



AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF REHABILITATION MEDICINE
BACHELOR OF SCIENCE IN PHYSIOTHERAPY

END OF TRIMESTER EXAMINATIONS JANUARY TO APRIL 2025

UNIT CODE: PHT 123

UNIT NAME: Anatomy of the Upper and Lower Limbs

DATE: 10th APRIL 2025

TIME: 2pm – 4pm

INSTRUCTIONS

1. All students will have two (2) hours to complete the examination
2. Attempt all questions as per the instruction
3. It is the student's responsibility to report any page and number missing in this paper.
4. Check that the paper is complete
5. Total number of pages is 8 including the cover.
6. Read through the paper quickly before you start.

Section A. Multiple Choice Questions. Answer all questions. (30 Marks)

Q1. Which muscle is commonly referred to as the "boxer's muscle"?

- a) Triceps brachii
- b) Deltoid
- c) Serratus anterior
- d) Coracobrachialis

Q2. What is the role of the extensor carpi radialis brevis muscle?

- a) Wrist flexion
- b) Wrist extension and ulnar deviation
- c) Wrist extension and radial deviation
- d) Wrist flexion and ulnar deviation

Q3. The distal end of the radius articulates with which of the following?

- a) Clavicle
- b) Humerus and ulna
- c) Scaphoid and lunate bones
- d) Olecranon process

Q4. The roots of the brachial plexus are formed by the ventral (Anterior) rami of spinal nerves of:

- a) C3- T1
- b) C4-C8
- c) C5-T1
- d) C6-T2

Q5. Which of the following arises from the posterior cord of the brachial plexus

- a) Median nerve
- b) Dorsal scapular nerve
- c) Subscapular nerve
- d) Suprascapular nerve

Q6. Which of the following nerves provide the motor innervation to the posterior arm?

- a) Musculoskeletal nerve
- b) Axillar nerve
- c) Radial nerve
- d) Ulnar nerve

Q7. The axillary vein is formed by the union of which two veins?

- a) Cephalic and basilic veins
- b) Brachial and basilic veins
- c) Brachial and cephalic veins
- d) Radial and ulnar veins

Q8. Which of the following is NOT part of the arm or forearm bones?

- a) Radius
- b) Humerus
- c) Fibula
- d) Ulna

Q9. Where is the most common site for palpating the radial artery pulse?

- a) Medial to the biceps tendon
- b) Cubital fossa
- c) Anatomical snuffbox
- d) Lateral to the flexor carpi ulnaris

Q10. Injury to the radial nerve in the midshaft of the humerus most commonly results in which clinical sign?

- a) Claw hand
- b) Ape hand
- c) Wrist drop
- d) Pope's blessing

Q11. The radial artery is a terminal branch of which major artery?

- a) Axillary artery
- b) Subclavian artery
- c) Ulnar artery
- d) Brachial artery

Q12. The posterior surface of tibia shows an oblique line for the attachment of the soleus muscle. This line is called:

- a) Popliteal line
- b) Soleal line
- c) Malleolar line
- d) Interosseous line

Q13. The patella:

- a) Lies on the back of the knee joint.
- b) Has apex lying superiorly.
- c) Has smooth articulating anterior surface.
- d) Gives attachment to quadriceps femoris

Q14. The largest sesamoid bone in our body

- a) Petalle
- b) Tibia
- c) Patella
- d) Fibula

Q15. Which of the following is the longest and strongest bone in the human body?

- a) Tibia
- b) Fibula
- c) Femur
- d) Humerus

Q16. How many tarsal bones are in each foot?

- a) 5
- b) 6
- c) 7
- d) 8

Q17. Which of the following is the largest muscle in the lower limb?

- a) Rectus femoris
- b) Gluteus maximus
- c) Sartorius
- d) Gastrocnemius

Q18. The Achilles tendon is primarily formed by which two muscles?

- a) Tibialis anterior and extensor digitorum longus
- b) Rectus femoris and vastus lateralis
- c) Fibularis longus and brevis
- d) Gastrocnemius and soleus

Q19. The primary artery supplying the lower limb is the:

- a) Internal iliac artery
- b) External iliac artery
- c) Femoral artery
- d) Popliteal artery

Q20. Which tarsal bone forms the heel?

- a) Navicular
- b) Talus
- c) Calcaneus
- d) Cuboid

Q21. The greater trochanter is a feature of which bone

- a) Tibia
- b) Femur
- c) Fibula
- d) Talus

Q22. Which nerve of the brachial plexus is responsible for innervating most of the flexor muscles of the forearm?

- a) Radial nerve
- b) Median nerve
- c) Ulnar nerve
- d) Musculocutaneous nerve

Q23. Injury to the upper trunk of the brachial plexus (C5-C6) results in which condition?

- a) Carpal tunnel syndrome
- b) Klumpke's palsy
- c) Erb-Duchenne palsy
- d) Thoracic outlet syndrome

Q24. The popliteal artery is located in which anatomical region?

- a) Inguinal region
- b) Popliteal fossa
- c) Anterior thigh
- d) Plantar foot

Q25. The profunda femoris artery is a major branch of which artery?

- a) Popliteal artery
- b) Femoral artery
- c) Tibial artery
- d) Peroneal artery

Q26. The sciatic nerve divides into which two branches?

- a) Femoral and obturator nerves
- b) Superior and inferior gluteal nerves
- c) Tibial and common fibular (peroneal) nerves
- d) Pudendal and saphenous nerves

Q27. The common fibular (peroneal) nerve divides into which two branches?

- a) Tibial and sural nerves
- b) Deep fibular and superficial fibular nerves
- c) Medial and lateral plantar nerves
- d) Obturator and femoral nerves

Q28. Damage to the deep fibular nerve would most likely cause weakness in which movement?

- a) Knee extension
- b) Ankle dorsiflexion
- c) Plantar flexion
- d) Hip abduction

Q29. The obturator nerve primarily supplies which compartment of the thigh?

- a) Anterior
- b) Posterior
- c) Medial
- d) Lateral

Q30. The sciatic nerve is a branch of which plexus?

- a) Cervical plexus
- b) Thoracic plexus
- c) Lumbar plexus
- d) Brachial plexus

Section B (Structured short answer questions (20 Marks))

Q31. Explain the carpal bones (8 Marks)

Q32. Describe the course and branches of the axillary artery (12 Marks)

Section C (CHOOSE ONLY TWO Structured long answer questions (20 Marks))

Q33. Discuss the three (3) main parts of the femur (10 Marks)

Q34 Explain the muscles of the anterior compartment of the thigh (10 Marks)

Q35. Explain the Tarsal and Metatarsal bones (10 Marks)