



**TECHNICAL UNIVERSITY OF MOMBASA**  
***Faculty of Applied & Health Sciences***

DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES

DIPLOMA IN COMMUNITY HEALTH

(DCH 14S)

**AAB 2108: HUMAN ANATOMY AND PHYSIOLOGY I**

(DCH 14S)

SPECIAL/SUPPLEMENTARY EXAMINATIONS

**SERIES: FEBRUARY 2015**

**TIME: 2 HOURS**

**INSTRUCTIONS:**

- This paper consists of **FIVE** questions.
- Answer question **ONE (Compulsory)** and any other **TWO** questions.

***This paper consists of Three printed pages.***

### QUESTION 1 (Compulsory)

- a) Draw a well a labelled diagram of mitochondrion and state its main function. **(4 marks)**
- b) i) Name **ONE** organ located in thoracic cavity. **(1 mark)**  
ii) Outline **THREE** functions of human muscles. **(3 marks)**
- c) State **FOUR** components of blood plasma. **(4 marks)**
- d) Give **FOUR** function of human bones. **(4 marks)**
- e) State **FOUR** characteristics of living things. **(4 marks)**
- f) i) Name the **THREE** classifications of the cartilage. **(3 marks)**  
ii) State one function of blood platelets. **(1 mark)**
- g) i) What do you understand by the term cardiovascular system? **(2 marks)**  
ii) State **TWO** factors that influence the rate of heart beat. **(2 marks)**
- h) State **TWO** functions of the digestive system. **(4 marks)**

### QUESTION 2

- a) Distinguish between a tissue and an organ. **(4 marks)**
- b) Name the **FOUR** basic types of tissues that make up the human body and describe the characteristics of each. **(11 marks)**

### QUESTION 3

- a) State **SIX** functions of the digestive system. **(6 marks)**
- b) Describe the **THREE** pairs of salivary glands. **(6 marks)**
- c) List any **THREE** regions of the stomach. **(3 marks)**

### QUESTION 4

- a) Define homeostatis. **(2 marks)**
- b) Name **THREE** components of homeostatic control mechanisms. **(3 marks)**
- c) Discuss the homeostasis regulation mechanism under the following headings.  
i) Negative feedback mechanism. **(5 marks)**  
ii) Positive feedback mechanisms. **(5 marks)**

## QUESTION 5

- a) Describe functions of blood. **(10 marks)**
- b) Outline **FIVE** signs and symptoms of anaemia. **(5 marks)**