



“Investing in Africa’s Future”

COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES
DEPARTMENT OF BIOMEDICAL AND MEDICAL LABORATORY SCIENCES
BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS DEGREE

NSLS102: CLINICAL CHEMISTRY I

END OF SECOND SEMESTER FINAL EXAMINATIONS

NOV/DEC 2020

LECTURER: MR G. MALUNGA

DATE: 27 NOVEMBER 2020

TIME: 0900 HRS

DURATION: 24 HOURS

INSTRUCTIONS

1. Write your candidate number on your answer sheets.
2. Answer any **ONE** question of your choice.
3. Each full question carries 100 marks
4. Submit your answer script as a PDF document through Moodle ONLY.
5. Use the following specifications in your answer scripts:
Font: Times New Roman
Font size: 12
Line spacing: 2.0
6. Credit will be given for logical, systematic and neat presentations.

Answer any ONE question

Question 1

You are a student medical laboratory scientist on attachment in a Clinical Chemistry Department of a National Reference Laboratory and you have just received a blood sample and a 24-hour urine sample for the determination of serum protein and urine protein respectively. Give a detailed analysis of the different analytical methods which you can use to measure these tests. **[100 marks]**

Question 2

Describe in detail the biochemical processes involved in:

- a) Glucose metabolism. **[50 marks]**
- b) Protein metabolism. **[50 marks]**

Question 3

Mr Phiri is suspected to be having a coronary artery disease and a blood sample is sent to your laboratory for investigation of dyslipidemia. Write a detailed account on how you will investigate this dyslipidemia. **[100 marks]**

The End