

**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. Posterior interosseous nerve.
2. Short external rotators of Hip.
3. Blood supply of Talus.
4. Posterior cruciate ligament.

**II. Physiology**

**(4 x 5 = 20)**

1. Superficial and Deep reflexes.
2. Lactic acidosis in trauma.
3. Vit-D and calcium metabolism.
4. Bone morphogenic proteins.

**III. Biochemistry**

**(3 x 5 = 15)**

1. Synovial fluid analysis.
2. Serum electrophoresis.
3. Diseases of defective collagen synthesis.

**IV. Pharmacology**

**(3 x 5 = 15)**

1. Bisphosphonates in Orthopaedics.
2. Chemotherapy in Osteosarcoma.
3. DVT- Prophylaxis and management.

**V. Microbiology**

**(3 x 5 = 15)**

1. Recent advances in tuberculosis diagnosis.
2. Gas gangrene.
3. Colour coding of biomedical waste.

**VI. Pathology**

**(3 x 5 = 15)**

1. Virchow's triad.
2. Cold abscess.
3. Fluorosis.

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