



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCE
DEPARTMENT OF REHABILITATION MEDICINE
BACHELOR OF SCIENCE IN PHYSIOTHERAPY
END OF SEPT-DECEMBER 2024 TRIMESTER EXAMINATIONS**

UNIT CODE: PHT 326 **UNIT NAME: Sports Physiotherapy 2. Special exam**
DATE: Day/ Date/ December
TIME: TWO HOURS
START: 0:00 **STOP : 0:00**

INSTRUCTIONS (physical exams)

- 1. Do not write on this question paper**
(Marks and questions distribution as per program curriculum.)

INSTRUCTIONS (Online examinations)

1. This exam is marked out of 70 marks
2. This Examination comprises 3 Sections
3. This online exam shall take 2 Hours
4. Late submission of the answers will not be accepted
5. Ensure your web-camera is on at all times during the examination period
6. No movement is allowed during the examination
7. Idling of your machine for 5 min or more will lead to lock out from the exam
8. The Learning Management System (LMS) has inbuilt integrity checks to detect cheating
9. Any aspect of cheating detected during and or after the exam administration will lead to nullification of your exam
10. In case you have any questions call the invigilator for this exam on Tel. 0705833434 and or the Head of Department on Tel 0720491032
11. For adverse incidences please write an email to: amiu.examinations@amref.ac.ke

SECTION A: MULTIPLE CHOICE QUESTION. ANSWER ALL QUESTIONS. (30 MARKS)

1. Which screening test is commonly used to assess an athlete's flexibility and range of motion?
 - A. Sit and reach test
 - B. Vertical jump test
 - C. Shuttle run test
 - D. Beep test

2. Which of the following is the recommended approach for managing an acute soft tissue injury?
 - A. Heat and stretching
 - B. Rest, Ice, Compression, and Elevation (RICE)
 - C. Only massage therapy
 - D. High-impact exercises

3. What is a common symptom of supraspinatus tendinitis?
 - A. Knee pain
 - B. Sharp pain during shoulder abduction
 - C. Weak grip strength
 - D. Hip stiffness

4. Which preventive strategy is effective for avoiding hamstring strains?
 - A. Static stretching before warm-up
 - B. Adequate warm-up and eccentric strengthening of the hamstrings
 - C. Avoiding flexibility exercises
 - D. Avoiding hydration

5. Which of the following is a common preventive measure for lateral ankle ligament injuries?
 - A. Wearing high-heeled shoes
 - B. Strengthening and balance exercises
 - C. Avoiding any type of stretching
 - D. Only using ankle braces

6. Which activity modification can help prevent pre-patellar bursitis?
 - A. Avoiding repetitive kneeling
 - B. Running only on hard surfaces
 - C. Ignoring any knee discomfort
 - D. Practicing only high-intensity exercises

7. Which ligament is commonly injured in a skier's thumb injury?
 - A. Ulnar collateral ligament of the thumb
 - B. Radial collateral ligament of the thumb
 - C. Palmar radiocarpal ligament
 - D. Dorsal intercarpal ligament

8. Which of the following is a primary risk factor for Achilles tendon rupture?
 - A. Sedentary lifestyle

- B. Rapid, intense increases in activity
 - C. Regular stretching
 - D. Swimming regularly
9. Which of the following helps in preventing plantar fasciitis?
- A. Wearing high heels regularly
 - B. Using supportive footwear and stretching the calf muscles
 - C. Avoiding any type of footwear support
 - D. Overloading with high-impact exercises
10. Which physical examination maneuver is used to assess for ulnar collateral ligament instability in the thumb?
- A. Tinel's sign
 - B. Froment's sign
 - C. Valgus stress test
 - D. Allen's test
11. Which of the following is a recommended method for preventing heat-related illnesses during sports activities?
- A. Drinking large amounts of water all at once
 - B. Avoiding electrolyte replacement drinks
 - C. Wearing dark-colored clothing
 - D. Taking breaks in shaded areas
12. Which of the following sports is commonly associated with acromioclavicular (AC) joint injuries?
- A. Basketball
 - B. Soccer
 - C. Weightlifting
 - D. Swimming
13. Which of the following is a common symptom of a labral tear in the shoulder?
- A. Pain with overhead activities
 - B. Numbness in the fingers
 - C. Weakness in grip strength
 - D. Tingling sensation along the forearm
14. Which of the following maneuvers is commonly used to assess for hip impingement?
- A. Thomas test
 - B. Trendelenburg test
 - C. FABER test (Patrick's test)
 - D. FADIR test
15. Which of the following is a common symptom of femoral acetabular impingement (FAI)?
- A. Radiating pain down the leg
 - B. Clicking or locking sensation in the hip joint
 - C. Numbness in the foot
 - D. Pain with deep breathing

