

## Physical Rehabilitation in Traumatology and Orthopedics

### Final Exam Topics:

1. Pathophysiology of musculoskeletal disorders; acute inflammation, proliferation, remodeling/maturation phases and corresponding stages of physical rehabilitation: acute, sub-acute, functional recovery; characteristic of rehabilitation stages. RICE- therapy and principles of its implementation.
2. Functional assessment of musculoskeletal disorders.
3. Assessment of range of motion, goniometry technique in assessment of musculoskeletal disorders, limitations of range of motion.
4. Muscle assessment: strength, tone, and mass. Physiology of healing process after injury: bones, ligaments, tendons, cartilage, neural tissue and muscle.
5. Dislocation, sub-luxation, soft tissue injury, hematoma, swelling: rehabilitation management.
6. Main principles of determination of rehabilitation program in musculoskeletal disorders/injuries: examination, evaluation, diagnosis, prognosis, intervention and treatment outcome.
7. Scar formation and its rehabilitative management.
8. Main principles of physical rehabilitation after shoulder injury.
9. Physical rehabilitation in patients with rotator cuff injury/disorders.
10. Shoulder instability, treatment and physical rehabilitation.
11. Adhesive capsulitis of shoulder (“frozen shoulder”), treatment and physical rehabilitation.
12. Physical rehabilitation after shoulder joint tear/glenoid labrum tear.
13. Physical rehabilitation after injury to a biceps tendon.
14. Prevention and rehabilitation of post traumatic elbow contracture.
15. Physical rehabilitation of lateral and medial epicondylitis.
16. Physical rehabilitation after injuries to the medial collateral ligament and ulnar nerve.
17. Injury to the anterior cruciate ligament; rehabilitation strategy.
18. Knee arthrofibrosis, treatment and rehabilitation.
19. Traumatic injury to the medial and lateral collateral ligaments of knee; rehabilitation strategy.
20. Physical rehabilitation after injury to the menisci.
21. Dislocation of patella and rehabilitation management of habitual dislocation of patella.
22. Rehabilitation after ankle joint sprain.
23. Rehabilitation after Achilles tendon traumatic injury.
24. Stress fracture of the foot bones; rehabilitation management.
25. Spinal deformities: scoliosis, lordosis, kyphosis. Classification of scoliosis, diagnosis, prognosis, treatment and rehabilitation management of idiopathic scoliosis.
26. Rehabilitation management of back pain.
27. Physical rehabilitation after discectomy.

28. Physical rehabilitation in spondylolisthesis.

29. Rehabilitation program and main principles of rehabilitation management after hip and knee replacement.