



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
IN PUBLIC HEALTH/ COMMUNITY HEALTH AND DEVELOPMENT**

1ST YEAR 1ST SEMESTER 2023/2024 ACADEMIC YEAR

MAIN/KISUMU

COURSE CODE: HCB 1105

COURSE TITLE: INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY

EXAM VENUE: STREAM: (BSc. Env. Hlth/ Comm. Hlth Dvpt)

DATE:

EXAM SESSION:

TIME:

Instructions:

- 1. Answer all questions in section A and any other TWO questions in Section B.**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A: ANSWER ALL QUESTIONS (30MARKS)

1. List any THREE functions of catecholamines (3 marks)
2. Describe any THREE key symptoms of hypothyroidism (3 marks)
3. Describe briefly how the human brain is protected (3 marks)
4. Explain THREE major causes of jaundice (3 marks)
5. Describe THREE phases of gastric emptying (3 marks)
6. Explain major methods of measuring the cardiac output (3 marks)
7. Describe any THREE important functions of the skeleton (3 marks)
8. Explain any THREE main functions of the cell (3 marks)
9. Describe THREE bones of the skull (3 marks)
10. Mention THREE roles that protein play as part of plasma membrane (3 marks)

SECTION B: 40MARKS

Answer any TWO questions from this section

1. a. Discuss THREE types of muscle tissue in terms of general structure, location in the body and functions (15 marks)
b. Describe any TWO factors that affect muscle contraction (5 marks)
2. Discuss the modifiable and non-modifiable risk factors of stroke and heart attack (20 marks)
3. Discuss in detail anatomy and physiology of the Liver (20 marks)
4. a. Explain steps involved in blood clotting (10 marks)
b. Discuss the importance of the skin in temperature regulation (10 marks)