

### III rd PROFESSIONAL - PART – II SYLLABUS

#### 4) ORTHOPAEDICS & TRAUMATOLOGY

##### i) Theory Syllabus

Sl. No.	CHAPTER	No.of Hours
1.	<b>ORTHOPAEDICS : GENERAL</b> History- Orthopaedics in India- Emblem- Deformities- Acquired deformities- Causes – Principle & management – clinical examination of an orthopaedic patient- investigations, Radiological and imaging Techniques- walk cycle – Abnormal gaits – splinting – traction Procedures – Materials – Preventive Orthopaedics – Geriatric Orthopaedics.	2
2.	<b>CONGENITAL DEFORMITIES:</b> Etiology :- Congenital talipes- equino varus- congenital dislocation hip – congenital genu recurvatum, Sprengel's – Madelung's deformity – congenital torticollis – Spina Bifida.	2
3.	<b>DEVELOPMENTAL DISORDERS OF BONES:-</b> Anatomical and physiological factors-multiple exostosis, Enchondromatosis-Chondro osteodystrophy- Osteogenesis imperfecta – Fibrous dysplasia- Neurofibromatosis – Congenital pseudarthrosis of tibia.	2
4.	<b>INFECTIONS OF BONES AND JOINTS:</b> Osteomyelitis - Acute pyogenic osteomyelitis-chronic osteomyelitis – Primary Subacute osteomyelitis Brodie's abscess-Garre's osteomyelitis, Typhoid osteomyelitis – Septic spondylitis – Brucellar osteomyelitis – mycotic infection of bone- Syphilitic infection of bone – Parasitic infection of bone. Arthritis – Acute Pyogenic arthritis – Septic arthritis of infancy – smallpox arthritis – Acute Rheumatic arthritis- Chronic arthritis- Syphilitic infection of joints – Guinea worm arthritis.	3
5.	<b>BONE AND JOINT TUBERCULOSIS:</b> Tuberculosis of the spine – Pott's paraplegia- Tuberculosis of the Hip Joint & Knee joint – tuberculosis of other joints- sacro iliac joint – Ankle – Tarsal joints – Shoulder – Elbow- Wrist; Tuberculosis osteomyelitis – Dactylitis – caries Rib- BCG Osteomyelitis – Poncet's tuberculous rheumatism.	4
6.	<b>GENERALISED DISEASES OF BONES:</b> Rickets-Osteoporosis-Parathyroid Osteodystrophy- Paget's disease-Fluorosis.	1
7.	<b>DISEASES OF JOINTS :</b> Synovial fluid- classification- ankylosing spondylitis- osteoarthritis knee-gout-haemophilic arthritis – Villonodular synovitis.	1

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8.	AVASCULAR NECROSIS OF BONE AND EPIPHYSEAL OSTEOCHONDRITIS: Definition- Pathogenesis- Clinical features- Radiological staging, Epiphyseal osteochondritis –Perthes disease- Osgoold Sch letter's disease.	1
9.	TUMORS OF BONE Osteoid osteoma-Osteoma- Osteochondroma- Aneurysmal bone cyst-osteosarcoma- Giant cell tumour – Chondroblastoma- Ewing's Sarcoma Plasmacytoma Bone metastasis.	4
10.	NEUROLOGICAL AND MUSCULAR DISORDERS : Cerebral Palsy- Types – Treatment – Anterior poliomyelitis – stages Management – Physiotherapy.	1
11.	REGIONAL CONDITIONS OF NECK AND UPPER LIMB : Spondylosis – Cervical rib – Torticollis – Pariarthrits shoulder Tennis elbow – Cubitus varus – Ganglion – De quervain's disease- Trigger finger – carpal tunnel syndrome – Depuytren's contracture.	2
12.	REGIONAL CONDITIONS OF THE SPINE AND LOWER LIMB: Spondylolithesis – Fibrositis back – Hip clinical Examination- Coxa vara – Genu valgum – Genu varum- Recurrent dislocation of patella- Plantar Fasciitis.	2
13.	PHYSICAL MEDICINE AND REHABILITATION: Definitions – Rehabilitation- Medical Rehabilitation- Physical Medicine- Massage therapy – Exercise therapy- Hydrotherapy – Electrotherapy – Short wave diathermy- Ultrasound therapy- Laser therapy – Lower limb prosthesis – Upper limb prosthesis.	5
14.	INJURIES TO BONES AND JOINTS :- GENERAL Fractures – Types of fractures – Mechanism of fracture – Biology of fracture healing – Factors which influence fracture healing- General Principles of management of fractures- Diagnosis- Conservative management – Functional Cast Bracing – Open reduction and internal fixation. Complications of Fractures.	5
15.	INJURIES OF THE SHOULDER AND ARM: SHOULDER:- Fracture clavicle – Injuries of the Acromio Clavicular joint – Dislocation of the shoulder joint –Recurrent dislocation of shoulder. The arm – fracture of the Proximal end of humerus- Fracture neck of humerus –Fracture of the shaft of the humerus.	2

