

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

[MD 0524]

MAY 2024

Sub. Code: 4025

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

PAPER I – BASIC SCIENCES RELATED TO ANAESTHESIOLOGY

Q.P. Code: 204025

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Formation and branches of brachial plexus.
 - a) Various approaches to block brachial plexus.
 - b) Failed block- Rescue techniques.
2. Elaborate on coronary blood flow.
 - a) Determinants of myocardial oxygen demand-supply.
 - b) Assessment of ventricular function.

II. Write notes on:

(10 x 7 = 70)

1. Cardiac output monitoring.
2. Functional analysis of Bain circuit.
3. Interpretation of TOF (Train of four).
4. Point of Care tests for coagulation.
5. Pressure-Volume loop.
6. EtCO₂ (End tidal carbon di oxide).
7. Alveolar gas equation.
8. Desflurane.
9. Pulmonary function tests.
10. Anaphylaxis management.
