



**UNIVERSITI KUALA LUMPUR
ROYAL COLLEGE OF MEDICINE PERAK**

**FINAL EXAMINATION
JULY 2025 SEMESTER**

COURSE CODE : RFD14403
COURSE NAME : PHYSIOTHERAPY IN MUSCULOSKELETAL 1
PROGRAMME NAME : DIPLOMA IN PHYSIOTHERAPY
DATE : 17 SEPTEMBER 2025
TIME : 2.00 PM - 4.00 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 9 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. Find the type of fracture that is characterized by bone fragments being jammed tightly together.
 - A. Spiral fracture.
 - B. Oblique fracture.
 - C. Impacted fracture.
 - D. Comminuted fracture.

2. Identify the stage of compact bone healing which involves the formation of a soft callus.
 - A. Haematoma.
 - B. Consolidation.
 - C. Callus formation.
 - D. Periosteal proliferation.

3. Which of the following best describes a subluxation?
 - A. Displacement due to congenital causes only.
 - B. Displacement caused exclusively by fractures.
 - C. Complete displacement of articular surfaces between bones.
 - D. Partial displacement where joint surfaces remain partially in contact.

4. Which of the following is a common cause of dislocation?
 - I. Infection
 - II. Sport injury
 - III. Vitamin D deficiency
 - IV. Congenital conditions
 - A. I and II.
 - B. I, II, and III.
 - C. I, II, and IV.
 - D. II, III, and IV.

5. Which type of skin graft is taken from another species, usually a pig?
- A. Allograft.
 - B. Autograft.
 - C. Xenograft.
 - D. Dermograft.
6. Select the classification of burn that commonly requires skin grafting for healing.
- A. Superficial burn.
 - B. Full-thickness burn.
 - C. Deep partial-thickness burn.
 - D. Superficial partial-thickness burn.
7. Which condition is characterized by compression of the median nerve at the wrist?
- A. Trigger finger.
 - B. Carpal tunnel syndrome.
 - C. Thoracic outlet syndrome.
 - D. De Quervain's tenosynovitis.
8. Find the structure that is commonly affected in De Quervain's tenosynovitis.
- A. Biceps tendon.
 - B. Supraspinatus tendon.
 - C. Extensor pollicis brevis.
 - D. Flexor digitorum profundus.
9. Identify one of the characteristics for Grade II ligament injury.
- A. No visible swelling.
 - B. Microscopic damage.
 - C. Partial tear with swelling.
 - D. Complete rupture with instability.

10. Select the condition that is characterized by pain over the anterior shoulder during resisted shoulder flexion.
- A. Trigger finger.
 - B. Bicipital tendinitis.
 - C. Lateral epicondylitis.
 - D. Carpal tunnel syndrome.
11. Find the most common site of Achilles tendinitis pain.
- A. Tibialis anterior tendon.
 - B. Mid-portion of the tendon.
 - C. At the calcaneal tuberosity.
 - D. Medial gastrocnemius belly.
12. Which of the following conditions involves inflammation of the plantar fascia at its calcaneal attachment?
- A. Shin splints.
 - B. Plantar fasciitis.
 - C. Hamstring strain.
 - D. Gastrocnemius tear.
13. What is the most often cause of quadriceps contusion.
- A. Direct trauma.
 - B. Overstretching.
 - C. Sudden twisting.
 - D. Indirect force during sprinting.
14. Identify the ligament that prevents excess knee varus stress.
- A. Medial Collateral Ligament.
 - B. Lateral Collateral Ligament.
 - C. Anterior Cruciate Ligament.
 - D. Posterior Cruciate Ligament.

15. Identify the direction of patients head in Allen's test for thoracic outlet syndrome.
- A. Upward.
 - B. Straight ahead.
 - C. Toward the test arm.
 - D. Away from the test arm.
16. Identify the positive finding of Thompson test.
- A. Pain in the lateral ankle.
 - B. Weakness in toe flexion.
 - C. Pain in the Achilles tendon.
 - D. Lack of plantar flexion on calf squeeze.
17. Which material is commonly used for the socket in a total hip replacement?
- A. Rubber.
 - B. Ceramic.
 - C. Titanium.
 - D. Fiberglass.
18. Why is arthrodesis considered when joint replacement fails?
- A. It increases joint flexibility.
 - B. It restores full joint motion.
 - C. It prevents muscle atrophy.
 - D. It permanently relieves pain by fusing the joint.
19. Identify the use of goniometer.
- A. To analyse gait pattern.
 - B. To measure muscle bulk.
 - C. To evaluate pain severity.
 - D. To measure joint range of motion.
20. What are the things to be considered to set Short-term goals for patients?
- A. Focused only on occupation.
 - B. Long-lasting and permanent.
 - C. Independent of the patient's needs.
 - D. Realistic and prioritized according to problems.

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) The following questions are in regards to fracture:
- i. Define the term fracture. (1 mark)
 - ii. State **TWO (2)** main categories of fracture based on skin involvement. (2 marks)
- (b) State **TWO (2)** aims for immobilization in fracture management. (2 marks)
- (c) List **THREE (3)** possible complications that may arise if fracture healing is delayed or impaired. (3 marks)
- (d) List **FOUR (4)** examples of soft tissue injuries of the upper limb. (4 marks)
- (e) State **FOUR (4)** clinical features of carpal tunnel syndrome (CTS). (4 marks)
- (f) List **FOUR (4)** management options for CTS. (4 marks)

Question 2

- (a) List **TWO (2)** risk factors for rotator cuff injury. (2 marks)
- (b) Name **TWO (2)** imaging investigations that can confirm this diagnosis. (2 marks)
- (c) List **FOUR (4)** causes of dislocation and subluxation. (4 marks)
- (d) List **FOUR (4)** physiotherapist rehabilitation goals after immobilization. (4 marks)
- (e) Give **TWO (2)** intrinsic factors for hamstring injury. (2 marks)
- Describe one special test for the following conditions.
- (f) i. Tennis elbow (3 marks)
- ii. Golfer's elbow (3 marks)

Question 3

- (a) "A 25-year-old male presents with burns from a scald injury affecting the right forearm and upper arm. Examination shows bright pink skin, intact blisters, moist surface, and severe pain when exposed to air. The total body surface area burned is estimated at 9%."

With reference to the above case, answer all of the following questions.

- i. Based on the features, identify the depth of the burn. (1 marks)
- ii. Why does this patient experience severe pain? (2 marks)
- iii. List **TWO (2)** complications to monitor for this patient. (2 marks)
- iv. Outline **THREE (3)** goals of physiotherapy management for this patient. (3 marks)
- (b) Define "stump" in the context of amputation. (1 marks)
- (c) List **THREE (3)** indications for amputation. (3 marks)
- (d) State **FOUR (4)** common complications following amputation. (4 marks)

Question 4

- (a) Define sprain. (2 marks)
- (b) Describe **ONE (1)** special test for the following conditions:
- i. Anterior cruciate ligament (ACL) (4 marks)
 - ii. Posterior cruciate ligament (PCL). (4 marks)
- (c) List **SIX (6)** causes of plantar fasciitis. (6 marks)
- (d) List **TWO (2)** patient particulars collected in subjective assessment. (2 marks)
- (e) List **TWO (2)** important skills required during intervention stage. (2 marks)

END OF EXAMINATION PAPER