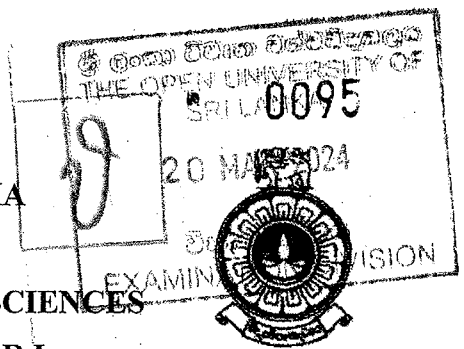


THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF MEDICAL LABORATORY SCIENCES



ACADEMIC YEAR 2023/2024 – SEMESTER I

BACHELOR OF MEDICAL LABORATORY SCIENCES (BMLS) HONOURS

MDU6503 – CLINICAL BIOCHEMISTRY III

FINAL EXAMINATION

DURATION: THREE (03) HOURS

DATE: 20TH MARCH 2024

TIME: 09.30AM – 12.30 PM

INDEX NO:

INDEX NO:

PART B – Structured Essay Questions (40 marks)

1. Hormones are molecules that coordinate different functions in the body by acting as chemical messengers.

1.1. State the connection between hormone molecules and hormone binding proteins.

(02 marks)

.....
.....
.....
.....

1.2.

1.2.1. List three (03) examples for major endocrine glands.

(1.5 marks)

I.
II.
III.

1.2.2. List three (03) examples for minor endocrine glands.

(1.5 marks)

I.
II.
III.

1.3. Briefly describe the role of the hypothalamus and the pituitary in endocrine functions of the human body providing suitable examples. (05 marks)

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

.....

.....

.....

.....

.....

.....

.....

.....

(Total: 10 marks)

2. Pre-natal diagnostic tests are essential medical evaluations conducted during pregnancy.
2.1. Briefly describe what is pre-natal diagnosis? (02 marks)

.....

.....

.....

.....

2.2. List three (03) biochemical markers that are used in pre-natal screening except Human chorionic gonadotropin (HCG). (03 marks)

I.

II.

III.

2.3. Write a short description on qualitative method of HCG assay. (05 marks)

.....

.....

.....

.....

.....

.....

.....

.....

INDEX NO:

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

(Total: 10 marks)

3. Trace elements are essential nutrients for various physiological functions of human body.

3.1. Briefly explain what are trace elements? (02 marks)

.....
.....
.....
.....
.....
.....

3.2. Give three (03) examples for trace elements. (03 marks)

- I.
- II.
- III.

3.3. Outline the functions of trace elements in the human body with examples. (05 marks)

.....
.....
.....
.....
.....
.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(Total: 10 marks)

4. The reproductive system is responsible for the continuation of a species.

4.1. Explain the “dual function” of gonads.

(02 marks)

.....

.....

.....

.....

4.2. Provide six (06) examples for disorders of female reproductive system.

(03 marks)

I.

II.

III.

IV.

V.

VI.

INDEX NO:

4.3. Briefly explain the metabolism and transport of steroid hormones. (05 marks)

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

(Total: 10 marks)

PART C – Essay Questions (30 marks)

1. Write an essay on “Laboratory assessment of vitamin A levels” (15 marks)
2. Write an essay on “Important aspects of therapeutic drug monitoring”. (15 marks)

Copy rights reserved.