



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

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

FIRST YEAR FIRST TRIMESTER EXAMINATION

**FOR THE DEGREE
OF**

**BACHELOR OF SCIENCE IN CLINICAL MEDICINE/
BACHELOR OF SCIENCE IN HEALTH PROFESSIONS EDUCATION/
BACHELOR OF SCIENCE IN PHYSIOTHERAPY.**

COURSE CODE: HCA 100/ NUR101/BSPI 12./HPT 112

COURSE TITLE: HUMAN ANATOMY ONE

DATE: TUESDAY 19TH APRIL 2022

TIME: 8:00 – 11:00 AM

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: 3 Hours

MMUST observes ZERO tolerance to examination cheating

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

SECTION A: MULTIPLE CHOICE QUESTION

(20 MKS)

(CHOOSE ONLY ONE BEST ANSWER IN EACH QUESTION)

1. Sciatic nerve emerges below which muscle then lies between the greater trochanter of the femur and the ischial tuberosity of the pelvic bone:-
 - A. Gluteus medius
 - B. Obturator internus
 - C. Quadratus femoris
 - D. Piriformis
 - E. Gemelli
2. Which of the following is not true about the clavicle?
 - A. Medial two-thirds of the clavicle is convex anteriorly and lateral third is concave anteriorly
 - B. medial sternal end has a rounded head and lateral acromial end is markedly flattened
 - C. inferior surface is rounded and marked by grooves and ridges
 - D. medial two-thirds of the clavicle is concave posteriorly and lateral third is convex posteriorly
 - E. superior surface is relatively smooth
3. When you sit, the strongest parts of the hip bone and can be palpated by sitting on your fingers is called:-
 - A. Ischial tuberosity
 - B. Pubic symphysis
 - C. Iliopubic eminence
 - D. Ischial spine
 - E. Pubic crest
4. Which of the following is not a deep vein of the upper limb?
 - A. Radial vein
 - B. Ulna vein
 - C. Basilic vein
 - D. Brachial vein
 - E. Axillary vein
5. The artery accompanying the ligamentum teres is a branch of:-
 - A. Femoral artery
 - B. Inferior gluteal artery
 - C. Superior gluteal artery
 - D. Medial circumflex femoral artery
 - E. Obturator artery
6. Which of the following muscles can be used to administer intramuscular injections?
 - A. Brachialis
 - B. Deltoid
 - C. Subscapularis
 - D. Biceps
 - E. Triceps

7. The greater sciatic foramen transmits these structures Except:-
- A. Superior gluteal vessels
 - B. Obturator internus muscle
 - C. Posterior cutaneous nerve of the thigh.
 - D. Piriformis muscle
 - E. Inferior gluteal vessels
8. Which muscle is the Prime mover of elbow flexion?
- A. Triceps Brachii
 - B. Biceps Brachii
 - C. Brachio radialis
 - D. Brachialis
 - E. Pronator teres
9. Injury to inferior gluteal nerve may disturb the normal gait by causing paralysis of:-
- A. Gluteus maximus
 - B. Gluteus medius
 - C. Hamstrings
 - D. Adductor magnus
 - E. Gluteus minimus
10. Which of the following is the insertion site for pectoralis major muscle?
- A. Coracoid process of scapula
 - B. Acromion of the scapula
 - C. Ribs 1–3
 - D. Deltoid tuberosity
 - E. Greater tubercle of the humerus
11. Which of the following muscles originates from the anterior superior iliac spine?
- A. Semimembranosus
 - B. Semitendinosus
 - C. Tensor fascia latae
 - D. Biceps femoris
 - E. Pectineus
12. The following are muscles of the anterior compartment of the leg except:-
- A. Tibialis anterior
 - B. Extensor digitorum longus
 - C. Fibularis brevis
 - D. Extensor hallucis longus
 - E. Fibularis tertius
13. The following are common fracture sites of bones except?
- A. Neck of femur
 - B. medial two-thirds of the clavicle
 - C. scaphoid bone
 - D. surgical neck of humerus
 - E. spine of the scapular

14. Which of the following muscles when they act together elevate the scapula and shoulder like when you lift a suitcase from the floor?

