



AMREF INTERNATIONAL TRAINING CENTRE

**DIPLOMA IN COMMUNITY HEALTH NURSING – KNQF LEVEL 6
HE/CU/CH/CC/03/5/MA
Human Anatomy and Physiology**

END OF SEMESTER EXAMINATION

Time: 2 HOURS 30 MINUTES

INSTRUCTIONS TO CANDIDATE

- Marks for each question are indicated in the brackets.
- The paper consists of TWO sections: A and B.
- Answer ALL questions in Section A and ANY THREE questions in Section B.
- Candidates are provided with a separate answer booklet.
- **DO NOT** write on this question paper.
- Write neatly in blue or black ink.
- Label any diagrams clearly where required.

This paper consists of THREE printed pages

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

AMU

SECTION A (40 MARKS)*Answer ALL questions in this section*

1. Define the following terms as used in anatomy and physiology:
 - i. Cell (1 mark)
 - ii. Tissue (1 mark)
 - iii. Organ (1 mark)
 - iv. Organ system (1 mark)
2. A 10-year-old boy with asthma is brought to the health post in Kisii, struggling to breathe. Name TWO muscles used during breathing. (2 marks)
3. A patient in a rural village in Baringo needs specialist care that is not available at the nearest dispensary. The CHP needs to refer him through the correct health system levels. State the FOUR levels of the Kenya Health Referral System (2 marks)
4. During a home visit in Mombasa, a CHO meets a patient who complains of pain when passing urine and swollen legs. List TWO disorders of the urinary system. (2 marks)
5. A CHP in Turkana is explaining to a mother why her child's swollen neck glands are a sign the body is fighting an infection. Name THREE functions of the lymphatic system. (3 marks)
6. A health educator at a women's group in Machakos is talking about how the skin protects the body. State THREE functions of the skin in the human body. (3 marks)
7. A CHP in Kibera notices that many residents in her catchment area are coughing and having difficulty breathing. Name THREE common diseases of the respiratory system. (3 marks)
8. Fatuma, a CHP in Isiolo, is doing a home visit and finds an elderly man who fell from a tree and is unable to walk. State 3 types of Muscle tissue in a human body. (3 marks)
9. A student nurse is revising the topic of body membranes before her end-of-semester exam. State THREE functions of membranes found in the human body. (3 marks)
10. A student at AMIU is examining body tissue samples during a laboratory practical. Name FOUR types of tissues found in the human body. (4 marks)
11. During an anatomy class, the trainer projects an image of a human cell on the screen and asks students to identify its parts. State 2 components of a human cell and state the function of each part. (4 marks)
12. A patient at Kenyatta National Hospital is being prepared for a heart scan. The doctor asks the student nurse to name the chambers of the heart. Name FOUR chambers of the heart and state the function of each chamber. (4 marks)
13. During a community health outreach in Eldoret, a CHP is explaining to school children how the skeleton supports the body. List FOUR functions of the skeletal system. (4 marks)

14. A nutrition educator in Meru is teaching community members about how the body breaks down food. List FOUR organs of the digestive system and state what happens to food in each organ. **(4 marks)**
15. At a community dialogue in Nakuru, residents ask the CHO to help them understand how diseases are transmitted. State the difference between a communicable disease and a non-communicable disease. Give ONE example of each type of disease found in Kenya. **(4 marks)**

SECTION B (60 MARKS)

Answer ANY THREE questions in this section

21. Peter is a 45-year-old man in Nakuru. He was brought to the health center after collapsing at work. He is sweating, his heart is beating very fast, and he is having difficulty breathing.
- (a) Describe how blood moves from the heart to the lungs and back to the heart. **(10 marks)**
 - (b) Describe FIVE functions of the human circulatory system **(10 marks)**
22. Mzee Otieno is an 80-year-old retired teacher in Kakamega. His family says he has become forgetful, walks with a shaky gait, and recently lost feeling in his left hand after a fall.
- (a) Describe 5 functions of the Nervous system **(10 marks)**
 - (b) Describe the structure of the Neurons(nerve cell) **(10 marks)**
23. Amina is a Community Health Promoter (CHP) in Garissa. She is conducting a home visit and finds a mother who has swollen legs, is passing very little urine, and complains of lower back pain.
- (a) Describe FIVE functions of the urinary system. **(10 marks)**
 - (b) Describe THREE common disorders of the urinary system seen in Kenyan communities. For each disorder, state ONE cause, ONE sign/symptom. **(10 marks)**
24. During a health education session in Mombasa, a community health Officer is asked by community members about causes of recurring miscarriages in women.
- (a) Describe the process of fertilization **(10 marks)**
 - (b) Describe the role of a community health officer in sexual Reproductive Health **(10 marks)**