

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

[MS 0723]

**JULY 2023**  
**(MAY 2023 EXAM SESSION)**

**Sub. Code: 2219**

**M.S. DEGREE EXAMINATION**  
**BRANCH II – ORTHOPAEDIC SURGERY**  
**PAPER I – APPLIED BASIC SCIENCES IN ORTHOPAEDIC SURGERY**

*Q.P. Code: 222219*

**Time: Three Hours**

**Maximum: 100 Marks**

**Write notes on:**

**I. ANATOMY** **(4 x 5 = 20)**

1. Shoulder stability.
2. Physis.
3. Anatomy of palmar fascia.
4. Antigravity Muscles.

**II. PHYSIOLOGY** **(4 x 5 = 20)**

1. Physiology of bone mineralization.
2. Normal myelo proliferation and myelo proliferation disorder.
3. Physiology and mechanism of neuropathic ankle joint.
4. Biological reaction in wear debris and host cell after joint replacement.

**III. BIOCHEMISTRY** **(3 x 5 = 15)**

1. T cell based assay for extra pulmonary TB.
2. Hypercalcemia.
3. Serum Creatine kinase.

**IV. PHARMACOLOGY** **(3 x 5 = 15)**

1. Antibiotics in septic arthritis.
2. Zoledronic acid.
3. Tolperisone.

**V. PATHOLOGY** **(3 x 5 = 15)**

1. Tumour Necrosis.
2. Post traumatic osteolysis.
3. Autosomal recessive muscular dystrophies.

**VI. MICROBIOLOGY** **(3 x 5 = 15)**

1. Sterilization of endoscopic instruments.
2. MRSA.
3. Pathogenesis of osteomyelitis in children.

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