



UNIVERSITI KUALA LUMPUR
ROYAL COLLEGE OF MEDICINE PERAK

FINAL EXAMINATION
MARCH 2026 SEMESTER

COURSE CODE : RFD14403
COURSE NAME : PHYSIOTHERAPY IN MUSCULOSKELETAL 1
PROGRAMME NAME : DIPLOMA IN PHYSIOTHERAPY
DATE : 1 JULY 2026
TIME : 2.30 PM - 4.30 PM
DURATION : 2 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please read CAREFULLY the instructions given in the question paper.
2. This question paper has information printed on both sides of the paper.
3. This question paper consists of TWO (2) sections; Section A and Section B.
4. Answer ALL questions in Section A and THREE (3) questions in Section B.
5. Please mark/write your answers in the OMR answer script and answer booklet provided.
6. Answer all questions in English language ONLY.

THERE ARE 8 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A: MULTIPLE CHOICE QUESTIONS (Total: 20 marks)

INSTRUCTION: Answer ALL questions.

Please use the OMR sheet provided.

1. Identify the mechanism of Galeazzi's fracture.
 - A. Fall on outstretched hand.
 - B. Fall onto outstretched hand with forearm in pronation.
 - C. Backward fall on the palm of an outstretched hand with forearm in pronation.
 - D. Backward fall on the palm of an outstretched hand with forearm in supination.

2. **"Health conditions such as osteoporosis, cancer, and osteomyelitis weaken the bones."**

Select the fracture that is caused by the above conditions.

 - A. Colle's fracture.
 - B. Monteggia fracture.
 - C. Compound fracture.
 - D. Pathological fracture.

3. Identify the statement related to joint dislocation.
 - A. Subluxation is complete dislocation.
 - B. Dislocation is a partial articular displacement.
 - C. Subluxation can be in anterior or posterior dislocation.
 - D. Dislocation is the displacement of entire articular surfaces.

4. Select the complications of joint dislocation.
 - I. Osteoarthritis.
 - II. Avulsion fracture.
 - III. Nerve impingement.
 - IV. Limb length discrepancy.
 - A. I and II.
 - B. I, II, and III.
 - C. I, II, and IV.
 - D. II, III, and IV.

5. Find the source of chemical injury in burn.

- A. Sunburn.
- B. Hot water.
- C. Lightening.
- D. Hydrochloric acid.

6. **"Mr. A was presented with burns to anterior part of his chest and abdomen."**

Identify the percentage of burn area using the Rule of Nines.

- A. 4.5%
- B. 9.0%
- C. 18.0%
- D. 21.0%

7. **• Irritation to the tendon during bending and straightening of fingers.**
• Lumps form on the tendon surface.

Find the condition related to the above characteristics.

- A. Adhesive capsulitis.
- B. Lateral epicondylitis.
- C. Stenosing tenosynovitis.
- D. Carpal tunnel syndrome.

8. Identify the complication that develops from bicipital tendinitis.

- A. Dinner fork deformity.
- B. Madelung's deformity.
- C. Popeye bulge deformity.
- D. Cubitus varus deformity.

9. **"Angiogenesis is the process of developing new blood vessels which happen in healing process."**

Select the soft tissue healing stage that presents with the above process.

- A. Proliferative.
- B. Remodeling.
- C. Inflammation.
- D. Callus formation.

10. Select the condition that is caused by repetitive overhead activity.
- A. Bicipital tendinitis.
 - B. Rotator cuff injury.
 - C. Carpal tunnel syndrome.
 - D. Thoracic outlet syndrome.
11. Find the mechanism of injury that causes contusion.
- A. Direct trauma.
 - B. Indirect trauma.
 - C. Twisting of joints.
 - D. Degenerative changes.
12. Select the risk factors for quadriceps strain.
- I. Proper conditioning.
 - II. Inadequate stretching.
 - III. Muscle imbalance of the lower extremity.
 - IV. Inadequate warm-up before vigorous exercise.
- A. I and II.
 - B. I and III.
 - C. I, II and III.
 - D. II, III and IV.
13. Find the appropriate management for acute lower limb injury.
- A. Massage.
 - B. Heat therapy.
 - C. Plyometric exercises.
 - D. Elevation of extremity.
14. Select the common cause of pulled hamstrings.
- A. Valgus forces from direct contact to the knee.
 - B. Ground reaction force during landing from a jump.
 - C. Shear forces during rotational movement of the knee.
 - D. Eccentric force at myotendinous junction during sprinting.

15. Identify the appropriate test for supraspinatus injury.
- A. Allen's test.
 - B. Speed's test.
 - C. Empty can test.
 - D. Yergason's test.
16. Select the positive finding for Thomas test.
- A. Tightness of hamstrings.
 - B. Weakness of gluteus medius.
 - C. Tightness of hip flexor, rectus femoris, and tensor fascia latae.
 - D. Pain and reduce the range of motion of the hip and sacroiliac joints.
17. Identify the indication for ankle arthrodesis.
- A. Pain.
 - B. Stability.
 - C. Degeneration.
 - D. Joint replacement.
18. Select the appropriate exercise to initiate muscle contraction after knee surgery.
- A. Calf stretches.
 - B. Pelvic bridging.
 - C. Pendulum exercise.
 - D. Static quadriceps exercise.
19. Identify the purpose of current history taking during subjective assessment.
- A. To identify the doctor's diagnosis.
 - B. To evaluate the severity of the condition.
 - C. To know more about the patient's gender.
 - D. To determine patient's interest in physiotherapy management.
20. Select the grade of manual muscle testing for shoulder flexor that is done in side-lying position.
- A. Grade 1.
 - B. Grade 2.
 - C. Grade 3.
 - D. Grade 4.

SECTION B: MODIFIED ESSAY QUESTIONS (Total: 60 marks)**INSTRUCTION: This section consists of FOUR (4) questions.****Answer THREE (3) questions in the answer booklet provided.****Question 1**

- (a) State **FIVE (5)** stages of compact bone healing process. (5 mark)
- (b) Describe **THREE (3)** factors that influence the duration of bone healing. (6 marks)
- (c) List **FOUR (4)** causes of joint dislocation. (4 marks)
- (d) Describe physiotherapy management for joint subluxation. (5 marks)

Question 2

- (a) List **FIVE (5)** complications of burn injury. (5 marks)
- (b) Explain the purpose of static splints to prevent contracture in burn injury. (5 marks)
- (c) List **FOUR (4)** clinical features of supraspinatus tendinitis. (4 marks)
- (d) Describe the pathophysiology of bicipital tendinitis. (6 marks)

Question 3

- (a) List **FIVE (5)** causes of tennis elbow. (5 marks)
- (b) State **FIVE (5)** clinical features of anterior cruciate ligament (ACL) injury. (5 marks)
- (c) Describe secondary metatarsalgia. (4 marks)
- (d) Explain **THREE (3)** phases of medial and lateral collateral ligament injury rehabilitation programme. (6 marks)

Question 4

- (a) State **THREE (3)** functions of special tests. (3 marks)
- (b) Describe the technique for Hawkins-Kennedy impingement test. (4 marks)
- (c) List **FOUR (4)** complications of amputation. (4 marks)
- (d) Explain physiotherapy management for amputee. (5 marks)
- (e) Give **FOUR (4)** components of pain assessment. (4 marks)

END OF EXAMINATION PAPER