



# TECHNICAL UNIVERSITY OF MOMBASA

*Faculty of Applied and Health Sciences*

**DEPARTMENT OF MEDICAL SCIENCES**

DIPLOMA IN MEDICAL ENGINEERING  
(DME 112/212/213)

## **AMD 2250 : HUMAN ANATOMY & PHYSIOLOGY**

**SPECIAL/SUPPLEMENTARY: EXAMINATIONS**

**SERIES: OCTOBER 2013**

**TIME: 2 HOURS**

### **INSTRUCTIONS:**

You should have the following for this examination

- *Answer booklet*

This paper consists of **FIVE** questions.

Attempt question ONE (compulsory) and any other TWO from this paper.

*This paper consists of 2 **PRINTED** pages*

**Question ONE**

- a) List the THREE layers that encase the heart. (3marks)
- b) List FOUR differences between arteries and veins (4marks)
- c) List eight organelles, giving their relevant function in the human cell. (8marks)
- d) List FIVE constituents of blood plasma (5marks)
- e) State FIVE important functions of the skeletal system. (8marks)
- f) State THREE mechanisms necessary for transport of substances across a plasma membrane in a cell. (3marks)
- g) Define the following terms
  - (i) Dyspnoea (1mark)
  - (ii) Ischaemia (1mark)

**Question TWO**

Draw and label the structure of a knee joint. (15marks)

**Question THREE**

List at least TEN agents affecting bone metabolism listing their effect to the bone tissue (15marks)

**Question FOUR**

Describe the stages of healing in fractures (15marks)

**Question FIVE**

Describe events that occur in an injured blood vessel. (15marks)