



Dr. D. Y. PATIL VIDYAPEETH, PUNE
(Deemed to be University)

**Syllabus for
III – MBBS
(Part - II)**

2014 - 15
(Amended / Revised upto July 2019)



Dr. D.Y. PATIL VIDYAPEETH, PUNE
(Deemed to be University)

(Re-accredited by NAAC with a CGPA of 3.62 on a four point scale at 'A' Grade)
(An ISO 9001 : 2015 Certified University)

Dr. A. N. Suryakar
Registrar

Ref. No. : DPU/875-VII/2019

Date : 11/09/2019

NOTIFICATION

Whereas in pursuance of the following decisions taken by the Board of Management, it is hereby notified to all concerned that the **"Syllabus for III M.B.B.S. Part-I and Part II-2014-15"** is revised upto July 2019 and hereby published.

- Changes in syllabus for UG and PG in General Medicine, Pulmonary Medicine and General Surgery vide **Resolution No. BM-07-(iii)-4 dated 28th January, 2014.**
- Updation in UG and PG syllabus of General Medicine, **Obstetrics & Gynecology, Orthopedics, Anaesthesiology, ENT and Ophthalmology** vide **Resolution No. BM-04(i)-15, dated 31st March, 2015.**
- Structure format for evolution of History taking for 3rd Semester in General Medicine vide **Resolution No. BM-26(v)-15, dated 29th December, 2015.**
- Replacement of the term "one line answer by one Sentence answer in the Clinical subjects" vide **Resolution No. BM-26(ix)-15, dated 29th December, 2015**
- Introduction of Bioethical aspects in various chapters of all subjects vide **Resolution No. BM-26(xi)-15, dated 29th December, 2015**
- Modifications in UG Syllabus of Psychiatry vide **Resolution No. BM-17(ix)-16, dated 22nd September, 2016.**
- Consideration of weightage to the journal marks in internal assessment of III MBBS Clinical Subjects as continuous day to day assessment vide **Resolution No. BM-05(ii)-17, dated 7th April, 2017.**
- Conduct of prelim exam of 3rd MBBS only after the end of clinical postings, vide **Resolution No. BM-38(ix)-17, dated 27th December, 2017.**
- Enhancement of UG syllabus of General Medicine subject vide **Resolution No. BM-16(x)-18, dated 21st July, 2018.**
- Conduct of P.B.L. classes in E-library in the Department of Paediatrics vide **Resolution No. BM-35(ii)-18, dated 12th October, 2018.**
- Graduate Attributes, Programme Outcomes (POs), Course Outcomes (Cos) and gap analysis for all courses of UG and PG Programmes for Para-Clinical and **Surgical Subjects** vide **Resolution No. BM-10(vii)-19 dated, 12th April, 2019.**
- Interdisciplinary subjects (for **Surgical Subjects**) of M.B.B.S, M.D./M.S. and Super-specialty (D.M./M.Ch.) Programs under the Faculty of Medicine vide **Resolution No. BM-10(viii) dated 12th April, 2019.**



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- Graduate Attributes, Programme Outcomes (POs), Course Outcomes (Cos) outcome analysis of Pos and Cos and mapping with objectives for all courses of UG and PG Programmes of Pre-Clinical and **Medicine** Subjects under the Faculty of Medicine vide **Resolution No. BM-27(x)-19 dated 30th July, 2019.**
- Interdisciplinary subjects (**for Medicine Subjects**) of M.B.B.S, M.D./M.S. and Super-specialty (D.M./M.Ch.) Programs under the Faculty of Medicine vide **Resolution No. BM-27(xi) dated 30th July, 2019.**

The “Syllabus for III M.B.B.S. Part-I and Part II– 2014-15” Revised upto July 2019 will be useful to all the concerned. This will come into force with immediate effect.