- A. Trapezius and serratus anterior
- B. Levator scapulae and trapezius
- C. Serratus anterior and Levator scapulae
- D. Rhomboid major and rhomboid minor
- E. Rhomboid major and Levator scapulae

15. The hamstring muscles include the following except:-

- A. Semimembranosus
- B. Tensor fasciae latae
- C. Semitendinosus
- D. Biceps femoris
- E. Part of adductor magnus

16. The following features are not found at the distal end of the humerus:-

- A. Greater and lesser tubercle
- B. olecranon and coronoid fossa
- C. Capitulum and Trochlea
- D. Medial and lateral epicondyles
- E. Lateral and medial supracondylar ridges

17. The following are muscles of the medial compartment of the thigh except:-

- A. Pectinius
- B. Gracilis
- C. Quadrator femoris
- D. Adductor longus
- E. Adductor brevis
- F.

18. The following are extrinsic muscles of the hand except:-

- A. Flexor carpi radialis
- B. Flexor carpi ulnaris
- C. Flexor digitorum superficialis
- D. Palmaris longus
- E. Flexor Pollicis Brevis

19. The roots of the sciatic nerve are:

- A. L2, L3, L4, L5, S1
- B. S2, S3, S4
- C. L4, L5
- D. L4, L5, S1, S2, S3
- E. S2, S2, S3, S4

20. The following are muscles important in stabilizing the shoulder joint except:-

- A. subscapularis
- B. supraspinatus
- C. infraspinatus
- D. teres minor
- E. triceps

SECTION B (ANSWER ALL QUESTIONS)

40MKS

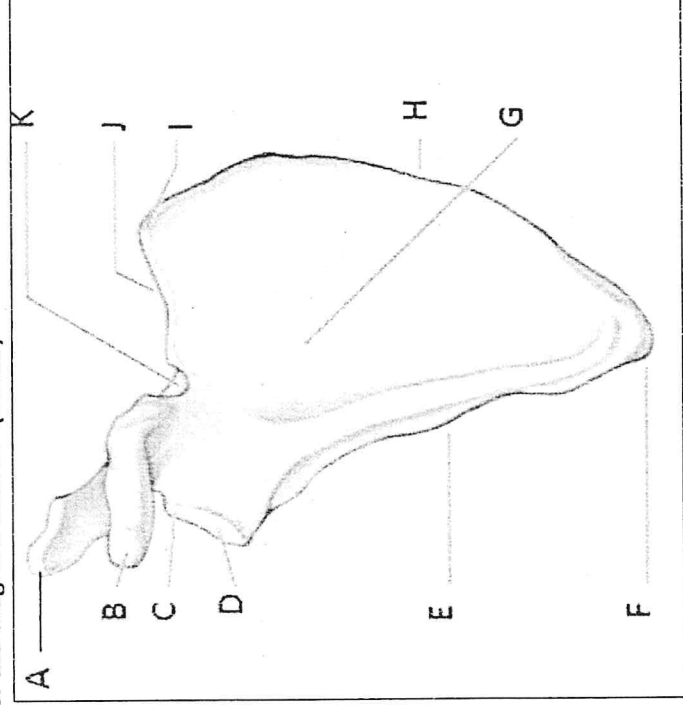
1. Match the bone markings in column A with the correct definition in column B (10MKS)

Column A	Column B
1. Canal	A. A flare superior to a condyle
2. Crest	B. A shallow, broad, or elongated basin
3. Epicondyle	C. rounded knob
4. Fissure	D. A sharp, slender, or narrow process
5. Fossa	E. A narrow ridge
6. Spine	F. A groove for a tendon, nerve, or blood vessel
7. Sulcus	G. A rough surface
8. Tuberosity	H. A small, rounded process
9. Tubercle	I. A slit through a bone
10. Condyle	J. tubular passage or tunnel in a bone

2. Fill in the blanks (5MKS)

- A. is the longest muscle of the lower limb
 B. The internal surface of the iliac ala is concave and is called
 C. lies at the scapula's lateral angle and is a shallow socket that articulates with the head of the humerus.
 D. transport milk from the mammary gland to the nipple of the breast.
 E. is an insertion for the deltoid muscle of the shoulder.