16. A basketball player complains of pain and swelling in the knee after landing from a jump. Imaging reveals a tear in the cartilage of the knee. Which structure is most likely affected?
- A. Medial collateral ligament (MCL)
 - B. Anterior cruciate ligament (ACL)
 - C. Meniscus
 - D. Quadriceps tendon
17. Which of the following is a common mechanism of injury for a posterior cruciate ligament (PCL) tear?
- A. Valgus stress on the knee
 - B. Hyperextension of the knee
 - C. External rotation of the tibia
 - D. Medial rotation of the femur
18. A cyclist presents with pain and swelling behind the knee. He reports feeling a "pop" while pushing down on the pedal. Which structure is most likely injured?
- A. Medial collateral ligament (MCL)
 - B. Anterior cruciate ligament (ACL)
 - C. Popliteus tendon
 - D. Gastrocnemius muscle
19. Which of the following maneuvers is commonly used to assess for an anterior cruciate ligament (ACL) tear?
- A. McMurray test
 - B. Lachman test
 - C. Valgus stress test
 - D. Thessaly test
20. Shin splints typically result from inflammation of which structure?
- A. Achilles tendon
 - B. Medial collateral ligament
 - C. Tibialis anterior muscle
 - D. Peroneal tendons
21. A soccer player presents with pain and swelling in the lower leg after a collision with another player. Which injury is most likely?
- A. Achilles tendon rupture
 - B. Tibial stress fracture
 - C. Medial meniscus tear
 - D. Patellar tendonitis
22. Which of the following is a common symptom of compartment syndrome in the leg?
- A. Tingling sensation in the toes
 - B. Visible deformity of the calf muscles
 - C. Numbness in the foot
 - D. Severe pain that worsens with activity
23. Which of the following structures is commonly affected in a high ankle sprain?
- A. Anterior talofibular ligament (ATFL)
 - B. Deltoid ligament

- C. Syndesmosis
 - D. Calcaneofibular ligament (CFL)
24. A basketball player reports pain and swelling on the outside of the ankle after landing on another player's foot. Which ligament is most likely injured?
- A. Anterior talofibular ligament (ATFL)
 - B. Deltoid ligament
 - C. Calcaneofibular ligament (CFL)
 - D. Posterior talofibular ligament (PTFL)
25. Which of the following is a common symptom of Achilles tendinitis?
- A. Pain on the inside of the ankle joint
 - B. Swelling over the dorsum of the foot
 - C. Pain and stiffness in the Achilles tendon
 - D. Numbness in the toes
26. Which of the following maneuvers is commonly used to assess for cervical spine stability following an injury?
- A. Lachman test
 - B. Straight leg raise test
 - C. Spurling test
 - D. Trendelenburg test
27. A soccer player collapses suddenly during a game and remains unresponsive. Which cardiac condition should be suspected as a possible cause?
- A. Aortic dissection
 - B. Hypertrophic cardiomyopathy
 - C. Atrial fibrillation
 - D. Cardiac tamponade
28. Which of the following substances is banned due to its ability to increase oxygen-carrying capacity in the blood?
- A. Caffeine
 - B. Erythropoietin (EPO)
 - C. Aspirin
 - D. Ibuprofen
29. Which of the following is a potential adverse effect of anabolic steroid abuse in athletes?
- A. Increased risk of cardiovascular disease
 - B. Decreased muscle mass
 - C. Increased flexibility
 - D. Enhanced bone density
30. Which of the following is a primary purpose of taping in sports?
- A. Enhance muscle size
 - B. Restrict harmful movement and provide joint support

- C. Improve cardiovascular endurance
- D. Prevent sweating

SECTION B –SHORT ANSWER QUESTIONS (20 MARKS) Answer all questions

1. Explain the difference between anterior and posterior shoulder dislocations. (4 Marks)
2. Describe the rehabilitation process following elbow dislocations and fractures. (4 Marks)
3. Discuss the mechanisms of injury for quadriceps contusions in athletes. (4 Marks)
4. Describe the diagnostic methods used to evaluate meniscus tears. (4 Marks)
5. Describe the initial treatment options for calf strains. (4 Marks)

SECTION C -LONG ANSWER QUESTIONS (20 MARKS). Choose one question

1. Hip and groin injuries are common among athletes participating in various sports. Discuss under: (20 Marks)
 - I. The spectrum of hip and groin injuries encountered in athletes
 - II. The diagnostic approach to hip and groin injuries in athletes,
 - III. The principles of management for hip and groin injuries in athletes.
2. Anterior cruciate ligament (ACL) injuries are significant knee injuries commonly encountered in athletes, particularly those participating in high-impact sports like basketball and football. Discuss: (20 Marks)
 - i. The mechanisms of injury for ACL tears in athletes,
 - ii. The clinical presentation of ACL injuries,
 - iii. The diagnostic workup for ACL injuries,
 - iv. The principles of management for ACL injuries in athletes.
 - v. The outcomes and potential complications associated with ACL injuries and reconstruction in athletes,