



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 (Special exam) 1st Year

DATE: 10th APRIL 2025

TIME: 2PM to 4PM

INSTRUCTIONS

1. All students will have two (2) hours to complete the examination
2. This is an online exam, 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.
7. Upon finishing the exam paper, on submission, the message 'Your examination has been submitted' will appear.

TOTAL: _____/70

PERCENT: _____/100%

POINTS EARNED TOWARDS FINAL GRADE _____/70

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

Q1. The sciatic nerve is a branch of which plexus?

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

Q2. The obturator nerve primarily supplies which compartment of the thigh?

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

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

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

Q4. Damage to the deep fibular nerve would most likely cause weakness in which movement?

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

Q5. The common fibular (peroneal) nerve divides into which two branches?

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

Q6. The sciatic nerve divides into which two branches?

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

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

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

Q8. Injury to the upper trunk of the brachial plexus (C5-C6) results in which condition?

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

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

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

Q10. Which nerve of the brachial plexus is responsible for innervating most of the flexor muscles of the forearm?

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

Q11. The greater trochanter is a feature of which bone

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

Q12. Which tarsal bone forms the heel?

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

Q13. Which of the following is the longest and strongest bone in the human body?

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

Q14. The Achilles tendon is primarily formed by which two muscles?

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

Q15. The patella:

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

Q16. How many tarsal bones are in each foot?

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

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

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

Q18. The largest sesamoid bone in our body

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

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

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

Q20. The posterior surface of tibia shows an oblique line for the attachment of the soleus muscle. This line is called:

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

Q21 The radial artery is a terminal branch of which major artery?

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

Q22. Injury to the radial nerve in the midshaft of the humerus most commonly results in which clinical sign?

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

Q23. The popliteal artery is located in which anatomical region?

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

Q24. The profunda femoris artery is a major branch of which artery?

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

Q25. Which of the following is NOT part of the arm or forearm bones?

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

Q26. Which of the following nerves provide the motor innervation to the posterior arm?

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

Q27. Which of the following arises from the posterior cord of the brachial plexus

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

Q28. 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

Q29. What is the role of the extensor carpi radialis brevis muscle?

- a) Wrist flexion
- b) Wrist extension and radial deviation

c) Wrist extension and ulnar deviation

d) Wrist flexion and ulnar deviation

Q30. Which muscle is commonly referred to as the "boxer's muscle"?

a) Triceps brachii

b) Deltoid

c) Serratus anterior

d) Coracobrachialis

Section B (Structured short answer questions (20 Marks). Answer all the questions

Q31. Describe the course and branches of the axillary artery (12 Marks)

Q32. Explain the carpal bones (8 Marks)

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

Q33. Explain the muscles of the anterior compartment of the thigh (10 Marks)

Q34. Explain the Tarsal and Metatarsal bones (10 Marks)

Q35. Discuss the three (3) main parts of the femur (10 Marks)