3. Label the diagram below:- (5MKS)

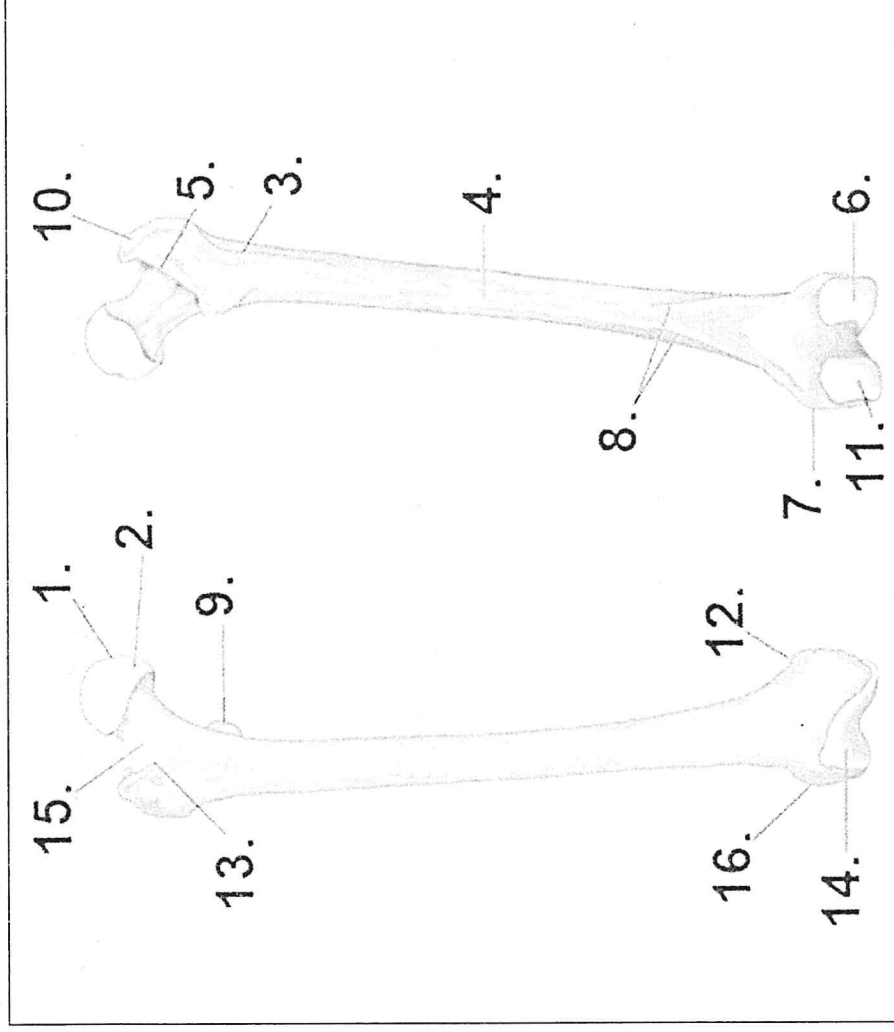


4. a. Which muscles of the Leg form the Achilles tendon? (2mks)
 b. Explain the anatomical signs of a ruptured Achilles tendon? (3mks)

- c. Describe the arches of the foot and explain how they are maintained in position? (5mks)
5. a. Explain five characteristics used in naming muscles giving an example of each? (5mks)
- b. Describe the intrinsic muscles of the hand:- (5mks)

SECTION C. (ANSWER ALL THE QUESTIONS) (40 MKS)

1. A) Identify and label the parts of the bone? (8 mks)



- B) Discuss the boundaries, anatomical relations, contents and clinical significance of the Axilla? (12mks)
2. A) Discuss the blood supply and drainage of the lower limb? (10 mks)
- B) With the aid of a diagram describe the brachial plexus? (10mks)

END