

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0124)

JANUARY 2024

Sub. Code: 1981

M.Ch. – PAEDIATRIC ORTHOPAEDICS

PAPER I – BASIC SCIENCE

Q.P. Code: 181981

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe in detail the types of stages of fracture healing and the effects of medications on fracture healing.
2. Describe the clinical features, radiological manifestations and treatment of the various types of Mucopolysaccharidosis.

II. Write notes on:

(10 x 7 = 70)

1. Sprengel deformity.
2. McCune – Albright syndrome.
3. Injury grading systems for peripheral nerve injury.
4. Anti-resorptive drugs in osteoporosis.
5. Diagnostic criteria for achondroplasia.
6. Longitudinal limb deficiencies.
7. Pathogenesis of syndactyly.
8. Osteopetrosis.
9. Vascular Endothelial Growth Factor (VEGF).
10. Calcitriol.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0225)

FEBRUARY 2025

Sub. Code: 1981

M.Ch. – PAEDIATRIC ORTHOPAEDICS

PAPER I – BASIC SCIENCES

Q.P. Code: 181981

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the clinical features, symptoms, biochemical findings and treatment of Vitamin D deficiency nutritional Rickets.
2. Discuss the prevention, diagnosis and management of Paediatric ACL injuries.

II. Write notes on:

(10 x 7 = 70)

1. Garre's osteomyelitis.
2. Spondylolisthesis in children.
3. Ethambutol.
4. Fat embolism syndrome.
5. Femoral neck stress fractures.
6. Talo-calcaneal coalition.
7. Foot and ankle abnormalities in fibular hemimelia.
8. Acute phase reactants in septic arthritis.
9. Intoeing gait.
10. Dual energy X-ray absorptiometry.

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

(MCH 0126)

JANUARY 2026

Sub. Code: 1981

M.Ch. – PAEDIATRIC ORTHOPAEDICS

PAPER I – BASIC SCIENCES

Q.P. Code: 181981

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Classification of physeal injuries and their Sequelae and write a note on its Anatomy.
2. Anatomical factors associated with Slipped capital femoral epiphysis. Describe the Modified Dunn osteotomy, indications, approach, risks and benefits in SCFE.

II. Write notes on:

(10 x 7 = 70)

1. Brown tumours.
2. Tranexamic acid and its use in paediatric orthopaedic surgery.
3. Measurement of bone mineral density in children.
4. Trochlear dysplasia.
5. Femoral acetabular impingement.
6. Brodies abscess.
7. Tarsal coalitions.
8. Caffey's disease.
9. Calcipenic rickets.
10. Lateral discoid meniscus.
