



FACULTY OF ALLIED HEALTH SCIENCES, UNIVERSITY OF RUHUNA
Department of Medical Laboratory Science
Second End Semester Examination – August 2022
MLS 1274 Physiology II – Theory II (SEQ)

Date: 22/08/2022

Time: 1.45 p.m. – 3.15 p.m.

Duration: 90 minutes

Answer all questions

Index Number:

01.

- 1.1 State **four** hormones that contribute for and during pregnancy. (20 marks)
- 1.2 What is GFR? (20 marks)
- 1.3 What is filtration fraction? (20 Marks)
- 1.4 Explain how countercurrent mechanism helps in concentrating urine. (40 marks)

02.

- 2.1 List **five** neurotransmitters associated with the nervous system. (10 Marks)
- 2.2 Name **five** receptors located in the skin. (15 marks)
- 2.3 Breathing is mostly an involuntary process. Briefly describe the process of inhalation. (25 Marks)
- 2.4 Outline the process of depolarization of an axon as an action potential travel along a neuron. (30 Marks)
- 2.5 Outline the events of the sliding filament model of striated muscle contraction. (20 Marks)

03.

- 3.1 Briefly describe **five** characteristics of hormones. (20 marks)
- 3.2 What are the types of pancreatic endocrine cells and name **one** hormone secreted by each type of cell? (15 marks)
- 3.3 List **five** clinical manifestations of chronic diabetes mellitus. (15 marks)
- 3.4 State **five** functions of saliva. (10 marks)
- 3.5 State **five** components of the pancreatic juice and their digestive functions. (15 marks)
- 3.6 List **four** causes of constipation. (10 marks)
- 3.7 Outline the steps in the process of "act of vomiting". (15 marks)