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

[MD 1224] DECEMBER 2024 Sub. Code: 4085
(OCTOBER 2024 EXAM SESSION)

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.

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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.

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

[MD 0526] **MAY 2026** **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. Retroperitoneal organs.
2. Carpal bones.
3. Cross section of the Spinal cord with ascending and descending tracts.
4. Superior orbital fissure.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Parathormone.
2. Cerebral autoregulation.
3. Minute ventilation.
4. Glomerular filtration.

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

1. Urea cycle.
2. Haem breakdown pathway.
3. Ketone bodies.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Class I antiarrhythmic agents.
2. Carbapenems.
3. Ketamine.

V. PATHOLOGY: **(3 x 5 = 15)**

1. Aortic dissection.
2. Tumour lysis.
3. Coagulation pathway.

VI. MICROBIOLOGY: **(3 x 5 = 15)**

1. Scrub typhus.
2. Botulism.
3. Hospital acquired pneumonia.

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