

TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR THE DIPLOMA IN COMMUNITY HEALTH AND HIV MANAGEMENT.

DCHM 16S/YEAR1/ SEMESTER1

AAB 2108 HUMAN ANATOMY AND PHYSIOLOGY I

SEMESTER EXAMINATIONS

SERIES: DECEMBER 2016

TIME: 2 HOURS

Paper 2

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.

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Question ONE (Compulsory)

- a) State two functions of each of the following parts of a human cell.
 - i) Cytoskeleton. (2 mks)
 - ii) Golgi apparatus. (2 mks)
- b) State four characteristics of the epithelial tissue.(4 mks)
- c)
 - i) Name the two organs that are located in the thoracic cavity. (2 mks)
 - ii) State two functions of the pericardium in a human body. (2mks)

- d) Distinguish between the terms homeostasis and hemostasis. (2 mks)
- e) i) State one function of the Cowper's gland. (1 mk)
 - ii) Outline three functions of the human female reproductive system. (3 mks)
- f) i) Define the term angiogenesis. (2 mks)
 - ii) Briefly describe the role of blood supply in the development of cancer. (2 mks)
- g) State one function of each of the following hormones.
 - i) Insulin. (1 mk)
 - ii) Thyroxine. (1 mk)
- g) Briefly describe how the human kidney regulates the body's pH. (2 mks)
- h) Briefly describe the following diseases that affect the human musculoskeletal system.
 - i) Arthritis (2 mks)
 - ii) Osteoporosis (2 mks)

Question TWO

- a) State five functions of supportive cells in the human nervous system. (5 mks)
- b) Describe the process of message transmission across a chemical synapse. (10 mks)

Question THREE

- a) Write a detailed description of the structure of human heart. (9 mks)
- b) Name three cardiovascular diseases and explain three reasons why these diseases have become prevalent in the country. (6 mks)

Question FOUR

- a) Differentiate between tissue fluid and lymph. (2 mks)
- b) Outline five functions of the human lymphatic system and briefly describe the process of lymph formation in a human body. (13 mks)

Question FIVE

- a) Describe the main components of a homeostatic control mechanism and state the role of each. (6 mks)
- b) Describe the negative feedback homeostatic control mechanisms and state three examples. (9 mks)