(Dr. A. N. Suryakar)
Registrar

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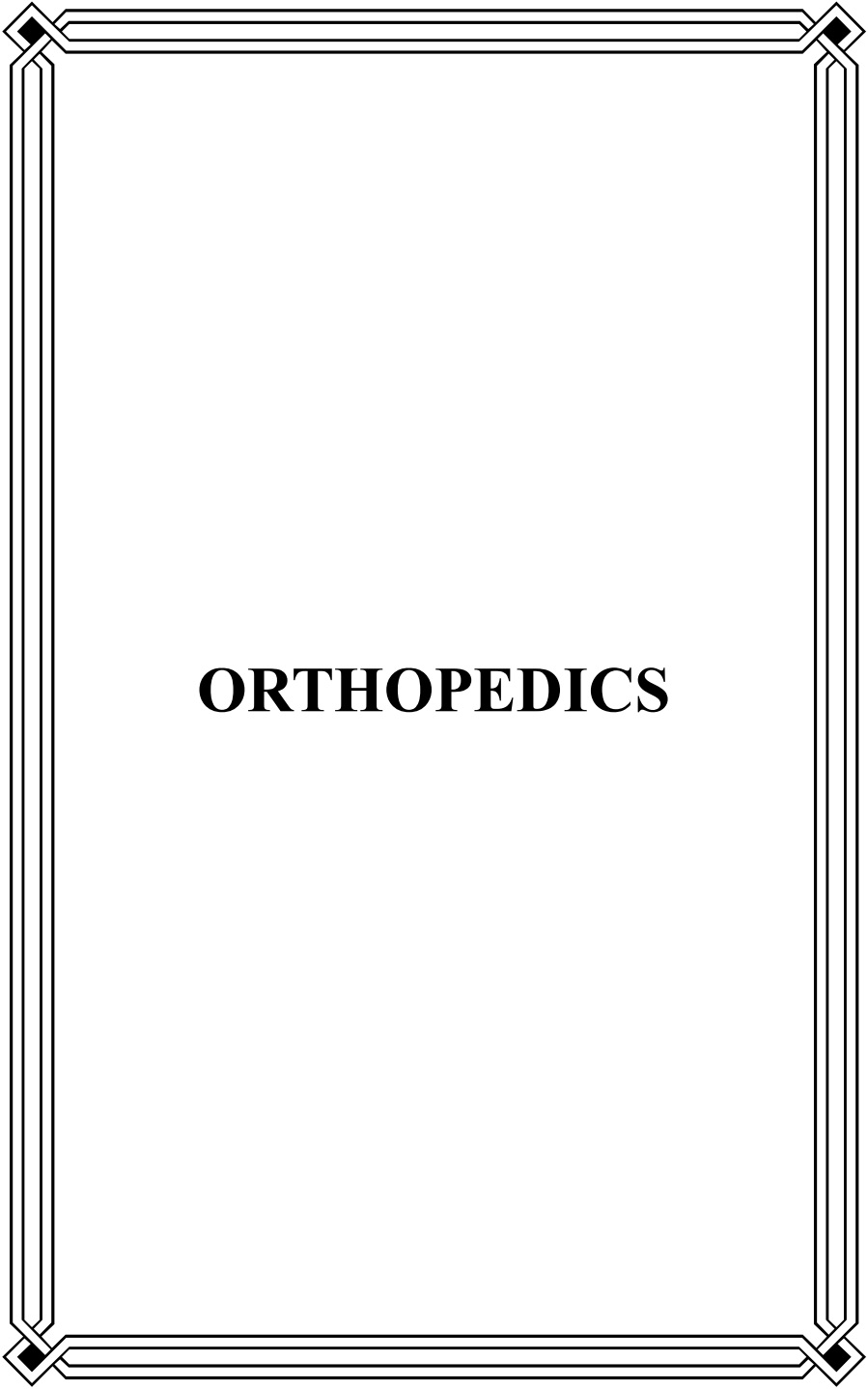
1. PS to Chancellor for kind information of Hon'ble Chancellor, Dr. D. Y. Patil Vidyapeeth, Pune.
2. PS to Vice Chancellor for kind information of Hon'ble Vice Chancellor, Dr. D. Y. Patil Vidyapeeth, Pune.
3. The Dean, Dr. D. Y. Patil Medical College Hospital & Research Centre, Pimpri, Pune
4. The Controller of Examinations, Dr. D. Y. Patil Vidyapeeth, Pune.
5. Director (IQAC), Dr. D. Y. Patil Vidyapeeth, Pune.
6. Web Master for uploading on Website.

**MAPPING OF PROGRAMME OUTCOMES [POs] AND COURSE
OUTCOMES [COs] OF MBBS PROGRAMMES**

Course Code	Course Title
MB401	General Medicine & Allied
MB402	General Surgery & Allied
MB403	Obstetrics & Gynaecology
MB404	Paediatrics

