



# Technical University of Mombasa

*Faculty of Applied and Health Sciences*

DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES

DIPLOMA IN COMMUNITY HEALTH AND HIV MANAGEMENT  
(DCH13M)

AAB 2109 : HUMAN ANATOMY AND PHYSIOLOGY II

SEMESTER: EXAMINATIONS

SERIES: DECEMBER 2013

TIME: 2 HOURS

## **INSTRUCTIONS:**

You should have the following for this paper

- *Answer booklet*

This paper consists of **FIVE** questions.

Answer Question **ONE (compulsory)** and any other **TWO** questions

*This paper consists of 3 PRINTED pages*

### Question ONE

- (a) Define the following terms
- (i) Nephron (1 mark)
  - (ii) Loop of henle (2 marks)
  - (iii) Cardiac failure (2 marks)
- (b) Draw a well labelled diagram of the mammalian Heart (5 marks)
- (c) State three functions of the following
- (i) Spleen (3 marks)
  - (ii) Thymus gland (3 marks)
- (d) The urinary system is made up of the following structures:- (2 marks)
- (e) State **four** functions of the male reproductive system (3 marks)
- (f) Briefly explain the exchange of gases at the respiratory membrane (4 marks)
- (g) Name **two** type of lymphocytes found within the lymphatic tissues and state their functions (4 marks)

### Question TWO

- a) Briefly describe the cross-sectional structure of a human vein (5 marks)
- b) Describe the location, structure and function of the human heart (10 marks)

### Question THREE

- a) State the roles of each of the following endocrine hormones
- (i) Aldosterone (1 ½ marks)
  - (ii) Norepinephrine (1½ marks)
- b) Using relevant examples, describe the organization of the human lymphatic system (12 marks)

### Question FOUR

- a) Name and describe the main components of the renal system, stating their functions (10 marks)
- b) Briefly describe the role of the human placentas during pregnancy (5 marks)

## **Question FIVE**

- a) Briefly describe the cross-sectional structure of the human gastro-intestinal tract (5 marks)
- b) Describe the regulation of the human gastrointestinal tract (10 marks)