MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF PURE, APPLIED AND HEALTH SCIENCES

DEPARTMENT OF HEALTH SCIENCES

UNIVERSITY ORDINARY EXAMINATION

2023/2024 ACADEMIC YEAR

SECOND YEAR **SECOND** SEMESTER EXAMINATION FOR BACHELOR

OF SCIENCE IN MEDICAL LABORATORY SCIENCE

MML 210 – HAEMOTOLOGY I

DURATION: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Answer question ONE and any other two questions.
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

SECTION A – ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (30 MARKS)

a) Distinguish neutrophils from eosinophils. Support your answer using diagrams. (5 marks)
b) Briefly explain the composition of blood. (5 marks)
c) State the conditions in which lymphocytes are increased in the blood circulation. (5 marks)
d) Name any three types of normal haemoglobin. (1.5 marks)
e) State the structural formulae for the above named haemoglobin. (3.5 marks)
f) Name any five types of vacutainers and their uses. (5 marks)

SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

Describe the micro haematocrit method of PCV (packed cell volume) determination. (20 marks)

QUESTION THREE (20 MARKS)

Outline the procedure of Erythrocyte Sedimentation Rate (ESR) determination by the westergren method. (20 marks)

QUESTION FOUR (20 MARKS)

a) Outline the procedure of peripheral blood film preparation. (15 marks)
b) State the importance of a thin blood film examination in a haematology laboratory. (5 marks)