General Surgery and allied: (MB 402)		
CO No.	At the end of the course, the learner should be able to:	Mapped Programme Outcomes
402.1	Describe aetiology, pathophysiology, principles of diagnosis and management of common surgical problems including emergencies in adults and children.	PO1,PO2, PO4,PO5, PO7,PO9
402.2	Define indications and methods for fluid and electrolyte replacement therapy including blood transfusion;	PO1,PO2, PO4,PO5, PO7, PO9
402.3	Define asepsis, disinfection and sterilization and recommend judicious use of antibiotics;	PO1,PO2,PO3 ,PO4,PO5, PO6,PO7,PO9
402.4	Diagnose common surgical conditions both acute and chronic, in adult and children	PO1,PO2, PO3,PO5, PO7, PO9
402.5	Plan various laboratory tests for surgical conditions and interpret the results;	PO1,PO2, PO3,PO4, PO5,PO6,PO9
402.6	Identify and manage patients of hemorrhagic, septicæmic and other types of shock	PO1,PO2,PO4 ,PO5 ,PO9
402.7	Be able to maintain patient air-way and resuscitate any critically ill patient	PO1,PO2, PO3,PO5, PO6,PO7,PO9
402.8	Monitor patients of head, chest, spinal and abdominal injuries, both in adults and children;	PO1,PO2, PO3,PO5,PO6 ,PO7,PO9
402.9	Acquire principles of operative surgery, including pre-operative, operative and postoperative care and monitoring.	PO1,PO2, PO3,PO5, PO6, PO9
402.1	Treat open wounds including preventive measures against tetanus and gas gangrene;	PO1,PO2, PO5,PO6, PO7,PO8,PO9
402.11	Diagnose neonatal and pediatric surgical emergencies and provide sound primary care before referring the patient to secondary / tertiary centres;	PO1,PO2,PO3 ,PO5,PO6, PO7,PO9
402.12	Recognize the importance of clinical Orthopaedics & diagnose and manage majority of the conditions in clinical Orthopaedics on the basis of clinical assessment & investigations	PO1,PO2,PO3 ,PO4,PO5, PO6,PO7, PO8, PO9

General Surgery and allied: (MB 402)		
CO No.	At the end of the course, the learner should be able to:	Mapped Programme Outcomes
401.13	Carry out Bag Mask Ventilation and Basic Life Support(COLS)	PO1,PO2,PO3,PO5,PO6,PO7,PO9
401.14	At the end of the course student should know basic principles of various imaging modalities to diagnose various diseases and basic principles of recent advances	PO1,PO2,PO3,PO4,PO5,PO7,PO8,PO9



ORTHOPEDICS

ORTHOPEDICS

1. Goal:-

The student shall be able to :

1. Take relevant points in the history, clinical examination to diagnose fractures and deformities.
2. Deliver first aid measures for common fractures and sprains
3. Use techniques of splinting, plaster, immobilization
4. Diagnose congenital anomalies, skeletal deformity and metabolic bone diseases, infections of bone and joint, joint arthritis,

2. Objectives:-

5th Semester –

1. Students must be able to take relevant points in the history
2. Clinical examination to diagnose fractures and deformities.
3. Evaluations done by post term completion examinations

6th Semester –

1. Students must know the basic physiology of fracture healing, types of fractures and complication of fractures.
2. Basic principles of plaster techniques and complications.
3. Lectures on injuries of upper limb.

7th Semester –

1. Lectures on injuries of lower extremities.
2. Clinically, Student must be able to examine & diagnose common diseases of upper limb.

8th Semester –

1. Students are taught about injuries of the pelvis and spine.
2. Common congenital anomalies
3. Common arthritic conditions, neoplastic & neurological conditions like poliomyelitis, cerebral palsy etc
4. Theoretical knowledge regarding chronic & acute infection of bone and joints
5. During their clinical posting they are taught to examine various orthopedic conditions of spine.

9th Semester –

1. Tutorial & Lectures include revision of all orthopaedic conditions and diseases.
2. In Clinical posting, they are trained to examination various orthopaedic conditions involving bones and joints by taking history, clinical examination and relevant investigations
3. Evaluation done by post-term completion examination.

3. Integration:-

1. Lectures for 6, 7, 8, 9 semesters
2. Revision lectures for 9 semester
3. **Tutorials for 8, 9 semesters**
4. Bed side for clinics for 5,6,7,8,9 semester followed by term end exam

4. Learning Methods:-

Lectures, Tutorials bedside clinics

Distribution of Teaching hours-

- ☐ Lectures – 50 hours
- ☐ Tutorials and revision – 50
- ☐ Clinical postings in Orthopaedics

Total clinical Posting of 07 weeks of 153 hours

5th Semester – 2 weeks

6th Semester – 2 weeks

9th Semester – 3 weeks

Course contents and suggested lecture program of Orthopaedics (Total 100 hours)

This is suggested programme and can vary at institute

Total 100 hours of teaching has to be done in Orthopaedics including Tutorials

Details of syllabus is given separately below after distribution as per semester

- *6th Semester Lectures* 1 to 16
- *7th Semester Lectures* 17 to 31
- *8th Semester Lectures 1* 32 to 46
- *8th Semester Lectures 2* 47 to 61
- *9th Semester Revision Lect.* 62 to 72
- *8th Semester Tutorial* 73 to 93
- *9th Semester Tutorial* 94 to 117

