



**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

DATE: Monday/ 2nd/ December

TIME: TWO HOURS

START: 9am STOP: 11am

INSTRUCTIONS (physical exams)

1. This exam is marked out of 70 marks
2. This Examination comprises 3 Sections
3. This exam shall take 2 Hours
4. **DO NOT WRITE ON THE QUESTION PAPER**

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

1. Which of the following is a key purpose of screening in sports physiotherapy?
 - A. To assess personal fitness goals
 - B. To diagnose an injury after it occurs
 - C. To identify risk factors for potential injuries
 - D. To increase muscle mass
2. After a lateral ankle ligament sprain, what type of exercise is generally recommended during the initial rehabilitation phase?
 - A. High-impact jumping
 - B. Static and dynamic balance exercises
 - C. Sprinting drills
 - D. Heavy weightlifting
3. What is the primary rehabilitation focus for sub-acromial bursitis?
 - A. Strengthening and mobility exercises to reduce impingement
 - B. Intensive shoulder weightlifting
 - C. Sprinting exercises
 - D. Using shoulder braces constantly
4. Which of the following is part of the prevention strategy for bicipital tendinitis?
 - A. Avoiding all types of resistance exercises
 - B. Strengthening the shoulder stabilizer muscles
 - C. Focusing only on flexibility exercises
 - D. Using immobilization techniques during exercise
5. In the rehabilitation of golfer's elbow, which of the following exercises is commonly used?
 - A. Wrist flexor stretching and strengthening exercises
 - B. High-impact throwing drills
 - C. Knee squats
 - D. Sprinting
6. What type of exercise can be used in the rehabilitation of IT band tightness?
 - A. Hip abductor strengthening and foam rolling
 - B. Sprinting exercises
 - C. Deep knee squats
 - D. Jumping jacks
7. In the early rehabilitation of an Achilles tendon rupture, which activity should be avoided?
 - A. Partial weight-bearing exercises
 - B. High-impact jumping or running
 - C. Light stretching
 - D. Isometric exercises

8. What is the primary symptom of De Quervain's tenosynovitis?
 - A. Swelling over the dorsum of the hand
 - B. Numbness and tingling in the fingers
 - C. Pain over the thumb and wrist during gripping
 - D. Limited range of motion in the little finger
9. What is a common characteristic of mallet finger?
 - A. The inability to extend the fingertip
 - B. Wrist pain
 - C. Knee instability
 - D. Hip pain
10. An athlete presents with sudden chest pain, shortness of breath, and a rapid heartbeat during training. Which condition is most likely responsible?
 - A. Heat exhaustion
 - B. Asthma attack
 - C. Myocardial infarction
 - D. Ankle sprain
11. Which of the following sports is associated with a high risk of overuse injuries in the shoulder?
 - A. Swimming
 - B. Running
 - C. Cycling
 - D. Tennis
12. A baseball pitcher presents with pain and weakness in his throwing arm. He experiences pain during the late cocking phase of throwing. Which structure is most likely injured?
 - A. Ulnar collateral ligament (UCL)
 - B. Biceps tendon
 - C. Supraspinatus tendon
 - D. Sternoclavicular joint
13. A volleyball player complains of pain and tenderness over the lateral epicondyle of the elbow. Which condition is most likely responsible?
 - A. Rotator cuff tear
 - B. Tennis elbow (lateral epicondylitis)
 - C. Shoulder dislocation
 - D. Ulnar collateral ligament (UCL) injury
14. Which of the following structures is commonly affected in hip flexor strains?
 - A. Gluteus medius tendon
 - B. Hamstring muscle group
 - C. Tensor fasciae latae muscle
 - D. Iliopsoas muscle group
15. A soccer player presents with sharp pain in the groin area, particularly during kicking and running. Which condition is most likely responsible?
 - A. Femoral neck stress fracture
 - B. Adductor strain
 - C. Piriformis syndrome

