

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

(D.ORTHO 0524)

MAY 2024

Sub. Code: 4004

DIPLOMA IN ORTHOPAEDICS (D. ORTHO) EXAMINATION

PAPER I - BASIC SCIENCES AS APPLIED TO ORTHOPAEDICS

Q.P. Code: 354004

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Broadly classify various types of joints. Describe the structure and functions of typical synovial joint.
2. Classify osteoporosis. Pharmacological treatment and Clinical approach in management of postmenopausal osteoporosis.

II. Write notes on:

(10 x 7 = 70)

1. Deep vein thrombosis.
2. Neoadjuvant chemotherapy in Osteosarcoma.
3. Synthetic bone graft.
4. Mucopolysaccharidosis.
5. Antibiotics in musculoskeletal infection.
6. Bursa around knee joint.
7. Achilles tendon disorders.
8. Platelet Rich Plasma.
9. Scarpa triangle.
10. Acute phase reactants in fracture healing.

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

(D. ORTHO 1224)

**DECEMBER 2024
(OCTOBER 2024 EXAM SESSION)**

Sub. Code: 4004

DIPLOMA IN ORTHOPAEDICS (D. ORTHO) EXAMINATION

PAPER I - BASIC SCIENCES AS APPLIED TO ORTHOPAEDICS

Q.P. Code: 354004

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the pathophysiology of rheumatoid arthritis and discuss the recent advancement in medical and surgical management of rheumatoid arthritis.
2. Describe the anatomy of the acetabulum. Briefly discuss about the surgical approaches for fixation of acetabular fractures.

II. Write notes on:

(10 x 7 = 70)

1. Drugs for methicillin resistant staphylococcus aureus.
2. Principle of Bone biopsy in malignant tumour.
3. Smith Peterson approach for hip.
4. Tumour necrosis factor alpha inhibitors.
5. Anatomy of distal femur in relevance to orthopaedics.
6. Golden hour management of pelvic injury.
7. Protocol for prevention of post operative infection.
8. Pathogenesis of acute osteomyelitis and its complications.
9. Nerve conduction test.
10. Bone markers in osteoporosis.

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

(D. ORTHO 1025]

OCTOBER 2025

Sub. Code: 4004

DIPLOMA IN ORTHOPAEDICS (D. ORTHO) EXAMINATION

PAPER I - BASIC SCIENCES AS APPLIED TO ORTHOPAEDICS

Q.P. Code: 354004

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe about the microscopic structure of growth plate. Mention the various types of epiphysis. Add a note on injuries and deformities after epiphyseal injuries.
2. Enumerate in detail about the types of shock. Give a brief on stages of shock and describe about the management of hypovolemic shock following pelvic injury.

II. Write notes on:

(10 x 7 = 70)

1. Tensor fascia lata.
2. Synovial fluid analysis.
3. Radioulnar synostosis.
4. Femoral anteversion.
5. Gene Xpert assay.
6. Bone Bank.
7. Vitamin D.
8. Antitubercular Treatment in bony tuberculosis.
9. Alkaline Phosphatase.
10. Anatomy of spinal nerve and nerve injuries.
