

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

[MD 1223]

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

Sub. Code: 2040

**M.D. DEGREE EXAMINATION
BRANCH X – ANAESTHESIOLOGY**

**PAPER I – APPLIED BASIC SCIENCES RELATED TO ANAESTHESIA
INCLUDING PHYSICS IN ANAESTHESIA,
HISTORY OF ANAESTHESIA**

Q.P. Code: 202040

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Different approaches of Acid Base Balance.
2. Functional Anatomy of the Anaesthesia Work Station, highlighting the safety features in each section.

II. Write notes on:

(10 x 7 = 70)

1. Mucociliary function and surfactant.
2. Beer Lambert Law.
3. Raman effect and its application in Anaesthesia.
4. Tubuloglomerular Feedback.
5. Zero versus First – Order Kinetics.
6. Weight Scalars.
7. Heme Metabolism and Bilirubin.
8. Cardiac Reflexes.
9. Evolution of Anaesthesia in India.
10. Harvey Cushing.