D. Trochanteric bursitis

16. A runner complains of deep, aching pain in the buttock and hip region, especially when sitting or climbing stairs. Which condition is most likely responsible?
 - A. Trochanteric bursitis
 - B. Piriformis syndrome
 - C. Femoroacetabular impingement (FAI)
 - D. Ischial tuberosity avulsion fracture
17. Which of the following exercises have generally proven to be effective in reducing the risks of the patella-femoral pain syndrome?
 - A. Stair climbing
 - B. Hamstring stretches
 - C. Exercises that strengthen the quadriceps
 - D. Abdominal exercises
18. Which of the following is a common symptom of patellar tendinitis?
 - A. Locking of the knee joint
 - B. Clicking or popping with knee movement
 - C. Pain with climbing stairs or jumping
 - D. Numbness in the lower leg
19. A runner experiences sudden, sharp pain on the lateral aspect of the knee after changing direction quickly. Which structure is most likely injured?
 - A. Medial collateral ligament (MCL)
 - B. Anterior cruciate ligament (ACL)
 - C. Lateral meniscus
 - D. Iliotibial (IT) band
20. Which of the following is a common mechanism of injury for an ankle sprain?
 - A. Direct impact to the front of the ankle
 - B. Plantarflexion and inversion of the foot
 - C. Dorsiflexion and eversion of the foot
 - D. Hyperextension of the toes
21. A cyclist presents with pain and tenderness over the lateral aspect of the knee. Which condition is most likely responsible?
 - A. Iliotibial band syndrome
 - B. Patellar tendinitis
 - C. Hamstring strain
 - D. Quadriceps tendinitis
22. A rugby player complains of pain and tenderness over the shin bone after repetitive impacts during training. Which condition is most likely responsible?
 - A. Achilles tendinopathy
 - B. Medial tibial stress syndrome (shin splints)
 - C. Anterior compartment syndrome
 - D. Tibial stress fracture
23. Which of the following is a common mechanism of injury for a Lisfranc injury?
 - A. Hyperplantarflexion of the foot
 - B. Excessive inversion of the foot

- C. Direct impact to the dorsum of the foot
 - D. Hyperdorsiflexion of the foot
24. A runner presents with sharp pain and tenderness over the bony prominence on the inside of the foot. Which condition is most likely responsible?
- A. Plantar fasciitis
 - B. Tarsal tunnel syndrome
 - C. Morton's neuroma
 - D. Medial tibial stress syndrome (shin splints)
25. A weightlifter complains of pain and stiffness in the lower back that worsens with activity and improves with rest. He has limited range of motion in the lumbar spine. Which condition is most likely responsible?
- A. Lumbar disc herniation
 - B. Ankylosing spondylitis
 - C. Lumbar facet syndrome
 - D. Lumbar radiculopathy
26. A gymnast presents with localized tenderness and swelling over the midline of the spine after a fall during practice. Which condition is most likely responsible?
- A. Lumbar strain
 - B. Spondylolysis
 - C. Sacroiliitis
 - D. Coccydynia
27. A long-distance runner complains of chest pain, palpitations, and dizziness during races. Which cardiac condition is most likely responsible?
- A. Atrial fibrillation
 - B. Ventricular tachycardia
 - C. Hypertrophic cardiomyopathy
 - D. Myocardial infarction
28. An 18-year-old high school basketball player is being treated for Achilles tendinitis. What type of strengthening exercise has been shown to be helpful in the later phases of rehabilitation?
- A. Eccentric
 - B. Isokinetic
 - C. Concentric
 - D. Isometric
29. Beta-blockers are banned in which of the following sports due to their calming effect?
- A. Powerlifting
 - B. Archery
 - C. Wrestling
 - D. Track and field
30. Which type of taping is commonly used to improve proprioception and support muscle movement?
- A. Rigid taping
 - B. Elastic kinesiology taping
 - C. Cohesive bandaging
 - D. Adhesive tape

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

31. Describe the typical symptoms and diagnostic methods for rotator cuff injuries. **(4 Marks)**
32. Discuss the difference between tennis elbow (lateral epicondylitis) and golfer's elbow (medial epicondylitis). **(4 Marks)**
33. Discuss the common causes and risk factors associated with groin strains in athletes. **(4 Marks)**
34. Outline the management strategies and rehabilitation protocols for athletes with hamstring injuries. **(4 Marks)**
35. Discuss the etiology and risk factors associated with patellofemoral pain syndrome in athletes. **(4 Marks)**

SECTION C –LONG ANSWER QUESTIONS. Choose one question. (20 Marks)

36. Discuss the rehabilitation process following surgical intervention for shoulder instability.
 - i. Outline the goals of postoperative rehabilitation
 - ii. Describe the progression of rehabilitation protocols. **(20 Marks)**

37. Ankle ligament injuries are common orthopedic injuries encountered in athletes participating in various sports. Discuss; **(20Marks)**
 - i. The mechanisms of injury for ankle ligament injuries in athletes,
 - ii. The clinical presentation of ligament injuries
 - iii. The diagnostic workup for ankle ligament injuries
 - iv. The initial treatment strategies and the rehabilitation process following ankle ligament injuries