

UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
FIRST YEAR FIRST SEMESTER EXAMINATION IN BScHons (MLS)- 2020
MLSPM 1143 PHYSIOLOGY FOR MLS I- PAPER II

Date: 11.02.2022

Time: 2 hours

Answer all the six questions.

1.
 - 1.1. Write the volume and distribution of body fluids in a 50 kg adult (20 Marks)
 - 1.2. Briefly explain the physiological basis of edema in patients with liver disease. (30 Marks)
 - 1.3. Describe the regulation of Na balance. (50 Marks)

2. Briefly describe the physiological basis of the following:
 - 2.1. ESR is increased in anemia (30 Marks)
 - 2.2. Clotting time is prolonged in patients with liver disease. (35 Marks)
 - 2.3. MCV is reduced in iron deficiency (35 Marks)

3. Describe:
 - 3.1. Synaptic transmission (50 Marks)
 - 3.2. Regulation of temperature in a hot environment (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 PO₂ in pulmonary edema (30 Marks)
 - 4.3. Explain the basis of increased respiratory rate in asthmatic patients (50 Marks)

5.
 - 5.1. Describe the events occurring in the left ventricle during a normal cardiac cycle (50 Marks)
 - 5.2. Define stroke volume (10 Marks)
 - 5.3. Briefly explain the factors affecting stroke volume. (30 Marks)

6. Explain the physiological basis of the following:
 - 6.1. Heart rate increases in hemorrhage (40 Marks)
 - 6.2. PR interval increases in ECG when stimulating right vagus nerve (30 Marks)
 - 6.3. Glyceryl Trinitrate relieves angina (30 Marks)