



**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**UNIVERSITY EXAMINATIONS  
2021/2022 ACADEMIC YEAR**

**FIRST YEAR SECOND TRIMESTER EXAMINATIONS  
FOR THE DEGREE  
OF  
DIPLOMA IN MEDICAL BIOTECHNOLOGY**

**COURSE CODE: BBD 123**

**COURSE TITLE: GENERAL ANATOMY**

**DATE: 21/04/2022**

**TIME: 12.00 -2.00 PM**

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**INSTRUCTIONS TO CANDIDATES**

This paper consists of three sections:

- i. Section A – Multiple Choice Questions
- ii. Section B – Short Answer Question
- iii. Section C – Long Answer Question.

Answer all questions

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over



**Section A: Multiple Choice Questions (20 marks)**

*Choose the most suitable choice, only one choice is correct*

1. The protective layer that covers the dermis is known as
  - a. epidermis
  - b. epithelial
  - c. muscle
  - d. nerve
2. The tissue responsible for the covering of internal organs and external tissues is known as
  - a. epidermal tissues
  - b. muscle tissue
  - c. epithelial tissue
  - d. nerve tissue
3. The \_\_\_\_\_ are the most abundant cells in the epidermis
  - a. Langerhans cells
  - b. Keratinocytes
  - c. Melanocytes
  - d. Adipocytes
4. How many thoracic vertebrae are there?
  - a. 7
  - b. 12
  - c. 5
  - d. 4
5. What is the shaft of a long bone known as?
  - a. periosteum
  - b. diaphysis
  - c. epiphysis
  - d. central cavity
6. How does food move through your digestive tract?
  - a. By gravity
  - b. By wavelike muscle contractions
  - c. By cilia
  - d. By chemical absorption
7. The digestion of food starts in
  - a. Mouth
  - b. Liver
  - c. Small intestine
  - d. Large intestine
8. The thickest layer in the heart is
  - a. Endocardium
  - b. Myocardium
  - c. Epicardium
  - d. Pericardium
9. What is the main job of the red corpuscles in the blood?
  - a. To clot blood
  - b. To fight disease
  - c. To transport oxygen to the body's cells and carry away carbon dioxide from the cells
  - d. To transport carbon dioxide to the body's cells and carry away oxygen from the cells
10. What is the function of the blood vessels and capillaries?
  - a. They pump blood to the heart.
  - b. They filter impurities from the blood.
  - c. They carry blood to all parts of the body.
  - d. They carry messages from the brain to the muscles.

11. In which part of the respiratory system, gaseous exchange takes place?
  - a. Alveoli
  - b. Pharynx
  - c. Larynx
  - d. Trachea
12. In Aves, the exchange of gases occurs within the \_\_\_\_\_.
  - a. Lungs
  - b. Air sacs
  - c. Air sacs and Lungs
  - d. None of the above
13. What gland is located just superior to the kidneys?
  - a. Pituitary.
  - b. Adrenal.
  - c. Pancreas.
  - d. ovaries
14. The primary target of the releasing and inhibiting hormones of the hypothalamus is the:
  - a. Liver and adipose tissue
  - b. Gonads
  - c. Anterior pituitary
  - d. Bone marrow
15. Sense of smell is perceived by \_\_\_\_\_.
  - a. Pituitary
  - b. Hypothalamus
  - c. Olfactory lobe
  - d. Cerebrum
16. The outermost covering of the kidney is the \_\_\_\_\_.
  - a. Cortex
  - b. Medulla
  - c. Pelvis
  - d. Capsule
17. The external genitalia of the female are collectively called the
  - a. labia
  - b. vulva
  - c. clitoris
  - d. mons pubis
18. Sperm production begins in the
  - a. seminiferous tubules
  - b. epididymis
  - c. vas deferens
  - d. ejaculatory duct
19. The human nervous system comprises
  - a. the central nervous system and the peripheral nervous system
  - b. the central nervous system and the somatic nervous system
  - c. the sympathetic and the parasympathetic nervous systems
  - d. the autonomic and the somatic nervous systems
20. Which is the largest part of the brain?
  - a. medulla oblongata
  - b. cerebrum
  - c. cerebellum
  - d. thalamus

**Section B Short Answer Questions (40 marks)**

1. Outline the subdivisions of anatomy (8marks)
2. Explain the structural level of organization (8marks)
3. Explain the functions major endocrine glands in human body (8marks)
4. Describe the function of epithelial tissues (8marks)
5. Explain the function of the kidney (8marks)

**Section C Long Answer Questions (40 marks)**

1. Describe the anatomical classification of the Central Nervous system (20marks)
2. Discuss the layers of the skin (20marks)