

# University of Fort Hare

*Together in Excellence*

HUS 112

DEGREE EXAMINATIONS

JUNE 2023

Time: 3 Hours

MODULE: ANATOMY AND MOVEMENT

Marks: 100

This paper consists of 9 pages including cover page

Internal Examiner

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Instructions

Answer all questions.

**Question 1**

**[15]**

**Please choose the correct answer. (Only write down the number and the correct letter)**

- 1. The Buccal region is the region of an/the:**
  - a. Cheek
  - b. Orbit
  - c. Upper part of the back
  - d. All the above
- 2. Identify the front part of the knee called?**
  - a. Patella
  - b. Popliteal
  - c. Ankle
  - d. Shin
- 3. Choose the correct Position of your hand facing downward.**
  - a. Supination
  - b. Pronation
  - c. Dorsiflexion
  - d. Planter flexion
- 4. Identify the extension of the ankle so the movement of the foot to point in a downward motion away from the body.**
  - a. Supination
  - b. Pronation
  - c. Dorsiflexion
  - d. Planter flexion
- 5. The upward movement of the scapula and shoulder.**
  - a. Protraction
  - b. Elevation
  - c. Adduction
  - d. Depression

- 6. Choose the correct bones that makes up the palm of the hand?**
- a. Carpals
  - b. Metacarpals
  - c. Phalanges
  - d. Ulna
- 7. The age group in which the medullary cavity contains fat that extends into the epiphysis and there is a little red marrow present in spongy bone cavities.**
- a. Adolescents
  - b. Infants
  - c. Adults
  - d. Sports members
- 8. Identify the Important function of bones?**
- a. Support
  - b. Protection
  - c. Mineral storage
  - d. All of the above
- 9. Function of cardiac muscles?**
- a. Heat production
  - b. Pumping blood continuously
  - c. Posture
  - d. Hormonal control
- 10. Identify the responsibility of dendrites?**
- a. Receives information.
  - b. Transmit information.
  - c. Encounters with sarcolemma.
  - d. All of the above

**11. Cartilage is surrounded by the:**

- a. Perichondrium
- b. Bones
- c. Cartilage
- d. All of the above

**12. Function of nasal.**

- a. Supports the external ear.
- b. Supports the external nose.
- c. Supports the orbit.
- d. Supports the chin.

**13. Elastic cartilage is only found on:**

- a. External ear.
- b. Epiglottis
- c. A and B
- d. Orbit

**14. Fibrocartilage is found on:**

- a. Menisci of the knee.
- b. Disc of the vertebral column.
- c. A and B.
- d. External ear.

**15. Example of short bone.**

- a. Carpal
- b. Tarsal
- c. Sesamoid bone
- d. All of the above

**Question 2**

**[45]**

- 2.1 . When it comes to pre-natal ossification, there are two types, please identify them and briefly explain what each entail. **[2x2=4]**
- 2.2. Name two (2) primary divisions of the skeletal system? **[2]**
- 2.3. Indicate what each skeletal system division consists of? **[2]**
- 2.4. Describe three types of bones that are found in the human body and give one example for each. **[3x2=6]**
- 2.5. Please name and describe the three anatomical planes **[3x2=6]**
- 2.6. Please discuss the 3 functions of the muscles **[3x2=6]**
- 2.7. Please describe two major types of surface marking **[2x2=4]**
- 2.8. Identify 3 types of muscular tissue and write their location. **[3x2=6]**
- 2.9. Indicate Symptoms of McArdle's Disease. **[3]**
- 2.10. Describe function of vertebral column. **[6]**

**Question 3****[10]****3. Match the following questions/ statement on column A to correct answers on column B.****(please only write down the number and the correct letter example 1. B)**

| <b>COLUMN A</b>   | <b>COLUMN B</b>              |
|---|------------------------------|
| 1. What forms around diaphysis by osteoblasts located on the inner side of the periosteum?      | A. Abduction                 |
| 2. What runs inward to supply the bone marrow and the spongy bone?                              | B. Adduction                 |
| 3. The movement of the joint away from the midline of the                                       | C. Endosteum                 |
| 4. The movement of the joint towards the midline of the body                                    | D. Endochondral ossification |
| 5. Region of the neck of spinal column  | E. Periosteum                |
| 6. Region at the back of the knee   | F. Nutrient artery           |
| 7. It covers the outer bone surfaces  | G. Hematopoietic tissue      |
| 8. It covers the inner bone surfaces  | H. Popliteal                 |
| 9. Is found within the cavities of the spongy bone of long bones and in the diploe of flat bone | I. Cervical region           |
| 10. The process by which all bones move   | J. Bone collar               |

