



**JARAMOGI OGINGA ODONGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES**

**UNIVERSITY EXAMINATION FOR CERTIFICATE IN COMMUNITY HEALTH AND
DEVELOPMENT**

1st YEAR 1st SEMESTER 2016/2017 ACADEMIC YEAR

KISII CAMPUS- PART TIME

COURSE CODE: HCD 1111

COURSE TITLE: INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY

EXAM VENUE: ROOM 18

STREAM: (Cert. Comm Hlth & Dev)

DATE: 13/12/16

EXAM SESSION: 9.00 – 10.30 AM

TIME: 1 ½ HOURS

Instructions:

- 1. Answer all questions in section A and any other 2 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 in this section (30 marks)

1 Define the following terms as used in human anatomy and physiology (3mks)

(i) Cartilage (ii) Coagulation (iii) Digestion (iv) Tissue (v) chyle (vi) Mitochondria

2 Name the two main body cavities (1mks)

3 Explain briefly about the Cell Theory (2mks)

4 Movement across-cell membrane takes place in two ways describe (2mks)

5 What do the following body cavities constitute (2mks)

(i) The ventral body cavity

(ii) The dorsal body cavity

6 Name three functions of the skeletal system (3mks)

7 Name three types of human bones and state where they are found in the body (3mks)

8 The human bone contains a number of cells. Name any two of such cells (1mk)

9 State briefly any three functions of human bones (3mks)

10 Muscle tissue has a number of key functions Name any two (1mk)

11 State any two types of cells found in the nervous system (1mk)

12 Describe briefly the parts of a typical reflex arc (2mks)

13 The heart wall has three tissue layers. Name them (3mks)

14. Name four main ingredients of blood plasma. (2mks)

15 . What are the advantages of breathing through the nose? (1mk)

SECTION B (Answer any two questions)

- 1** Define the term homeostasis and describe any five homeostasis examples that will support your definition (20mks)

- 2** (a) Describe the functions of the human Skin and state briefly which factors determine the skin colour (10mks)

(b) Explain briefly the glands of the human skin (10mks)

- 3** (a) Describe the Types of muscle contraction in the human body (10mks)

(b) Explain the blood clotting, or coagulation process after an injury (5mks)

(c) Describe briefly the formation of a blood clot (5mks)

- 4** (a) Explain the functions of the human liver (10mks)

(b) Describe the gallbladder and briefly explain how it works (5mks)

(c) Describe the major functions of the urinary system: (5mks)