

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

[MD 1223]

**DECEMBER 2023
(OCTOBER 2023 EXAM SESSION)**

Sub. Code: 2000

M.D. DEGREE EXAMINATION

BRANCH I – GENERAL MEDICINE

PAPER I – APPLIED BASIC SCIENCES IN GENERAL MEDICINE

Q.P. Code: 202000

Time : Three Hours

Maximum : 100 Marks

Write Notes on:

I. ANATOMY: (4 x 5 = 20)

1. Anatomy of the Thoracic Duct.
2. Artery of Percheron and its importance.
3. Triangle of KOCH with diagrammatic representation.
4. Space of Disse, diagrammatic representation and its importance.

II. PHYSIOLOGY: (4 x 5 = 20)

1. Feedback Loop of Blood Osmolality.
2. Modulation of Pain transmission.
3. Thyroid hormone synthesis and secretion.
4. Adrenal hormone synthesis pathway.

III. BIO-CHEMISTRY: (3 x 5 = 15)

1. Ionic components concentration in the extracellular and intracellular fluid.
2. High energy phosphates.
3. Essential Aminoacids.

IV. PHARMACOLOGY: (3 x 5 = 15)

1. Rhythm control drugs in Atrial Fibrillation.
2. Edrophonium.
3. Bupropion.

V. PATHOLOGY: (3 x 5 = 15)

1. Necroptosis and Pyroptosis.
2. Trinucleotide repeat mutations.
3. Adaptive Immune System.

VI. MICROBIOLOGY: (3 x 5 = 15)

1. Bacterial Plasmids.
2. Biofilms.
3. Orthomyxoviruses.
