



AMREF INTERNATIONAL TRAINING CENTER

Qualification code :
Qualification : Community Health LEVEL 5
Unit code : HE/CU/HR/CC/04/5/A
Unit of competency : Human Anatomy and Physiology

CANDIDATE WRITTEN ASSESSMENT

INSTRUCTIONS TO CANDIDATE

1. You have **THREE (3)** hours to answer all the questions.
2. Marks for each question are indicated in the brackets.
3. The paper consists of **TWO** sections: A and B
4. Do not write on the question paper.
5. A separate answer booklet will be provided.

This paper consists of FOUR (4) printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing

SECTION A: (40 MARKS)

Answer all questions in this section

1. Define the following terms (5 marks)
 - a) Anatomy
 - b) Physiology
 - c) Tissue
 - d) Homeostasis
 - e) Metabolism
2. Identify FOUR main functions of the human skeletal system. (4 marks)
3. Joints connect bones and facilitate body movement. They vary in structure and range of motion, enabling flexibility and stability in different parts of the body. Enumerate FIVE major types of joints in the human body. (5 marks)
4. The human body maintains a constant internal temperature despite changes in the external environment. Identify THREE mechanisms that regulate body temperature. (3 marks)
5. The circulatory system is divided into two main pathways that ensure efficient oxygen and nutrient distribution throughout the body. Outline the difference between the systemic and pulmonary circulations. (4 marks)
6. The digestive system consists of several organs working together to break down food and absorb nutrients essential for body function. Identify FOUR main components of the digestive system. (4 marks)
7. The endocrine system regulates various physiological activities through hormones secreted by specialized glands. Identify FOUR major endocrine glands. (4 marks)
8. Outline THREE functions of the liver. (3 marks)
9. State TWO functions of the kidney in maintaining homeostasis. (4 marks)

10. Neurons are the functional units of the nervous system responsible for transmitting electrical impulses throughout the body. Identify FOUR parts of the neuron (4 marks)

SECTION B: (60 MARKS)

Answer THREE questions from this section

11. The heart is a vital organ responsible for pumping blood throughout the body, supplying oxygen and nutrients to tissues while removing waste products. Proper understanding of its structure, function, and regulation is key to interpreting cardiovascular health.

a) Describe the structure and function of the heart (12 marks)

b) Explain the mechanism of autonomic nervous system regulation of the heart rate (8 marks)

12. The respiratory system enables the exchange of gases essential for cellular metabolism. Knowledge of its anatomy and physiology helps health professionals assess and manage conditions affecting breathing.

a) Describe the structure of the respiratory system and explain the process of gas exchange.

(12 marks)

b) Discuss FOUR factors that affect breathing rate in humans. (8 marks)

13. The digestive system is responsible for the breakdown of food into absorbable nutrients that sustain life. Understanding its anatomy and physiological processes is fundamental in diagnosing and managing nutritional and gastrointestinal disorders.

a) Explain the structure and function of the human digestive system. (10 marks)

b) Describe the process of digestion and absorption of carbohydrates. (10 marks)

14. The female reproductive system plays a central role in human reproduction, hormonal regulation, and menstrual health. Comprehension of its structure and hormonal control is essential for understanding reproductive physiology and disorders.

a) Discuss the structure and function of the female reproductive system. (10 marks)

b) Explain FIVE role of hormones in the menstrual cycle. (10 marks)