

DIPLOMA IN ORTHOPAEDICS (D ORTHO)

SYLLABUS

THEORY

The syllabus for D-Ortho and M.S Ortho is essentially the same but the MS trainees are more intensively trained in the management also apart from diagnosis

1. Methods of Clinical Examinations
2. Basic Sciences

- (A) Structure & functions of
 - Bone
 - Cartilage
 - Synovium
 - Muscle
 - Ligment
 - Tendon
- (B) Relevant surgical Anatomy of Axial and appendicular skeleton
Physiologic basis of functioning of skeletal system
- (C) Biochemical basis of function of Bone
- (D) Pathologic basis of Orthopaedic diseases
- (E) Pharmaco therapeutics in Orthopaedics
- (F) Microbiological basis of Orthopaedic infection
- (G) Orthopaedic implants, Metals, Corrosion, Lubrication and implant failure

3. Traumatology

Injuries of axial and appendicular skeleton and associated soft tissues, their clinical examination, radiography and modes of treatment

- General Consideration:
- Fracture healing,
 - Conservative treatment of fractures
 - Internal fixation principles
 - External fixation principles
 - Open fractures
 - Pathologic fractures
 - Bone grafting
 - Poly Trauma
 - Trauma Care
 - Individual injuries to upper limb, lower limb, spinal column, shoulder girdle and pelvis girdle in detail

4. Diagnostic Imaging in Orthopedics Radiography

MRI and CT scan
Nuclear Medicine
Ultrasonography

5. Metabolic Bones diseases
6. Endocrine disorders of Bone
7. Bone & Joint infection
8. Polimyelitis of skeletal system
9. Cerebral palsy and other spastic disorders
10. Systemic complication in Orthopaedics
 - Shock
 - Crush syndrome
 - DIC
 - Thromboembolism
 - Fat Embolism syndrome
 - Gas gangrene
 - Tetanus
11. Orthopaedic anaesthesia, regional blocks, pain management and care of critically ill patient
12. Neoplasms of Bone & Joint
13. Osteoarthritis
14. Rheumatoid arthritis
15. Disorders of synovium
16. Peripheral Nerve injuries and dysfunction
17. Biomaterials in orthopaedics
18. Ilizarov – Basic principles and principles of deformity correction
19. Arthroscopy
20. Arthroscopy
21. Hand injuries with reconstruction principles
22. Re implantation
23. Regional Orthopaedic disorders
24. Congenital anomalies
25. Paediatric Orthopaedics
26. Analysis of Gait
27. Microsurgery in Orthopaedics
28. Arthrodesis
29. Prosthetics and Orthotics
30. Amputation
31. Rehabilitation Orthopaedics
32. Disability evaluation
33. Bone substitutes
34. Recent advances in Orthopaedics

Course duration

2 years – Posting in each unit by rotation and 1 month in physical Medicine

Teaching Schedule

1. Clinical case discussion every day
2. Topic presentation – once a week
3. Journal club – once a week
4. Continuing orthopaedic education programme at least twice a year
5. Seminar once in two weeks
6. Routine ward word and preoperative evaluation
7. Performing and assisting operation under guidance of staff members
8. Casualty management under supervision
9. Outpatient and plaster room management
10. Maintenance of case records (Minimum 50)

Text Books Recommended

Prescribed Books

1. Graham Apley – System of Orthopaedics
2. Fractures and Joint injuries – Watson Jones
3. Orthopaedics – Samuel F Turck
4. Mercer Orthopaedic Surgery
5. Outline of fractures – Adam's
6. Outline of Orthopaedics – Adam's
7. Clinical Surgery – Das – Chapter on Orthopaedics
8. Crawford Adam's – Operative techniques (orthopaedics)
9. Text book of Orthopaedics and fractures GS Kulkarni

Reference Book

1. Campbell's Operative Orthopaedics
2. Tachdjian's Pediatric orthopaedics
3. AO principles of fracture management
4. Rockwood and Green Fractures in adults
5. Fractures in children
