



FACULTY OF ALLIED HEALTH SCIENCES, UNIVERSITY OF RUHUNA
Department of Medical Laboratory Science
Second End Semester Examination – August 2022
MLS 1252 Enzyme, Bioenergetics and Hormone action– Theory II – (SEQ)

Date: 15th August 2022

Time: 2.15 p.m. – 3.15 p.m.

Duration: One hour

Answer all questions

Index Number:

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01. 1.1. List **five** characteristics of enzymes. (10 marks)
- 1.2. Define the following terms.
- 1.2.1. Apo-enzyme (05 marks)
- 1.2.2. Holoenzyme (05 marks)
- 1.2.3. Isozymes (10 marks)
- 1.3. Explain the electron transport chain (ETC). (30 marks)
- 1.4. Explain the biochemical basis of the following.
- 1.4.1. Creatine kinase- II (CK-II) is useful in the diagnosis of myocardial infarction. (20 marks)
- 1.4.2. Immediate administration of nitrite is effective in cyanide poisoning (20 marks)
- 02.
- 2.1 Explain the characteristics of group II hormones. (20 marks)
- 2.2 Explain the molecular mechanisms involved in the action of thyroid hormones. (30 marks)
- 2.3 Briefly explain the functions of the following vitamins.
- 2.3.1 Vitamin A (10 marks)
- 2.3.2 Folic acid (10 marks)
- 2.4 Briefly explain the antioxidant properties of the following vitamins.
- 2.4.1 Vitamin C (20 marks)
- 2.4.2 Vitamin E (10 marks)