



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

**UNIT CODE: PHT 312 UNIT NAME: SPORTS PHYSIOTHERAPY (MAIN)
FRESH ENTRY**

**DATE: FRIDAY/9TH / AUGUST
TIME: TWO HOURS
START: 11.15AM STOP : 1:15PM**

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 QUESTIONS (30 MARKS)

1. A 57-year-old man sustains a fall off of a two-step ladder and has pain and weakness in in his Rt right shoulder. His MRI scan shows medial subluxation of biceps. What physical examination would confirm this finding?
 - A. External rotation lag sign
 - B. Yergason's test
 - C. Hornblower test
 - D. Allen test
2. Why medial meniscus is more commonly injured than the lateral meniscus?
 - A. Because it is loosely attached with femoral condyle
 - B. Because it is firmly attached with femur condyle
 - C. Because it is loosely attached with tibial plateau
 - D. Because it is firmly attached with the tibial plateau
3. Tendinopathy of the long head of biceps is commonly associated with which one of following conditions.
 - A. Subacromial impingement
 - B. Frozen
 - C. Glenohumeral osteoarthritis
 - D. Shoulder instability
 - E. Acromial joint subluxation
4. Mr. Ouma is a 25-year-old jokey who has Lt shoulder instabilities due to several shoulder dislocations. Which tests would you use as your objective examination for this condition?
 - A. Apprehension test or posterior drawer test
 - B. Active compression or crank test
 - C. Neers test or painful arc test
 - D. External rotation lag sign or bear hug test
5. Which fracture is called as the boxer's fracture?
 - A. Fracture of distal radius
 - B. Fracture of Metacarpal
 - C. Fracture of Carpal
 - D. Fracture of radius

6. A 15-year-old footballer complains of Rt shoulder pain. He gives a history of being tackled and falling on his Rt shoulder. On examination, ROM is reduced due to pain and tenderness over the distal clavicle and acromion. On palpation the clavicle is slightly mobile in an anterior direction. What ligaments have been completely torn in this injury pattern?
- Acromioclavicular and middle glenohumeral
 - Posterior inferior glenohumeral and anterior superior glenohumeral
 - Coracoclavicular and posterior inferior glenohumeral
 - Acromioclavicular and coracoclavicular
7. Which of the following is a cause for the meniscus injury?
- Combination of rotation and compression force
 - Anterior translation force
 - Posterior translation force
 - Longitudinal force
8. What is the most reliable means of documenting a PCL injury?
- Posterior drawer test
 - Quadriceps active test
 - Stress radiographs
 - Dial test
9. A 25-year-old weightlifter had an MRI examination of his shoulder, which shows a SLAP lesion with a cyst in the spinoglenoid notch. Which one of the following clinical signs/ tests would be expected to be positive in this scenario?
- Jobe
 - Horn blower
 - Lift off
 - Belly push
 - Speed
10. A 9-year-old boy is injured while playing soccer. His examination reveals painful range of motion between 5 – 75 degrees. There is tenderness on the medial side of his knee. There is no effusion, a grade 1A Lachman test and severe pain over the medial epicondyle of the knee. Varus stress is negative, and pain is elicited with valgus stress. Initial radiographs were negative for abnormality what is the next diagnostic step?
- Repeat radiographs while the patient is weight bearing
 - Ultrasonography of the lower extremity and calf
 - Stress radiographs
 - CT scan
11. Which joint of the body is considered as the most mobile joint of the body?

- A. Hip Joint
 - B. Shoulder Joint
 - C. Knee joint
 - D. Elbow Joint
12. A 14-year-old gymnast misses her dismount off of the uneven bars and loses consciousness for about 15 seconds. She is dazed and confused for several minutes. She does not complain of pain; numbness or weakness and she is moving all extremities without deficit. The athlete and coach want to go back to the competition that day. How should they be advised?
- A. Concussion precludes same day, return to play
 - B. Order an urgent MRI scan; if findings are normal, she can return to competition
 - C. Order neurocognitive testing; if findings are normal she can return to competition
 - D. If she is symptom free after 15 minutes exertion test, she may return to competition
13. Eliciting the impingement test in the hip involves which of the maneuvers?
- A. Flexion, abduction and external rotation
 - B. Flexion, adduction and internal rotation
 - C. Flexion adduction and external rotation
 - D. Flexion abduction and internal rotation
 - E. Extension adduction and internal rotation
14. Acute management of quadriceps contusions should consist of which of the following?
- A. Immobilization in full extension for 24 hours
 - B. Immobilization in 90 degrees of flexion for 24 hours
 - C. Immobilization in 120 degrees of flexion for 24 hours
 - D. Immediate range of motion exercise in double upright brace
 - E. Immediate range of motion exercise without bracing
15. Which of the following bones is most frequently involved in stress fractures in athletes?
- A. Femur
 - B. Tibia
 - C. Fibula
 - D. Navicular
 - E. 5th metatarsal
16. What is Footballer's Ankle?
- A. Pain at the front of the ankle
 - B. Pain at the back of the ankle
 - C. Pain at the lateral side of the ankle
 - D. All of the above
17. Which Therapy is best recommended therapy on-field after getting a bruise?
- A. RICE Therapy
 - B. Cryotherapy
 - C. Chemotherapy