5. Syllabus:-

TOPIC: GENERAL ORTHOPAEDICS

Lectures

1. Introduction and scope of Orthopaedics Traumatology and Orthopaedic Diseases. Idea about Scheme of Examination.
2. Definition and Classification of Fracture and Dislocation Signs, Symptoms and diagnosis of sprain, contusion fracture and dislocation.
3. First aid measures in Poly-trauma patient, spinal cord injury patient and knowledge about various splints.
4. Principles of Management of sprain Fracture and Dislocation with emphasis on various aspects of closed reduction, immobilization including internal fixation and rehabilitation.
5. Complications of fracture and its management with specific reference to malunion Delayed union, Non-union, Myositis Ossificans, Sudeck's dystrophy, Volkman's ischaemia, Avascular Necrosis, Fat embolism, secondary Osteoarthritis and injury to Muscles, Tendon, Nerve and Blood vessels
6. Plaster technique, plaster complications and plaster disease
7. Fracture Healing in cortical and cancellous bones and factors affecting fracture healing.

TOPIC: ORTHOPAEDIC TRAUMATOLOGY

1. Fracture clavicle, scapula, neck humerus and shaft humerus.
2. Supracondylar fracture humerus with complications
3. Fracture Forearm bones, Monteggia and Galeazzi fracture dislocations, fracture olecranon head and neck radius.
4. Fractures scaphoid, Metacarpals and phalanges
5. Colles fracture and Complications.
6. Dislocation (Acute and Recurrent) of shoulder and elbow
7. Fracture of Vertebrae with complications
8. Fracture of Pelvis with complications

9. Fracture shaft femur and fractures around knee
10. Fracture neck femur and trochanteric fracture.
11. Meniscus and ligaments injury at knee
12. Fracture Tibia-fibula, fracture of tarsals, metatarsals and phalanges.
13. Fracture dislocation around ankle.
14. Dislocation of Hip, knee, ankle, tarsals and small bones in foot

TOPIC: ORTHOPAEDIC DISEASES

1. Congenital skeletal anomalies with emphasis on congenital Talipes Equino varus (CTEV)
2. Congenital dislocation of hip (CDH), Osteogenesis Imperfecta spina Bifida and Torticollis
3. Osteochondritis - various types
4. Post Polio Residual Palsy with stress on preventive and rehabilitation aspect.
5. Acute Osteomyelitis.
6. Chronic Osteomyelitis
7. Pyogenic arthritis of Hip, knee
8. Osteo-articular Tuberculosis with special reference to tuberculosis with special reference to Tuberculosis of Hip, knee and elbow :
9. Tuberculosis spine and paraplegia
10. Fungal infections and leprosy in Orthopaedics
11. Cerebral palsy, Diagnosis and rehabilitation
12. Rheumatoid arthritis
13. Degenerative arthritis.
14. Nerve injuries and principles of management
15. Amputation and Disarticulation – Indications methods and complications.
16. Metabolic bone disease : Rickets, Osteomalacia and Osteoporosis.

17. Tumours of bones and its classification, Benign :- osteochondroma, Giant cell tumour Unicameral Bone cyst, Aneurysmal cyst, Aneurysmal cyst.
 19. Malignant – Osteogenic sarcoma, Ewing's tumour, Fibrosarcoma, Chondrosarcoma, Multiple Myeloma, Secondaries from Primary Carcinoma (Metastatic tumours)
 20. Back ache
 21. Frozen shoulder, Tennis Elbow, Dequervain's disease, Dupuytren's Contracture, Osgood – Schlatter's disease, planter fascitis.
- 6. Lectures, Tutorials (Total Number, Topics) In Each Semester:-**

6th Semester Lectures

Topic	Lesson Plan
Basic of fractures Polytrauma	a) Introduction b) Local examination c) Classification d) Diagnosis a) Defination b) management
Principles of fracture management .	a) Conservative b) Operative
Stages of fracture healding	a) Cortical bonehealing b) Cancellous bone healing
Complications of fractures	a) Immediate b) Early c) late
Injuries to nerves, tendons muscles ligaments	Injuries to nerves, tendons, muscles ligaments
Plaster technique, plaster complications and plaster diseases	Plaster technique ,plaster complications and plaster disease
Fractures of carpels, metacarpels, phalanges	a) classification b) treatment
Fracture of both bones forearm Monteggia and galleazzi fracture Diseases	a) signs symptoms b) treatement
Injuries around the elbow	a) Dislocations elbow b) Fracture olecrenon a) Classification b) Signs and symptoms c) Treatement c) Fracture radial head d) Classification e) Signs and symptoms f) Treatement
Fractures of the distel humerus	a) Supra condylar fractures of the humerus a) Classification b) Signs and symptoms c) Closed treatement d) Operative treatement e) Complications b) Condylar fractures

