



FACULTY OF ALLIED HEALTH SCIENCES, UNIVERSITY OF  
RUHUNA

Department of Nursing

1<sup>st</sup> End Semester Examination – 2023 – 2020/2021 (14<sup>th</sup>) Batch

NUR 1122 – Physiology I - SEQ

Date: 6<sup>th</sup> February 2023

Time: 10.45 a.m.-11.45 a.m.

Duration: 1 hour

Index Number: .....

**Answer all questions. Use the space given.**

01.

1.1. Briefly describe the chemical digestion process in the stomach. (20 marks)

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1.2. State the composition and functions of the mucosal barrier in the stomach. (10 marks)

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1.3. State four (4) functions of the gastrin hormone. (10 marks)

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1.4. What is defecation?

(10 marks)

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1.5. Describe briefly the defecation reflex.

(30 marks)

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1.6. Briefly describe voluntary facilitation of defecation.

(20 marks)

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02.

2.1. Red Blood Cells (RBC) are degraded by the cells of the reticuloendothelial system particularly in the liver and spleen after 120 days in circulation. Bilirubin is one of the end products of RBC degradation.

2.1.1. List the initial products of RBC degradation. (3 marks)

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2.1.2. Briefly describe the pathway of haem degradation. (35 marks)

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Jaundice is a yellow colour discoloration of the body tissue resulting from the accumulation of excess bilirubin. Pathophysiology of pathological Jaundice is best explained by dividing the metabolism of bilirubin into three phases; pre-hepatic, hepatic and post-hepatic.

2.1.3. Indicate the biochemical features of each type of jaundice. (9 marks)

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2.1.4. How the physiologic neonatal jaundice is managed? (3 marks)

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2.2. The general ability of a host to resist a particular infection or disease is called as immunity.

2.2.1. State three (3) lines of defense in the human body which act as barriers for foreign bodies. (6 marks)

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2.2.2. Compare active and passive immunity. (24 marks)

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2.2.3. Illustrate how the response of innate immunity and adaptive immunity changes with the time. (20 marks)

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