

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 312 UNIT NAME: SPORTS PHYSIOTHERAPY 1 (Special

paper)

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: MULTIPPLE CHOICE QUESTION. ANSWER ALL QUESTIONS (30 MARKS)

- 1. Which type of healthcare professional is typically part of a sports medicine team?
 - A. Nutritionist
 - B. Physiotherapist
 - C. Orthopedic specialist
 - D. All of the above
- 2. Which of the following is a primary method for injury prevention in sports?
 - A. Avoiding physical conditioning
 - B. Using proper warm-up and cool-down routines
 - C. Avoiding any type of physical stress on the body
 - D. Taking frequent breaks from practice
- 3. High temperatures can increase the risk of which condition in athletes?
 - A. Hypothermia
 - B. Hyperthermia or heat stroke
 - C. Bone fractures
 - D. Muscle hypertrophy
- 4. For hydration recovery, which nutrient should also be included along with water?
 - A. Fiber
 - B. Electrolytes, like sodium and potassium
 - C. Sugar only
 - D. Protein
- 5. Which macronutrient is essential in a recovery diet to aid in muscle repair?
 - A. Carbohydrates
 - B. Protein
 - C. Fat
 - D. Fiber
- 6. Which of the following is a good meal choice before engaging in a long, low-intensity activity?
 - A. Sugary snack bar
 - B. High-protein smoothie
 - C. Mixed nuts and whole-grain bread
 - D. Plain pasta
- 7. What is a primary purpose of sports massage for athletes?
 - A. To boost muscle soreness
 - B. To promote muscle relaxation and reduce injury risk
 - C. To focus on joint flexibility only
 - D. To improve only mental focus
- 8. The main purpose of classification in disability sports is to:
 - A. Group athletes based on their nationality
 - B. Ensure fair competition by grouping athletes with similar physical limitations
 - C. Group athletes by weight only
 - D. Provide more funding to specific athletes
- 9. The Anterior drawer's Test is used to evaluate stability of which of the following?
 - A. Medial collateral ligament
 - B. Anterior cruciate ligament
 - C. Medial meniscus

- D. Patellar femoral joint
- 10. Of the tests below, which is used to check the integrity of the Achilles tendon?
 - A. Thompson test
 - B. Compression test
 - C. Baker's test
 - D. Greenstick test
- 11. Which of the following conditions is common to runners and cyclists and is characterized by pain and irritation over the lateral femoral condyle?
 - A. Pes anserine tendonitis
 - B. Iliotibial (IT) band syndrome
 - C. Jumper's knee
 - D. Biceps femoris tendonitis
- 12. Which of the following symptoms are for which condition. Conscious but with impaired memory, Unconscious, Difficulty concentrating
 - A. Retrograde amnesia
 - B. Anterograde amnesia
 - C. Concussion.
 - D. Tinnitus
- 13. What is a common skiing/snowboarding injury?
 - A. Knee ligament injuries
 - B. Tennis elbow
 - C. Frozen shoulder
 - D. Carpal tunnel syndrome
- 14. Which of the following statements is correct regarding the use of supplements as ergogenic aids?
 - A. Erythropoietin is safe to use in otherwise healthy young athletes
 - B. Creatine may enhance burst performance.
 - C. Protein supplements are safe, even with impaired renal function.
 - D. Herbal preparations are generally considered safe to use.
- 15. A strain is classified as being a:
 - A. Mild, moderate or severe tear in a muscle or tendon
 - B. Partial or complete rupture of a bursa
 - C. Prolonged muscular spasm
 - D. 1st, 2nd or 3rd degree tear in a ligament
- 16. Ligament injuries are usually assessed by way
 - A. Reflex testing
 - B. Ligament contraction testing
 - C. Ligament stress testing
 - D. Manual muscle testing
- 17. TOTAPS stands for?
 - A. Talk, Touch, Active movements, Passive movements, and Stress tests
 - B. Talk, Touch, Active movements, Resisted movements, and Strange tests
 - C. Talk, Touch, Articulate, Passive movements, and Strength tests
 - D. Talk, Touch, Active movements, Passive movements, and Skills tests
- 18. An example of an internal cause of injury is:
 - A. Fatigue
 - B. Body Contact
 - C. Environmental Temperature
 - D. Poor Playing Surface

