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

[MD 0524] **MAY 2024** **Sub. Code: 4045**

M.D. DEGREE EXAMINATION

BRANCH XVII – RESPIRATORY MEDICINE

PAPER I – GENERAL PULMONARY MEDICINE AND BASIC SCIENCES

Q.P. Code: 204045

Time: Three Hours **Maximum: 100 Marks**

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Cilia.
2. Diaphragm.
3. Lymphatic Drainage of Lung.
4. Airway Branching.

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

1. High Altitude Acclimatization.
2. Bohr Effect.
3. Caission's disease.
4. Flow Volume Loops.

III.BIOCHEMISTRY: **(3 x 5 = 15)**

1. Respiratory Acidosis.
2. Procalcitonin.
3. Alpha-1 Anti Typsin.

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

1. Bedaquiline.
2. Heparin.
3. Amphotericin.

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

1. Cryptogenic Organising Pneumonia.
2. Immuno Histochemistry Markers.
3. Ghon's Focus.

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

1. H3N2.
2. Mucormycosis.
3. WGS (Whole Genome Sequencing).

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

[MD 1224] **DECEMBER 2024** **Sub. Code: 4045**

(OCTOBER 2024 EXAM SESSION)

M.D. DEGREE EXAMINATION

RESPIRATORY MEDICINE

PAPER I – GENERAL PULMONARY MEDICINE AND BASIC SCIENCES

Q.P. Code: 204045

Time: Three Hours **Maximum: 100 Marks**

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Superior Mediastinum and Applied Anatomy.
2. Bronchial artery and Clinical application.
3. Mediastinal lymph node stations.
4. Bronchoscopic anatomy of airways.

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

1. Haldane effect.
2. Stages of Sleep.
3. Physiology of NIV.
4. Forced oscillation techniques.

III.BIOCHEMISTRY: **(3 x 5 = 15)**

1. Anion gap.
2. CFTR mutations.
3. Galactomannan.

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

1. Dupilumab.
2. Crizotinib.
3. Pharmacovigilance.

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

1. Carcinoid tumours.
2. Granulomatosis with polyangiitis.
3. Molecular endotypes in asthma.

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

1. Acinetobacter Baumannii.
2. Severe combined immunodeficiency.
3. National standards for minimum ventilation in Health-Care Settings.

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

[MD 1025] **OCTOBER 2025** **Sub. Code: 4045**

M.D. DEGREE EXAMINATION

RESPIRATORY MEDICINE

PAPER I – GENERAL PULMONARY MEDICINE AND BASIC SCIENCES

Q.P. Code: 204045

Time: Three Hours **Maximum: 100 Marks**

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Bronchopulmonary segment.
2. Cardiac bronchus.
3. Developmental anomalies of diaphragm.
4. Lymphatic drainage of lung.

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

1. Closing volume.
2. Pulmonary vascular resistance.
3. Oxygen dissociation curve.
4. Alveolar macrophages.

III.BIOCHEMISTRY: **(3 x 5 = 15)**

1. Role of lung in Acid base Homeostasis.
2. Interferon Gamma Release Assay.
3. Oxygen Toxicity.

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

1. Pretomanid.
2. Rifabutin.
3. E- Cigarette or vaping product induced lung injury (EVALI).

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

1. Necrobiotic nodule.
2. Morphology of emphysema.
3. Pathogenesis of lymphangioleiomyomatosis.

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

1. Pulmonary Actinomycosis.
2. Microbiology of parapneumonic effusion.
3. Streptococcus pneumonia.

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

[MD 0526] **MAY 2026** **Sub. Code: 4045**

M.D. DEGREE EXAMINATION

RESPIRATORY MEDICINE

PAPER I – GENERAL PULMONARY MEDICINE AND BASIC SCIENCES

Q.P. Code: 204045

Time: Three Hours **Maximum: 100 Marks**

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Sequestration of lung.
2. Accessory fissures of lung.
3. Secondary pulmonary lobule.
4. Thoracic duct.

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

1. Regional differences in ventilation.
2. Lung compliance.
3. Dynamic compression of airways.
4. Lung receptors.

III.BIOCHEMISTRY: **(3 x 5 = 15)**

1. Interleukin – 6.
2. Metabolic functions of lung.
3. Respiratory acidosis.

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

1. Omalizumab.
2. Ultralong acting beta agonist.
3. Varenicline.

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

1. Interstitial pneumonia.
2. Caseating Granuloma.
3. Inherited lung disease.

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

1. Anaerobic infections in lung.
2. Aspergillus manifestation of lung.
3. Nocardiosis.

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

[MD 0926] **SEPTEMBER 2026** **Sub. Code: 4045**

M.D. DEGREE EXAMINATION

RESPIRATORY MEDICINE

PAPER I – GENERAL PULMONARY MEDICINE AND BASIC SCIENCES

Q.P. Code: 204045

Time: Three Hours **Maximum: 100 Marks**

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Structure of Cilia.
2. Stem cells of Respiratory disease.
3. Azygous and Hemiazygous venous system.
4. Collaterals in SVC syndrome.

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

1. Non Respiratory functions of Lung.
2. Equal pressure point.
3. Fate of an inhaled particle.
4. Calculation of PAO2 and significance of A-a Gradient.

III.BIOCHEMISTRY: **(3 x 5 = 15)**

1. Surfactant in Health and diseases.
2. Chemoreceptors.
3. Capnography.

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

1. BPaLM.
2. Role of steroids in Respiratory Medicine.
3. Pharmacological management of invasive Aspergillosis.

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

1. Pathological changes in the Lungs of Chronic smoker.
2. Lupus Pneumonitis.
3. Stages of Empyema.

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

1. Human Metapneumo Virus.
2. Role of Urinary Antigens in the diagnosis of Community Acquired Pneumonia.
3. Beta D Glucan.

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