**3.1 State whether the following statements or questions are true/false.**

**[12]**

3.1.1. Abdominal region is everything from your waist to your thorax not just abbs (midsection).

3.1.2. Anatomical position is when you are standing straight, feet facing forward with arms next to your sides and palms facing forward.

3.1.3. Frontal plane is also called coronal plane.

3.1.4. Histology is about Animals.

3.1.5. Appositional growth occurs when cells in the surrounding perichondrium secrete new matrix next to existing tissue.

3.1.6. Hyoid bone supports the skull.

3.1.7. Bones are shaped by the tissue that act upon or around them.

3.1.8. Arthritis is the type of condition when there is an exaggeration of the normal curve of the vertebral column.

3.1.9. In compact bone, osteocytes occupy small cavities or lacunae at the junction of the lamella.

3.1.10. Coronoid fossa is anterior depression that receives the coronoid process of the ulna during forearm flexion.

3.1.11. Estrogen regulates human growth hormone for proper bone proportions.

3.1.12. Short bone is the type of bone that is triangular-shaped and found in clavicle.

Question 4

[18]

4. Please identify the muscles and their actions from the figures below, also include which one is posterior /anterior compartment. Complete the table that is attached and hand that in with your answer book.

Figure 1

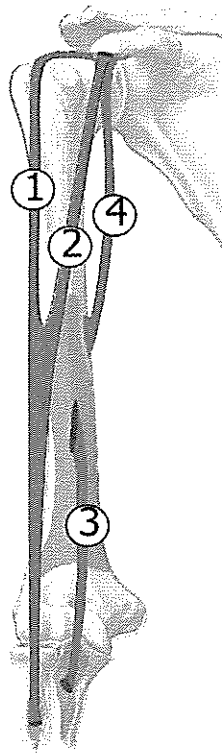
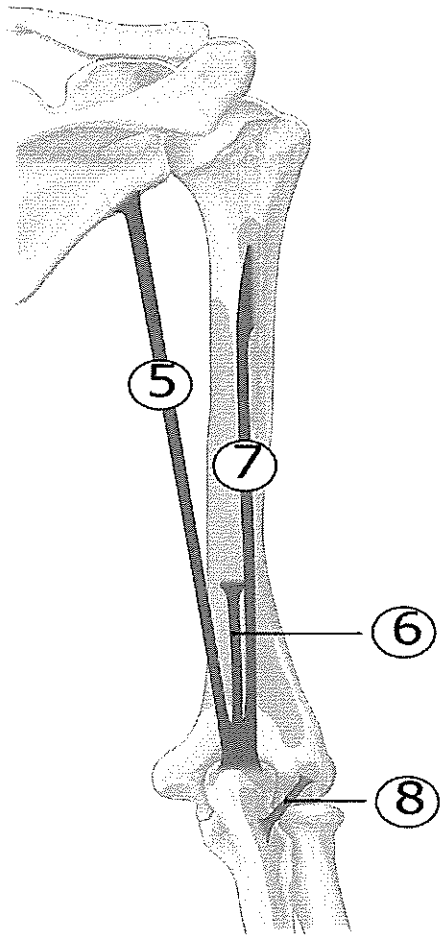


Figure 2



End of question paper

Name \_\_\_\_\_ St no \_\_\_\_\_

\_\_\_\_\_

| Muscle name                        | Action |
|------------------------------------|--------|
| <b>Figure 1 and 2 (18 marks)</b>   |        |
| <b>Type of muscle Compartment:</b> |        |
| 1.                                 |        |
| 2.                                 |        |
| 3.                                 |        |
| 4.                                 |        |
| <b>Type of muscle compartment:</b> |        |
| 5.                                 |        |
| 6.                                 |        |
| 7.                                 |        |
| 8.                                 |        |