- 19. A dislocation occurs when:
 - A. A muscle is detached from its origin
 - B. A bone protrudes through the skin
 - C. The bones at a joint are forced out of position
 - D. Ligaments are stretched beyond normal range of position
- 20. A warm up helps to prevent injuries by:
 - A. Keeping the body cold, which enables the body to work efficiently
 - B. Removing lactic acid from ligaments and tendons
 - C. Increasing blood circulation, stretching muscles
 - D. All of the above
- 21. Treatment for heatstroke will start by:
 - A. Cooling the body.
 - B. Raising the legs.
 - C. Keeping the victim warm.
 - D. Giving the victim a drink of water.
- 22. As a sports physio what things you have to watch in the players for the risk factors for ACL injury, Except?
 - A. Hormonal influence
 - B. Biomechanics of the athletes
 - C. lower extremity strength
 - D. Neuromuscular control
- 23. As a sports physio you want to perform isokinetic measurement on the athletes as they are going on a trip to other country for matches, what could be the best option for this?
 - A. By using dynamometers
 - B. By providing constant resistance muscles
 - C. By performing graded muscular test
 - D. By performing 10RM
 - A. Follow-through phase
- 24. Which of the following is the only nonreversible effect of anabolic steroids?
 - A. Muscle hypertrophy
 - B. Alterations in high density lipoprotein (HDL) and low density lipoprotein (LDL) ratios
 - C. Alopecia
 - D. Personality effects
- 25. A 17-year-old basketball player sustained an inversion twisting injury to the left ankle with the foot plantar flexed approximately 20 degrees. Which of the following ankle ligaments is most likely to be injured by this mechanism?
 - A. Anterior tibiofibular
 - B. Anterior talofibular
 - C. Calcaneofibular
 - D. Posterior talofibular
- 26. A 17-year-old pitcher reports pain over the medial aspect of the elbow that occurs during the acceleration phase of throwing, and it prevents him from throwing at the velocity needed to be competitive. What structure is most likely injured in this patient?
 - A. Radial collateral ligament
 - B. Posterior bundle of the ulnar collateral ligament
 - C. Anterior bundle of the ulnar collateral ligament

- D. Flexor carpi ulnaris
- 27. When traveling to a country with a different climate, what is an important item players should bring?
 - A. Heavy blankets
 - B. Local cuisine snacks
 - C. Climate-appropriate clothing
 - D. Extra water bottles
- 28. What should be included in a first-aid kit for a team traveling abroad?
 - A. Medical-grade syringes only
 - B. Local painkillers only
 - C. Basic wound care supplies and common medications
 - D. Sunglasses and sunscreen
- 29. What is the purpose of using resistance bands in physiotherapy?
 - A. To measure player height
 - B. To aid in muscle strengthening and stretching
 - C. To measure weight
 - D. To check joint alignment
- 30. What is the main purpose of sports massage for athletes?
 - A. To relax them before a big game
 - B. To address muscle soreness and increase blood flow
 - C. To prepare them mentally for the game
 - D. To teach them new techniques

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

- 31. How does an ice bath help a performer to recover? (4 Marks)
- 32. To what extent is taping effective in preventing sports injuries? (4 Marks)
- 33. Why are acclimatization and fluid intake effective strategies for supporting the body's temperature regulation mechanisms? (4 Marks)
- 34. Underline 5 symptoms of a concussion: (4 Marks)
- 35. Describe the dangers of using anabolic steroids as an athlete (4 Marks)

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

- 36. Discuss the STEPS used in making a diagnosis of sports injuries (20 Marks)
- 37. Discuss the components of sports rehabilitation (20Marks)