



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

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS  
2023/2024 ACADEMIC YEAR**

**FIRST YEAR FIRST TRIMESTER EXAMINATION**

**FOR THE DEGREE  
OF**

- 1. BACHELOR OF SCIENCE IN OPTOMETRY**
- 2. BACHELOR OF SCIENCE IN EPIDERMIOLOGY & BIOSTASTICS**
- 3. BACHELOR OF SCIENCE IN COMMUNITY HEALTH**
- 4. BACHELOR OF SCIENCE IN NUTRITION**
- 5. BACHELOR OF SCIENCE IN ENVIROMENTAL HEALTH**

**COURSE CODE: PHC 115:**

**COURSE TITLE: GENERAL HUMAN ANATOMY**

**DATE: 4<sup>th</sup> December 2023**

**TIME: 8:00am - 10:00am**

**INSTRUCTIONS TO CANDIDATES**

- 1. READ THE INSTRUCTIONS AT THE BEGIN OF EACH SECTION**
- 2. THIS PAPER CONSIST OF:**

Section A: Multiple Choice Questions (MCQ)	20 Marks.
Section B: Short Answer Questions (SAQ)	40 Marks.
Section C: Long Answer Question (LAQ)	40 Marks
- 3. NO MOBILE PHONE IS ALLOWED IN THE EXAMINATION ROOM**

**DURATION: 2 Hours**

**MMUST observes ZERO tolerance to examination cheating**

**This Paper Consists of FIVE Printed Pages. Please Turn Over.**

**MULTIPLE CHOICE QUESTIONS (choose only one answer in each question)**

1. The study of the structure of tissues microscopically is called:-
  - a. Histology
  - b. Cytology
  - c. Surface anatomy
  - d. Microbiology
  - e. Haematology
2. Which of the following is a System of internal communication and integration?
  - a. Lymphatic
  - b. Integumentary
  - c. Respiratory
  - d. Endocrine
  - e. Muscular
3. The following are Cranial bones except:-
  - a. Frontal
  - b. Occipital
  - c. Ethmoid
  - d. Sphenoid
  - e. Maxillae
4. Which of the following means closest to the point of attachment?
  - a. Superficial
  - b. Proximal
  - c. Medial
  - d. Superior
  - e. Dorsal
5. Which of the following planes separate the body in to an anterior and posterior body portion?
  - a. Sagittal
  - b. Median
  - c. Coronal
  - d. Transverse
  - e. Longitudinal
6. The following structures form the Root of the lung except: -
  - a. Bronchus
  - b. Aorta
  - c. Bronchial vessels
  - d. Pulmonary arteries and veins
  - e. Bronchopulmonary lymph nodes
7. Double-walled sac enclosing the heart is called: -
  - a. Pericardium
  - b. Pleura
  - c. Peritoneum
  - d. Omentum
  - e. Meninges

8. A shallow, broad, or elongated basin in a bone is called: -
- Crest
  - Fossa
  - Canal
  - Spine
  - Sulcus
9. The following are the primary types of tissues except: -
- Epithelial
  - Connective
  - Skeletal
  - Nervous
  - Muscle
10. Which of the following valves is found on the left side of the heart regulating openings between the atria and ventricles?
- Tricuspid
  - Mitral
  - Chordae tendineae
  - Aortic
  - Semilunar
11. The following are characteristics of an artery except: -
- Moves away from the heart
  - High blood pressure
  - Valves present
  - Have small lumen
  - They do not collapse when there is no blood in it.
12. The following are part of the conducting zone of the respiratory system except: -
- Nose
  - Nasal cavity
  - Pharynx
  - Alveoli
  - Trachea
13. The following are paranasal sinuses located in the skull except: -
- Frontal
  - Ethmoid
  - Sphenoidal
  - Maxillary
  - Parietal
14. Which of the following is not a universal property of a muscle?
- Excitability
  - Conductivity
  - Durability
  - Elasticity
  - Contractility

