



Technical University of Mombasa

Faculty of Applied and Health Sciences

DEPARTMENT OF MEDICAL SCIENCES

DIPLOMA IN MEDICAL ENGINEERING

(DME 211/212)

AAB 2250 : HUMAN ANATOMY & PHYSIOLOGY

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 2 PRINTED pages

Question ONE

- a) Differentiate structurally between arteries and veins **(4 marks)**
- b) Write down form important functions of epithelial tissue giving examples. **(4 marks)**
- c) List SIX components of blood plasma **(6 marks)**
- d) State FIVE important roles of the human skeleton. **(5 marks)**
- e) Define the following terms
 - (i) Cardiac output
 - (ii) Stroke volume
 - (iii) Hypoxia
 - (iv) Hyphea **(4 marks)**
- f) List five important factors that affect lung function. **(5 marks)**
- g) List TWO factors that affect fracture healing. **(2 marks)**

Question TWO

Explain what happens in the events of low blood volume and pressure. **(15 marks)**

Question THREE

Explain the main arterial blood supply to the heart's myocardium. **(15 marks)**

Question FOUR

Draw and label the structure of a long bone and explain how its adapted to the function. **(15 marks)**

Question FIVE

Explain the process of fracture healing and broken bone repair process. **(15 marks)**