

ORTHOPEDIC SURGERY

PAPER- I

Time : 3 hours
Max. Marks : 100

ORTHO/D/11/27/I

**Attempt all questions in order.
Each question carries 10 marks.**

Write short notes on:

1. Describe the pathology, clinical features and principles of treatment of a neuropathic joint. 3+3+4
2. Describe the pathophysiology of Polytrauma patient and discuss the principles of Damage Control Orthopedics. 5+5
3. Discuss the etiopathology, diagnosis, prophylaxis and treatment of D.V.T. 2+3+2+3
4. Describe the pathology, diagnosis and broad principles of management of ankylosing spondylitis. 2+5+3
5. Discuss the pathophysiology and principles of treatment of Heterotopic ossification. 5+5
6. Discuss the surgical options in the treatment of mild medial compartment osteoarthritis of knee in a 40 years old man. 10
7. a. Autonomic dysreflexia in Spinal Cord Injury. 5+5
b. Femoro-acetabular Impingement Syndrome
8. Describe the pathology of avascular necrosis of femoral head and outline the principles of management in Ficat 3 stage of femoral head in a 30 years old man. 5+5
9. a. Pigmented villonodular synovitis 5+5
b. Carpal Tunnel Syndrome
10. a. Transient migratory osteoporosis 5+5
b. Early tendon transfer in Radial Nerve Palsy

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PAPER- II

Time : 3 hours
Max. Marks : 100

ORTHO/D/11/27/II

Attempt all questions in order.
Each question carries 10 marks.

Write short notes on:

1. Define osteomyelitis. Discuss the pathology, clinical features, diagnosis and treatment of acute osteomyelitis in a child. 1+3+2+2+2
2. List the causes of limp in an 8 years old child. Describe the differentiating features of septic arthritis with transient synovitis. 4+6
3. What is Kienbock's disease? Write briefly its etiology, diagnosis, clinical staging and management. 1+2+2+2+3
4. Describe "JAIPUR FOOT". Discuss the difference with "SACH FOOT" & "MADRAS FOOT"? 6+2+2
5. a. SOMI brace 5+5
b. Interferential Therapy (IFT)
6. Define ulnar claw hand. Discuss the tendon transfer for ulnar claw hand following ulnar nerve injury. 4+6
7. a. Radial Club Hand 5+5
b. Congenital Vertical Talus
8. Describe the flexor zones of hand. Discuss the principles of acute tendon repair (zone-wise). 5+5
9. a. Renal Rickets 5+5
b. Salter's Osteotomy
10. a. Strength Duration Curve 5+5
b. Congenital Torticollis

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PAPER- III

Time : 3 hours
Max. Marks : 100

ORTHO/D/11/27/III

Attempt all questions in order.
Each question carries 10 marks.

Write short notes on:

1. Classify distal radius fractures. Describe radiological indices of wrist. Discuss the treatment principles of extra-articular distal radius fractures. 3+2+5
2. Classify infected nonunion. Discuss the treatment of infected nonunion of tibia. 3+7
3. Discuss the diagnosis and management of Anterior Cruciate Ligament (ACL) Injury. 10
4. Discuss the differences between :- 4+3+3
 - a. Machine screw and ASIF screw
 - b. DCP, LCDCP, Locking plate
 - c. Static compression and Dynamic compression
5. Classify proximal tibial fractures. Outline the management of type IV, V, and VI fractures. 4+2+2+2
6.
 - a. Fracture head of femur 5+5
 - b. Classification of Calcaneal fractures
7. Discuss the management of osteoporotic spinal fractures. 10
8. Describe the blood supply of talus. Classify "Talar neck fractures". Discuss treatment and list complications. 3+2+3+2
9. Describe the structure of physis. Classify physeal injury. Outline the treatment of physeal injury and enumerate the complications. 3+2+3+2
10. Define and classify Monteggia fracture dislocation. Discuss the treatment principles of neglected Monteggia fracture dislocation in a 10 years old child. 2+4+4

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PAPER- IV

Time : 3 hours
Max. Marks : 100

ORTHO/D/11/27/IV

Attempt all questions in order.
Each question carries 10 marks.

Write short notes on:

1. Describe the extensor mechanism of knee and the factors that predispose to recurrent dislocation of patella. 6+4
2. Draw a cross section of peripheral nerve and label the structures. Describe Sunderland's classification of nerve injury. 6+4
3. a. Plaster Cast Syndrome 5+5
b. Bone morphogenic protein
4. Describe Stress, Strain, and Young's Modulus of Elasticity in relation to Orthopedic implants. 3+3+4
5. Describe 'free vascularized bone transplant'. Discuss the principles of technique and applications in Orthopaedic practice. 4+6
6. Discuss the role of parathyroid glands in calcium metabolism. 10
7. Discuss the principles of application of Functional Cast Bracing in the management of diaphyseal fractures of long bones. 10
8. Discuss ceramics as bearing surface in Total Hip Arthroplasty. 10
9. a. Biodegradable Implants 5+5
b. Principles and applications of Interlocking Nailing
10. a. Unicameral Bone Cyst 5+5
b. Parosteal Osteosarcoma