Fractures of clavical and Acromioclavicular joint	a) Closed treatement b) Operative treatment
Fractures of proximal humerus and shaft	a) Classification b) Signs and symptoms c) Treatement
Dislocation Shoulder	d) Classification e) Signs and symptoms f) Treatement
Fractures of the foot	1. Fracture talus and calcaneum a) Classification b) Signs and symptoms c) Treatement 2. Metatarsal and phalanx fractures
Ankle Fractures	a) Classification b) Signs and symptoms c) Radiological features d) treatment
Fractures of the tibial shaft and fibula Fractures of the proximal tibia	a) classification b) signs and symptoms c) treatement a) classification b) signs and symptoms c) treatement
Fractures of patella	a) classification b) signs and symptoms c) treatment

7th Semester Lectures

Topic	Lesson Plan
Fracture olecranon a) Classification b) Signs and symptoms c) Treatment d) Operative Treatment e) Complication	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Ankle fractures a) Classification b) Signs and symptoms investigation c) Closed treatment d) Operative treatment e) Complication	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Fracture radial head a) Classification b) Signs and symptoms c) Treatment	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Fractures of the tibial shaft and fibula a) Classification b) Signs and symptoms investigation c) Closed treatment d) Operative treatment e) Complication	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Dislocations elbow	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Fractures of patella a) Classification b) Signs and symptoms investigation c) Closed treatment d) Operative treatment e) Complication	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Supracondylar fractures of the humerus a) Classification b) Signs and symptoms investigation	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work

Topic	Lesson Plan
c) Closed treatment d) Operative treatment e) Complication	
Fractures of the proximal tibia a) Classification b) Signs and symptoms investigation c) Closed treatment d) Operative treatment e) Complication	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Fractures of the clavicle a) Classification b) Signs and symptoms investigation c) Closed treatment d) Operative treatment e) Complication	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Supracondylar fractures of femur a) Classification b) Signs and symptoms investigation c) Closed treatment d) Operative treatment e) Complication	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Fractures proximal humerus and shaft a) Classification b) Signs and symptoms investigation c) Closed treatment d) Operative treatment e) Complication	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Fractures of the femoral shaft a) Classification b) Signs and symptoms investigation c) Closed treatment d) Operative treatment	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work

Topic	Lesson Plan
e) Complication	
Dislocation shoulder f) Classification g) Signs and symptoms investigation h) Closed treatment i) Operative treatment j) Complication	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Injuries of the acromioclavicular joint	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Fractures talus and calcaneum a) Classification b) Signs and symptoms investigation c) Closed treatment d) Operative treatment e) Complication	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work
Metatarsal and phalanx fractures	Aim is to achieve early diagnosis to institute early proper treatment & rehabilitation for full functionally recovery & early return to work

8th Semester Lectures (01)

Topic	Lesson Plan
Supracondylar Fractures of the Femur.	1) Classification 2) Signs and symptoms 3) Treatment
Fractures of the femoral shaft.	a) Classification b) Signs and symptoms c) Treatment
Inter Trochanteric fracture.	a) Classification b) Signs and symptoms c) Radiological features d) Treatment
Sub Trochanteric Fracture.	a) Classification b) Signs and symptoms c) Radiological features d) Treatment
Fracture Neck Femur.	a) Classification b) Signs and symptoms c) Radiological features d) Treatment
Dislocation of hip joint	a) Classification b) Signs and symptoms c) Radiological features d) Treatment
<i>Acetabular fracture fracture Pelvis</i>	<i>a) Anatomy b) Classification according to mode of injuries c) Signs and symptoms with associated injuries d) Radiological features e) Treatment f) Complication</i>

<i>Injuries to the spine</i>	a) <i>Anatomy</i> b) <i>Classification</i> c) <i>Signs & symptoms</i> d) <i>Treatment & Complication</i>
<i>Fracture s Pelvis</i>	a) <i>Classification</i> b) <i>Signs of Symptoms</i> c) <i>Radiological features</i> d) <i>Treatment & Complication</i>
<i>Introduction of peripheral nerve injury</i>	a) <i>Anatomy</i> b) <i>Types classification of Nerve injuries (Sedden-Sunderland Classification)</i> c) <i>Signs & Symptoms</i> d) <i>Nerve Conduction Studies</i> i) <i>EMG</i> ii) <i>NCV</i> e) <i>Treatment and Complications</i>
<i>Brachial Plexus injury</i>	a) <i>Anatomy – Classification / Types of Injuries</i> b) <i>Signs and Symptoms</i> c) <i>Treatment</i>
Peripheral nerve injury cont...	a) Ulnar nerve b) Median nerve c) Radial nerve d) Lateral popliteal nerve e) Sciatic nerve
Amputation.	a) Defination b) Types and level c) Complications d) Rehabilitation
Osteomyelitis	a) Defination b) Types c) Clinical and radiological features d) treatment
Septic arthritis	a) Clinical Features b) Investigations c) Treatment

