



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR:
BACHELOR OF SCIENCE IN ENVIRONMENTAL HEALTH
BSEH 16S/YEAR 1/ SEMESTER 1
AAB 4109: HUMAN ANATOMY AND PHYSIOLOGY

SEMESTER EXAMINATION
SERIES: DECEMBER 2016
TIME: 2 HOURS

Instructions to Candidates

This paper consists of FIVE questions

Answer question ONE (COMPULSORY) and any other TWO questions.

This paper consists of two printed pages.

QUESTION ONE

- a) Outline TWO roles of each of the following;
 - i. Endoplasmic reticulum (2marks)
 - ii. Nucleus (2marks)
- b) Differentiate between;
 - i. Frontal plane and Transverse plane (2marks)
 - ii. Diffusion and Osmosis (2marks)
 - iii. Active movement and Passive movement (2marks)
 - iv. Exocytosis and Endocytosis (2marks)
 - v. Sebaceous glands and Sudoriferous glands (2marks)

- c) State three factors influencing the stability of synovial joint (3marks)
- d) Explain why chemical reactions in the body are often irreversible (2marks)
- e) Name the Three kinds of cartilage and where they are abundant in the body (6marks)
- f) List any five major bones that give shape to the face. (5marks)

QUESTION TWO

- a) Describe the different types of muscles and their functions (6marks)
- b) Discuss the structure and functions of the skin (14marks)

QUESTION THREE

- a) Discuss the three major hormones which regulate fluid balance and electrolyte balance (10marks)
- b) Discuss the difference between dense regular connective tissue and dense irregular connective tissue and their functions (10marks)

QUESTION FOUR

- a) Discuss the Five types of cells in the bones and their functions (10marks)
- b) Discuss the comparison between bone and cartilage (10marks)

QUESTION FIVE

Discuss the main parts of the brain and their functions (20marks)