**15. The following are Parts of larynx except: -**

- a. Infraglottis
- b. Epiglottis
- c. Subglottis
- d. Supraglottis
- e. Vocal cords

**16. The following are muscles found on the thorax except: -**

- a. Pectoralis major
- b. Serratus anterior
- c. Intercostal
- d. External oblique
- e. Pectoralis minor

**17. Skull bones are flat bones and are firmly united by irregular, saw-toothed, interlocking, immovable joints called .....**

- a. Amphiarthroses
- b. Sutures
- c. Hyaline
- d. Diarthroses
- e. Synovial

**18. The .....\_vertebral bone contains a bifid spinous process and a transverse foramen.**

- a. Cervical
- b. Thoracic
- c. Lumbar
- d. Sacral
- e. Coccyx

**19. ....is the deepest layer of the epidermis**

- a. Stratum germinativum
- b. Stratum corneum
- c. Stratum spinosum
- d. Stratum lucidum
- e. Stratum granulosum

**20. Hemispherical head of the humerus articulates with the ..... of scapula.**

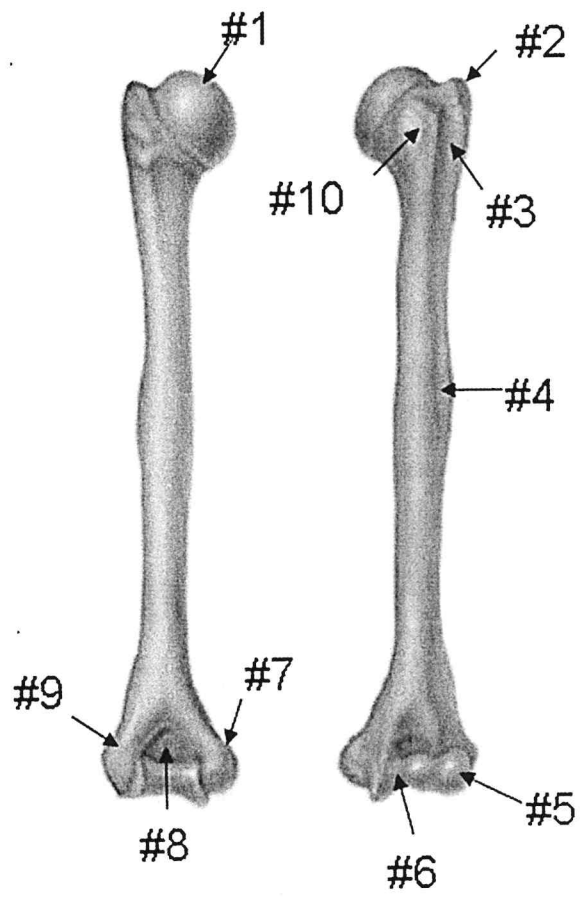
- a. Spine
- b. Coronoid process
- c. Acromion process
- d. Glenoid cavity
- e. Supraspinatus fossa

**SHORT ANSWER QUESTION: ANSWER ALL QUESTION. (Each question is five marks)**

1. Explain five criteria's used in naming of muscles
2. Define the following in relation to muscles?
  - a) Origin and Insertion
  - b) Agonist and Antagonist
  - c) Indirect and Direct Muscles
  - d) Intrinsic and Extrinsic
  - e) Synergist and Fixator
3. Explain the blood flow to the heart?
4. Enumerate five differences between the right and left lung?
5. Explain five functions of the integumentary system?
6. Explain the branching of the bronchial tree?
7. Explain five functions of blood
8. Draw a well labeled diagram of a nervous tissue?

**SECTION C: CHOOSE ONLY ONE QUESTION (20MKS)**

1. Using a well labeled diagram, explain the functions of cell organelles?
2. A. State five importance of learning skeletal anatomy?  
B. Label the diagram below



End