Tuberculosis of joint	a) Hip joint b) Knee joint c) Shoulder joint d) Treatment
Tuberculosis of spine	a) Clinical Features b) Investigations c) Treatment
Regional examination of foot and ankle	a) History b) General examination c) Inspection d) Palpation
Regional examination of knee	a) History b) General examination c) Inspection d) Palpation
Regional examination of hip	a) History b) General examination c) Inspection d) Palpation

8th Semester Lectures (2)

Topic	Lesson Plan
Congenital anomalies	a) CTEV b) CVT c) Osteogenesis imperfect d) Spine bifida e) Torticollis f) Scoliosis g) Kyphosis h) Sprengel's shoulder
Metabolic disorders	a) Scurvy b) Osteomalacia c) Osteoporosis d) Rickets
Bones tumors	a) Introduction b) Clinical features c) Classification d) Presentation e) Investigation f) Treatment
Benign tumors	a) Defination b) Classification

Topic	Lesson Plan
	c) <i>Signs & symptoms</i> d) <i>Diagnosis</i> e) <i>Treatment</i>
Malignant and metastatic tumors	a) <i>Defination</i> b) <i>Classification</i> c) <i>Signs & symptoms</i> d) <i>Diagnosis</i> e) <i>Treatment</i>
Arthritis	a) Osteoarthritis b) Rheumatoid arthritis c) Crystal arthritis d) Alkeptonuric arthritis e) Haemophilic arthritis
Arthritis	a) Osteoarthritis b) Rheumatoid arthritis c) Crystal arthritis d) Malkeptonuric arthritis e) Haemophilic arthritis
Miscellaneous topic	a) Dequervien's disease b) Dupuyterens contracture c) Frozen shoulder d) Ossgood schlatter's disease e) OCD f) Plantar fasciitis g) Tennis elbow
Miscellaneous topic	a) Dequervien's disease b) Dupuyterens contracture c) Frozen shoulder d) Ossgood schlatter's disease e) OCD f) Plantar fasciitis g) Tennis elbow
Polimyelitis	a) <i>Defination</i> b) <i>Classification/ Types</i> c) <i>Symptoms & Signs</i> d) <i>Investigation</i> e) <i>Treatment</i>
Cerebral palsy	a) Types b) Medical Management c) Surgical Management

Topic	Lesson Plan
Leprosy and Fungal infection	a) Clinical features b) Investigations c) Treatment
Examination of upper limb-hand ,wrist and forearm	a) History taking b) General examination c) Inspection d) palpation
Examination of shoulder joint and elbow joint	a) History taking b) General examination c) Inspection d) palpation
Regional examination of spine	a) History taking b) General examination c) Inspection d) palpation

9th Semester Revision Lectures

Topic	Lesson Plan
Fractures around wrist & hand	1) Fracture of Phalanx and metacarpal 2) Bennett's Fracture Dislocation, Rolando Fracture, Kaplan dislocation, Fracture of Scaphoid, dislocation of lunate 3) Colles Fracture, smith fracture, barton Fracture dislocation
Complication of fracture dislocation end radius	1) Carpel tunnel Syndrome , 2) Sudeck's osteodyystrophy
Fractures of fracture dislocation end radius	3) Galeazzi Fracture Dislocation 4) Monteggia fracture Dislocation 5) Supracondylar fracture Humerus 6) Lateral condylar fracture 7) Olecranon Fracture 8) Radial head Fracture 9) Dislocation of elbow
Complication of Supracondylar fracture of humerus	1) Cubitus varus 2) Myositis ossification 3) Volkmann's ischaemic contracture

Topic	Lesson Plan
	4) Acromio clavicular joint dislocation
Fractures around shoulder joint	1) Proximal humerus 2) Dislocation Of Shoulder 3) Fracture Of clavicle 4) Acromio clavicular joint dislocation
Fractures around Hip	1) Dislocation of Hip 2) Fracture Neck Femur
Fracture Of Spine	1) Fracture of Cervical Spine 2) Fracture of Dorsolumbar spine
Case presentation	Tumors of Bones
Fractures of femur around knee	1) Fracture femur 2) Fracture of surfaces around knee
Fractures of Tibia	Fractures of Tibia
Fractures around ankle & foot	1) Bimalleolar fracture, ankle dislocation 2) Fracture & Dislocation of foot

