

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

[MD 1224]

**DECEMBER 2024
(OCTOBER 2024 EXAM SESSION)**

Sub. Code: 4085

M.D. DEGREE EXAMINATION

EMERGENCY MEDICINE

**PAPER I – APPLIED BASIC SCIENCES RELATED TO
EMERGENCY MEDICINE**

Q.P. Code: 204085

Time : Three Hours

Maximum : 100 Marks

Write Notes on:

I. ANATOMY:

(4 x 5 = 20)

1. Coronary circulation with background of Acute Coronary Syndrome.
2. Leg compartment for evaluation of Compartment Syndrome.
3. Esophagus with a backdrop of Foreign body Obstruction.
4. Male Genital System.

II. PHYSIOLOGY:

(4 x 5 = 20)

1. Calcium homeostasis.
2. Acute Heart failure.
3. Hypercapnia.
4. Adrenal gland.

III. BIO-CHEMISTRY:

(3 x 5 = 15)

1. Lactic acidosis.
2. Methemoglobin formation and mechanism of action of Methylene blue.
3. Ketoacidosis syndrome.

IV. PHARMACOLOGY:

(3 x 5 = 15)

1. Norepinephrine.
2. Amiodarone.
3. Antiplatelet agents.

V. PATHOLOGY:

(3 x 5 = 15)

1. Rotator cuff tears.
2. Commotio cordis.
3. Acute Respiratory distress syndrome.

VI. MICROBIOLOGY:

(3 x 5 = 15)

1. Community Acquired Pneumonia.
2. Septic Arthritis.
3. Infections in HIV patients.

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

[MD 1025]

OCTOBER 2025

Sub. Code: 4085

M.D. DEGREE EXAMINATION

EMERGENCY MEDICINE

**PAPER I – APPLIED BASIC SCIENCES RELATED TO
EMERGENCY MEDICINE**

Q.P. Code: 204085

Time : Three Hours

Maximum : 100 Marks

Write Notes on:

I. ANATOMY:

(4 x 5 = 20)

1. Knee joint anatomy.
2. Abdominal aorta branches.
3. Spinal cord anatomy.
4. Rotator cuff anatomy.

II. PHYSIOLOGY:

(4 x 5 = 20)

1. Cardiac cycle.
2. Potassium balance.
3. Ventilation perfusion relationship.
4. Cerebral autoregulation.

III. BIO-CHEMISTRY:

(3 x 5 = 15)

1. Neurotransmitters.
2. Krebs cycle.
3. Ketosis.

IV. PHARMACOLOGY:

(3 x 5 = 15)

1. Antiepileptics classification.
2. Adrenaline.
3. Zero-order metabolism.

V. PATHOLOGY:

(3 x 5 = 15)

1. Coagulation cascade.
2. Type IV hypersensitivity reactions.
3. Blast crisis.

VI. MICROBIOLOGY:

(3 x 5 = 15)

1. Meningitis causing organisms age-wise.
2. Mycobacterium classification.
3. Herpes virus.
