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

[MS 1022] OCTOBER 2022 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:

 $I. ANATOMY (4 \times 5 = 20)$

- 1. Brachial Plexus.
- 2. Arches of Foot.
- 3. Draw the Cross-Section of Spinal Cord and Mention the functions of the Ascending and Descending Tracts.
- 4. Periosteum.

II. PHYSIOLOGY $(4 \times 5 = 20)$

- 1. Structure and Functions of Bone Cells.
- 2. Neuromuscular Junction.
- 3. Coagulation Pathway.
- 4. Synovial Fluid.

III. BIOCHEMISTRY $(3 \times 5 = 15)$

- 1. Collagen.
- 2. Fluorine.
- 3. Serum Electrophoresis.

IV. PHARMACOLOGY $(3 \times 5 = 15)$

- 1. Low-molecular-weight heparins (LMWHs).
- 2. Bisphosphonates.
- 3. Rifampicin.

V. MICROBIOLOGY $(3 \times 5 = 15)$

- 1. Antibiotic resistance.
- 2. Clostridium Welchii.
- 3. Reverse Transcriptase Polymerase Chain Reaction.

VI. PATHOLOGY (3 x 5 = 15)

- 1. F.N.A.C Fine Needle Aspiration Cytology.
- 2. Tubercle.
- 3. Myositis ossificans.
