



TECHNICAL UNIVERSITY OF MOMBASA

Faculty of applied and health sciences

DEPARTMENT OF PURE AND APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN MEDICAL ENGINEERING (DME 16S)

AAB 2250 HUMAN ANATOMY AND PHYSIOLOGY

END OF SEMESTER EXAMINATION

SERIES :sept 2017

TIME:2HOURS

DATE:sept 2017

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of Choose No questions. AttemptChoose instruction.

Do not write on the question paper.

QUESTION ONE

a)State the function of the following;

(i) Flagella 1 mark

(ii)Cytoplasm 1 mark

(iii)Nuclear material 1 mark

(iv) Microtubules 1 mark

b) (i)State TWO functions of lymphocytes 2 marks

(ii) State TWO function of skeletal system 2 marks

c) State the structural difference between arteries and veins 4 marks

(d)List the bones of vertebral column 4 marks

(e) (i) Explain the meaning of closed circulatory system 2 marks

(ii)List types of epithelial cells 2 marks

(f) (i)Name TWO measurement techniques for the heart 2 marks

(ii)List TWO types of muscles found in a human body 2 marks

(g) (i) Name the main minerals stored in the bones 2 marks

(ii)List TWO functions of epithelial tissue 2 marks

(h)NameTWO causes of chronic bronchitis 2 marks

Question TWO

(a)Explain how cells acquire and utilize energy 8 marks

(b) Describe the importance of intercellular junctions

7 marks

Question THREE

(a) Describe muscle contraction initiation

8 marks

(b) Explain systemic circulation

7 marks

Question FOUR

(a) Explain the external respiration

7 marks

(b) Explain the transport of substances across a plasma membrane

8 marks

Question FIVE

(a) Describe factors which causes high blood pressure

8 marks

(b) Explain gaseous exchange in the alveoli

7 marks