8th Semester Tutorial

Topic	Lesson Plan
Tuberculosis (Seminar)	<i>a) Introduction Bone TB b) Common Sites of Bone TB c) Classification</i>
Case taking general	<i>a) Basic Data Collection b) Chief Complaint c) Present History d) Personal History e) Family History</i>
Tuberculosis (Seminar)	<i>a) Investigation b) Management of Complications</i>
First aid and advance trauma Life saving (ATLS) measures (Seminar)	<i>a) Introduction b) Primary Survey A- Airway B- Breathing C- Circulation D- Disability E- Exposure c) Secondary Survey d) Technically Survey e) History of ATLS</i>

X-rays of Lower limb, trauma, infection	a) <i>Pelvic Fractures</i> b) <i>Femur/Tibia Fibula/Patella Fracture</i> c) <i>Ankle /Plafond Fractures</i> d) <i>Foot Fractures</i> e) <i>Osteomyelities in Proximal Tibia</i>
Bone tumors (Seminar)	a) <i>Defination</i> b) <i>Classification</i> - <i>Benign</i> - <i>Malignant</i> c) <i>Signs and Symptoms</i> d) <i>Treatment</i> - <i>Non Surgical</i> - <i>Surgical</i>
Examination – implants	a) <i>Intramedulary Nails</i> b) <i>DHS</i> c) <i>Screw-Types</i> d) <i>Dynamic compression plates / LC-DCP</i> e) <i>K-wire</i>
Case taking general	a) <i>Basic Data Collection</i> b) <i>Chief Complaint</i> c) <i>Present History</i> d) <i>Personal History</i> e) <i>Family History</i>
Case taking diseases	<i>Shorts</i> a) <i>Arthritis</i> b) <i>Infection</i> c) <i>Deformities</i> - <i>Congenital</i> - <i>Acquired</i>
X-rays of upper limb, trauma, infection	a) <i>Shoulder girdle fractures</i> b) <i>Humerus / Elbow / Forearm Fractures</i> c) <i>Wrist and Hand Fractures</i> d) <i>Osteomyelitis in Long Bones</i>
X-rays, specimen of tumors	a) <i>GCT (Giant Cell Tumors)</i> b) <i>Enchondrama</i> c) <i>Osteochandrama – Osteosarcoma</i> d) <i>Ewing's Sarcoma</i>

X-rays & disease of spine and pelvis	a) Spine - Traumatic fractures - TB Spine (Infection) - Tumors b) Pelvis - Traumatic fractures - AVN Perthes
Osteomyelitis (Seminar)	a) Overview / Defination b) Classification/ Types c) Signs & Symptoms d) Investigation e) Treatment - Nonsurgical - Surgical f) Complication
X-rays disease of upper limb	a) Trauma/Fractures b) Tumors c) Infection/Osteomyelitis d) Primary & Secondary Arthritis
Exam of Ortho case presentation	Joints a) Inspection b) Palpation c) Range of Movements d) Special Test's
Examination – specimen	a) GCT (Giant Cell Tumors) b) Enchondroma c) Osteochondroma – Osteosarcoma d) Ewing's Sarcoma
Examination - Orthosis	a) Defination b) Ankle foot Orthosis (lower limb) c) Knee Orthosis d) Wrist / Elbow Orthosis (Upper Limb) e) Finger Orthosis
Case taking trauma	a) Basic Data Collection b) Chief Complaint c) Present History d) Personal History e) Family History

X-rays & disease of upper limb	a) Trauma / Fractures b) Tumors c) Infection / Osteomyelitis d) Primary and Secondary Arthritis
X-rays & disease of spine and pelvis	a) Spine - Traumatic fractures - TB Spine (Infection) - Tumors b) Pelvis - Traumatic fractures - AVN Perthes
Examination – specimen	a) GCT (Giant Cell Tumors) b) Enchondroma c) Osteochondroma – Osteosarcoma d) Ewing's Sarcoma

9th Semester Tutorial

Topic	Lesson Plan
X-rays & disease of upper limb	a) Trauma / Fractures b) Tumors c) Infection / Osteomyelitis d) Primary & Secondary Arthritis
X-rays & disease of lower limb	a) Pelvic Fractures b) Femur / Tibia Fibula / Patella Fracture c) Ankle / Plafond Fractures d) Foot Fractures e) Osteomyelitis in Proximal Tibia
X-rays & disease of spine and pelvis	a) Spine - Traumatic fractures - TB Spine (Infection) - Tumors b) Pelvis - Traumatic fractures - AVN Perthes
X-rays of tumors	a) GCT (Giant Cell Tumors) b) Enchondroma c) Osteochondroma – Osteosarcoma d) Ewing's Sarcoma

