



*(University of Choice)*

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

**MAIN CAMPUS  
MAIN EXAMINATIONS**

**UNIVERSITY EXAMINATIONS  
2017/2018 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER EXAMINATIONS  
FOR THE DIPLOMA IN MEDICAL LABORATORY SCIENCES**

**COURSE CODE: BMD 123**

**COURSE TITLE: GENERAL HUMAN ANATOMY**

**DATE:**

**TIME:**

---

**INSTRUCTIONS TO CANDIDATES**

Answer ALL questions

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.



## SECTION A: MULTIPLE CHOICE QUESTIONS (20 MARKS)

1. The gallbladder, liver, and stomach are all part of the
  - A. Integumentary system
  - B. Cardiovascular system
  - C. Skeletal system
  - D. Respiratory system
  - E. Digestive system
2. Your right nostril is ----- to your right ear.
  - A. medial
  - B. lateral
  - C. superior
  - D. inferior
  - E. distal
3. If you were facing a person who is in the proper anatomical position, then you would be able to see the ----- region of the body.
  - A. gluteal
  - B. calcaneal
  - C. nasal
  - D. popliteal
  - E. vertebral
4. In the anatomical position, the ulna is found ----- to the radius.
  - A. medial
  - B. lateral
  - C. inferior
  - D. superior
  - E. distal
5. Which of the following is not true of body cavities?
  - A. The diaphragm separates the thoracic and abdominopelvic cavities.
  - B. The most inferior cavity is the pelvic cavity.
  - C. The mediastinum divides the thoracic cavity.
  - D. The walls of body cavities are covered with visceral serous membrane.
  - E. The liver is located in the abdominal cavity.
6. The function of the articular cartilage is
  - A. to reduce friction
  - B. to prevent the surfaces of the bones in the joint from making contact
  - C. to produce a lubricating fluid
  - D. to allow growth in length of the bone
  - E. a and b are correct
7. Moving the femur forward during walking is an example of
  - A. abduction
  - B. circumduction
  - C. flexion
  - D. elevation
  - E. adduction

8. When a gymnast performs the “splits” moving the lower limbs laterally, the primary movement at the hip joint is
- A. rotation
  - B. adduction
  - C. extension
  - D. protraction
  - E. abduction
9. In the anatomical position, the palms of the hands are
- A. supinated
  - B. flexed
  - C. pronated
  - D. depressed
  - E. retracted
10. The muscle name pectoralis major is telling you that
- A. this muscle is found in your chest and is larger than the pectoralis minor
  - B. this muscle has a triangular shape and is located in your chest
  - C. this muscle is found in your chest and its fibers run parallel to the long axis of your body
  - D. this muscle is found in your chest and is shorter than the pectoralis minor
  - E. this muscle is found in your chest and has a square shape.
11. The flexor muscles of the forearm are found on the ----- side of the forearm.
- A. posterior
  - B. anterior
  - C. medial
  - D. lateral
12. Which of the following is not considered to be part of the peripheral nervous system?
- A. cranial nerves
  - B. spinal cord
  - C. ganglia
  - D. spinal nerves
  - E. brachial plexus
13. The endocrine system acts through neurotransmitters called hormones that influence growth, development, and metabolic activities.
- A) True B) False
14. The pharynx connects the nasal and oral cavities to the ..... . It serves both the respiratory and digestive systems as a channel for air and food.
- A. larynx only
  - B. esophagus only
  - C. larynx and esophagus
  - D. uvula
15. Lymph nodes are widely distributed throughout the body along the lymphatic pathways where they filter the ----- before it is returned to the -----.
- A. lymph, blood
  - B. lymph, heart
  - C. blood, heart
  - D. blood, lymph

16. In addition to movement, muscle contraction also fulfills some other important functions in the body, such as posture, joint stability, and heat production.
  - A. True B. False
17. The nervous system is the center of all mental activity including all the following except.
  - A. thinking
  - B. learning
  - C. digesting
  - D. memory
18. Air flows in the process of pulmonary ventilation because of pressure differences between the atmosphere and the gases inside the lungs.
  - A. True B. False
19. The major openings at the base of the urinary bladder are the
  - A. renal artery, renal vein, urethra
  - B. renal artery, renal vein, ureter
  - C. ureter, urethra, collecting ducts
  - D. urethra and two ureters
  - E. collecting ducts, ureter, loop of Henle
20. The function of the articular cartilage is
  - A. to reduce friction
  - B. to prevent the surfaces of the bones in the joint from making contact
  - C. to produce a lubricating fluid
  - D. to allow growth in length of the bone
  - E. a and b are correct

### **SECTION B: SHORT ANSWER QUESTIONS (40 MARKS)**

1. Define the following terms as applied in human anatomy:
  - a) Saggital plane
  - b) Superficial
  - c) Coronal plane
  - d) Ventral (4 marks)
2. Outline any four functions of the human integumentary system. (4 marks)
3. State the categories of factors that affect human posture. (4 marks)
4. Define a serous membrane and name the 3 types of these membranes found in the human body. (4 marks)
5. Name the organs associated with the human digestive system. (4 marks)
6. Briefly describe urine formation in the nephrons. (4 marks)
7. List the organs of the lymphatic system and state any two functions of the system (4 marks)
8. State any four characteristics of epithelial tissues. (4 marks)
9. Enumerate various components of blood. (4 marks)
10. Outline any four human body structure units. (4 marks)

### **SECTION C: ESSAY QUESTIONS (40 MARKS)**

1. Give an account of how the anatomy of the human respiratory system is related to its functioning. (20 marks)
2. Describe the human anatomical landmarks. (20 marks)