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16.	<b>INJURIES OF ELBOW, FOREARM AND WRIST</b> Elbow – Supra condylar fracture – Intercondylar fracture – Fracture of the medial epicondyle-Fracture of the lateral condyle to the humerus – Dislocation of the elbow – Fractures of the head of the radius – Fractures of the neck of the radius – Fractures of the olecranon. The forearm-Fracture both bone forearm – Monteggia fracture dislocation- Galeazzi fracture dislocation. The Wrist- Colles fracture – Fracture separation of lower epiphysis of radius – Smith's fracture – Barton's fracture Fracture of Scaphoid bone – Dislocation of the Lunate bone.	3
17.	<b>INJURIES OF THE HAND :</b> Closed injuries – Fractures of Metacarpal bones – Fractures of the phalanges – Dislocation of metacarpo phalangeal joint Bennett's fracture dislocation – Open injuries- Principles of management – Tidy wounds-Crush injuries – Tendon injuries, Flexor tendon injuries- Extensor tendon injuries – Mallet finger.	1
18.	<b>INJURIES OF THE HIP AND THIGH:</b> The Hip – Dislocation of the hip joint :- Posterior dislocation – Anterior dislocation – Central dislocation – Anatomy and Vascular supply- Fracture of the neck of femur- Intracapsular fracture- Trochanteric fracture of femur. The Thigh :- Fracture shaft of the femur – Proximal third –Middle third – Distal third – Fracture femur in children.	4
19.	<b>INJURIES OF THE KNEE, LEG :-</b> The Knee :- Fracture patella The Leg :- Fracture of Tibia and Fibula.	1
20.	<b>INJURIES OF THE ANKLE AND FOOT :-</b> The Ankle – Fracture and fracture dislocation of the ankle Epiphyseal injury lower end Tibia. The foot :- Fractures of the talus- Fracture of the calcaneum- fractures of the metatarsals and phalanges.	1
21.	<b>INJURIES OF THE SPINE :</b> Dorso lumbar spine – Classification- Mechanism and Types of injuries – stable fractures with out para plegia- Fracture dislocation with paraplegia – Management of the fracture – management of paraplegia – Bed sore – Bladder care The cervical spine :- Lower Cervial spine injuries – Upper cervial spine injuries.	1

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22.	<b>FRACTURES OF THE PELVIS :</b> Fractures of the Pelvis – Mechanism – Classification- Management – Fracture of the acetabulum- Fracture of the Sacrum and Coccyx.	1
23.	<b>POLY TRAUMA</b> Poly Trauma – Incidence – Primary Survey – Glasgow coma Scale – Trauma –Resuscitation – Management.	1
24.	<b>COMPOUND FRACTURES :</b> Classification – Emergency surgical treatment – Management of Wound – management of infected open fracture – Complications of open fracture.	1
25.	<b>SOFT TISSUE INJURIES INCLUDING SPORTS INJURIES :</b> Injuries to ligaments : Cruciate ligament injuries- injuries to Semilunar cartilage.	1
26.	<b>NERVE INJURIES :</b> Pathology of nerve injury –Wallerian degeneration Regeneration – Injuries of the peripheral nerves – Classification – Mechanism of closed nerve injuries – Diagnosis of nerve lesion – clinical examination – management of nerve injuries.	2

**Recommended Books:**

- Text Book of Orthopaedics and Traumatology by Natarajan.
- Text Book of Orthopaedics by Maheswari
- Outlines of Orthopaedics by Adams.
- Outlines of Fractures by Adams.
- Clinical Orthopaedics Examination by Mc.Rae.
- Text book of Orthopaedics by Dr.C.Vyaghreswarudu.
- Text book of Orthopaedics by Graham Appley.