in blood pressure during moderate physical exercise (50 Marks)

6. Explain the physiological basis of the following:
 - 6.1. Cardiac output decreases when heart rate goes above 200/minute (30 Marks)
 - 6.2. PR interval increases in ECG when stimulating right vagus nerve (30 Marks)
 - 6.3. Elderly people may faint when they get up from the bed suddenly (40 Marks)