X-Ray of Infection	a) <i>Osteomyelitis</i> b) <i>TB- Spine</i> c) <i>TB Joints – Hip/Knee</i>
Examination Speciman	a) <i>GCT (Giant Cell Tumors)</i> b) <i>Enchondroma</i> c) <i>Osteochondroma – Osteosarcoma</i> d) <i>Ewing's Sarcoma</i>
Examination – Implants	a) <i>Intramedullary Nails</i> b) <i>DHS</i> c) <i>Screw-Types</i> d) <i>Dynamic compression plates/ LC-DCP</i> <i>K-wire</i>
Orthotics –Lower Limb	a) <i>Ankle Foot Orthosis</i> b) <i>Knee Orthosis</i>
Orthotics –Upper Limb	a) <i>Wrist Orthosis</i> b) <i>Hand Orthosis</i> c) <i>Finger Orthosis</i>
Elbow of Examination	a) <i>Inspection</i> b) <i>Palpation</i> c) <i>Range of Movements</i> d) <i>Special Test's</i>
Hip of Examination	a) <i>Inspection</i> b) <i>Palpation</i> c) <i>Range of Movements</i> d) <i>Special Test's</i>
Knee of Examination	a) <i>Inspection</i> b) <i>Palpation</i> c) <i>Range of Movements</i> d) <i>Special Test's</i>
Spine of Examination	a) <i>Inspection</i> b) <i>Palpation</i> c) <i>Range of Movements</i> d) <i>Special Test's</i>
Shoulder of Examination	e) <i>Inspection</i> f) <i>Palpation</i> g) <i>Range of Movements</i> h) <i>Special Test's</i>
Foot & Ankle (Anatomy , Biomechanics & Clinical examination)	a) <i>Anatomy</i> b) <i>Biomechanics</i> c) <i>Clinical Examination</i>

	- <i>Inspection</i> - <i>Palpation</i> - <i>Range of Movements</i> - <i>Special Test's</i>
Hand & wrist (deformity congenital, post-traumatic, post-infectious, recent advances, tumors)	Deformity - <i>Congenital</i> - <i>Post Traumatic</i> - <i>Post Infection</i> Recent advances Tumors
Splints commonly used in orthopaedics	Foot Drop Splints Wrist Drop Splint Thumb Abduction Splints Wrist Splint Cock up Splint Hand Splints /Mallatle Finger Splint
Role of mri, ct and usg in orthopaedics	MRI a) <i>Spine</i> b) <i>Joints</i> c) <i>Tumors</i> CT a) <i>Intraarticular Fractures</i> b) <i>Uses</i> USG a) <i>Principles of USG in Orthopaedics</i> b) <i>Shoulder Rotator Cuff Injuries</i> c) <i>Soft tissue swellings</i>
Back Pain – cause, Investigation & diagnosis	Back pain Management a) <i>Causes of Types of Back Pain</i> b) <i>Symptoms</i> c) <i>Investigations</i> d) <i>Treatment</i> - <i>Non surgical</i> - <i>Surgical Management</i>
Management of back pain	Back pain Management e) <i>Causes of Types of Back Pain</i> f) <i>Symptoms</i> g) <i>Investigations</i> h) <i>Treatment</i> - <i>Non surgical</i>

	- Surgical Management
AVN	a) Defination b) Signs & Symptoms c) Classification d) Aaetiopathogeneses e) Diagnosis f) Treatment
Perthe's disease	a) Defination b) Signs & Symptoms c) Classification d) Aaetiopathogeneses e) Diagnosis f) Treatment
Polio	a) Defination b) Classification/ Types c) Symptoms & Signs d) Investigation e) Treatment
CP	a) Types b) Medical Management c) Surgical Management

7. Evaluation Methods –

- 7.1 Internal assessment: Total **40 Marks** (Practical **40 Marks**)
- 7.2 Internal Assessment in Practical **40 Marks**

8. Pattern of final Examination

One line Answer Question	1x5=05 Marks
Short notes	4x2=08 Marks
Long Question	1x9=09 Marks

9. Books Recommended

9.1 Text books:

1. Essential orthopedics - J Maheshwari
2. Textbook Of Orthopedics With Clinical Examination Methods In Orthopedics – John ebnezar
3. Textbook of surgery – S. Das

9.2 Reference Books:

4. Campbell operative orthopedics
5. Rock wood & Green Trauma,
6. Tureks Orthopedics ,
7. Macray Clinical examination