UNIVERSITY OF FORT HARE

ANATOMY AND MOVEMENT
HUS 112

DEGREE EXAMINATIONS

MAY / JUNE

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Time:	**3 Hours**
Subject:	**HUS 112**
Marks:	**100**

This paper consists of 7 pages including the cover page

Internal Examiners

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External Examiners

INSTRUCTIONS

Answer all the All the Questions that follows.

It is in your best interest to write clearly and legibly.

Question 1.

Choose the correct answer. (Only write down the number and the correct letter) [10]

1.1. Choose the correct Position of your hand facing downward.

A. Supination

B. Pronation

C. Dorsiflexion

D. Planter flexion

1.2. The upward movement of the scapula and shoulder.

A. Protraction

B. Elevation

C. Adduction

D. Depression

1.3. Choose the correct bones that make up the palm of the hand?

A. Metacarpals

B. Carpals

C. Phalanges

D. Ulna

1.4. Refers to a structure being more in back than another structure in the body.

A. Anterior

B. Inferior

C. Posterior

D. Superior

1.5. Refers to a structure being further away from the root of the limb than another structure in the limb.

A. Proximal

B. Distal

C. Lateral

D. Medial

1.6. The ankle movement brings the foot towards the shin.

A. Dorsiflexion

B. Planterflexion

C. Eversion

D. Inversion

1.7. Which term describes moving a body part forward?

A. Retraction
B. Elevation
C. Protraction
D. Depression

1.8. Which term describes lowering a body part?

A. Retraction
B. Elevation
C. Protraction
D. Depression

1.9. Which anatomical plane divides the body into right and left portions?

A. Frontal plane
B. Sagittal plane
C. Transverse plane
D. Midsagittal plane

1.10. Which anatomical plane divides the body into equal right and left halves?

A. Frontal plane
B. Sagittal plane
C. Transverse plane
D. Midsagittal plane

Question 2 **[10]**

Match the following question/statement in column A to correct answers on column B. (only write the number and the correct letter. Example 1. A).

COLUMN A	COLUMN B
1. A "peg-in-socket" joint; the only example is a tooth in its socket.	A. Rheumatoid
2. Literally means "junction of cartilage"; hyaline cartilage unites the bones.	B. Gomphoses
3. An autoimmune disease – the immune system attacks the joints	C. Osteoarthritis
4. The most common chronic arthritis; likely related to normal aging processes.	D. Bursae
5. An elongated bursa that wraps around a tendon.	E. Synchondroses
6. Flattened fibrous sacs lined with synovial membranes	F. Functional classification
7. Classification of joints that focuses on the amount of movement	G. Synarthroses
8. Classification that is based on the material binding them and presence or absence of a joint cavity.	H. Amphiarthroses
9. Slightly moveable joint	I. Structural classification
10. Immovable joints	J. Tendon Sheath

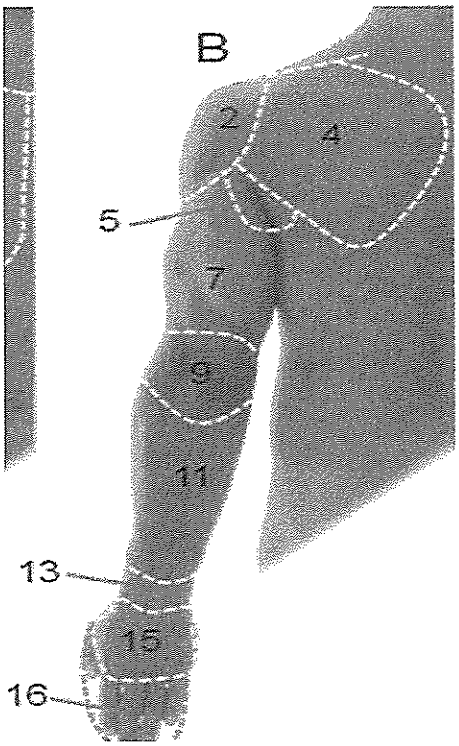
Question 3

State whether the questions/ statements are true/ false. **10**

1. The ulnar nerve passes posterior to medial epicondyle.
2. Axial skeleton is the bones of the upper and lower limb.
3. The axillary nerve is an important site clinically as the humerus fractures here commonly.
4. Shoulder: includes pectoral, deltoid and scapular regions.
5. Only Greater tubercles that provide attachment to four rotator cuff muscles.
6. Infraglenoid tubercle- attachment of the long head of triceps
7. Supraglenoid tubercle-attachment of the long head of biceps.
8. Spine- subdivides posterior surface into supraspinous and infraspinous fossa.
9. Humerus serves as a moveable support structure for scapula and UL.
10. The upper limb is connected to the axial skeleton.

Question 4.

Label the posterior region of the upper limb indicated by the numbers and arrows in the diagram below. **10**



Question 5.

5.1. In a table format write the correct origin and action of the muscles that move the humerus (upper arm) listed below. (18)

- Pectoralis major
- Latissimus dorsi
- Deltoid
- Supraspinatus
- Infraspinatus
- Teres minor
- Subscapularis
- Teres major
- Coracobrachialis

Question 6

6.1. Name and describe the four steps involved in the healing process of a bone fracture (8)

6.2. Identify and explain any five (5) types of bone fracture (10)

6.3. What are the two major events involved in the longitudinal growth of long bones? (2)

6.4. Identify six (6) functions of bone and skeletal system. (6)

6.5. There are four (4) types of cells that are present in bone tissue, Identify them. (4)

6.6. During a high-intensity soccer game, a player accidentally twists his leg and falls onto the field, causing a deep 5 cm vertical cut on the posterior mid-calf. The wound begins to bleed actively, and the player reports weakness and difficulty when attempting to push off and sprint during the game.

6.6.1. In order of penetration (superficial to deep/step-by-step), which anatomical structures would the object pierce? (6)

6.7.During a soccer match, Liam falls and hits his side while trying to block a goal. He feels sore but no bones are broken. His blood test shows normal calcium and red blood cell levels. The doctor also mentions his body is using stored energy for healing.

6.7.1. Based on Liam's situation, identify the functions of the skeletal system. (6)