D. Actinotherapy

18. 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. Jumper's knee
 - C. Iliotibial (IT) band syndrome
 - D. Biceps femoris tendonitis
19. When an elbow is dislocated, it is important to consider the possibility of what secondary injury?
- A. Fracture
 - B. Tearing/pinching of the nerves
 - C. Disruption of normal blood supply
 - D. All of the above
20. What condition is it when there is an apophysitis at the insertion of the patellar tendon on the tibial tubercle?
- A. Osgood Schlatter's disease
 - B. Patellar tendonitis
 - C. Sever's disease
 - D. Housemaid's knee
21. During this football tackle, the player in blue has collided with the lateral side of the red player's leg. What is the most likely injury to have occurred?
- A. Medial collateral ligament injury
 - B. Lateral collateral ligament injury
 - C. Patella tendon tear
 - D. Anterior cruciate ligament
22. During the physical examination, which of the following findings is most suggestive of a sprain?
- A. Deformity
 - B. Gross joint instability
 - C. Point tenderness
 - D. Swelling
23. Which test for a syndesmosis injury has the highest sensitivity?
- A. Squeeze test
 - B. External Rotation test
 - C. Anterior drawer test
 - D. Lachman test
24. The empty can test is used to determine injury to what muscle?

- A. Supraspinatus
 - B. Deltoid
 - C. Infraspinatus
 - D. Long head of biceps brachii
25. A 19-year-old female field hockey player sustains a right ankle injury last night during a game. The patient is on crutches and reports that she has not been able to put any weight on her right ankle since the injury. She was running alongside another player when her right ankle gave out and she twisted it, falling to the ground. physical examination reveals discoloration similar to hematoma and significant swelling around the lateral ankle area. Pain is elicited during palpation of the anterior talofibular ligament. What test should be performed to aid in this diagnosis?
- A. Thompson test
 - B. External rotation stress test
 - C. Squeeze test
 - D. Anterior drawer test
26. A 18 year old football player is participating in the second session of two a day preseason practices. He complains of dizziness and fatigue. He is brought to the sideline by the athletic trainer where examination demonstrates confusion and disorientation. What would be the next most appropriate step in his treatment?
- A. Rapid cooling via ice bath, cold water and fans
 - B. Transportation via ambulance to a local emergency department
 - C. Rapid rehydration via oral and IV fluids
 - D. Immediate administration of acetaminophen or other anti-pyretics
27. A physical therapist is working in an outpatient, during the patient's history the patient reports, "I tore 3 of my 4 rotator cuff muscles in the past". Which of the following muscles cannot be considered as possibly being torn?
- A. Teres minor
 - B. Teres major
 - C. Supraspinatus
 - D. Infraspinatus
28. Posterolateral rotatory elbow is caused by deficiency of which of the following ligaments?
- A. Radial portion of the lateral collateral ligament
 - B. Ulnar portion of the lateral collateral ligament annular ligament
 - C. Annular ligament
 - D. Anterior band of the ulnar collateral ligaments
29. A 16-year-old footballer comes complaining of dizziness and headache and has some difficulty remembering the previous series of plays. No loss consciousness has been noted. This is the first time this has happened. When can he return to play?
- A. Next play
 - B. Next season
 - C. After week

- D. After evaluation by a physician documenting the resolution of symptoms
30. Which of the following is the primary stabilizer of the longitudinal arch?
- A. Plantar fascia
 - B. Intrinsic musculature
 - C. Interosseous ligaments
 - D. Dorsal ligament

SECTION B: SHORT ANSWER QUESTIONS (20 MARKS)
ANSWER ALL QUESTIONS.

1. Examine the importance of sports medicine being a team effort (5 Marks)
2. Discuss the pain pathway (5 Marks)
3. Outline how to clinically assess footwear (5 Marks)
4. Outline the internal risk factors that predispose an athlete from injury (5 Marks)

SECTION B: LONG ANSWER QUESTIONS (20 MARKS)
ANSWER ANY TWO QUESTIONS

1. Discuss supplements effects and side effects (10 Marks)
2. Describe the processes involved in the visual observation and inspection of an injury (10 Marks).
3. Outline the sports injuries that can be sustained at the skin (10 Marks)