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

[MD 0524] **MAY 2024** **Sub. Code: 4048**

M.D. DEGREE EXAMINATION

BRANCH XVII – RESPIRATORY MEDICINE

PAPER IV – RECENT ADVANCES IN PULMONARY MEDICINE AND RESEARCH METHODOLOGY

Q.P. Code: 204048

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

I. Elaborate on: **(2 x 15 = 30)**

1. a) What are the derterminants of Aerosol Drug Deliver and discuss the Aerosol Drug Delivery during invasive mechanical Ventilation?

   b) Management of Steroid Resistant Bronchial Asthma.

2. Modes of Ventilation and its Complication.

II. Write notes on: **(10 x 7 = 70)**

1. Pretomanid.
2. Gene Therapy.
3. Blue Protocol.
4. Permissive Hypercapnoea.
5. C – TB Test.
6. EC CO2 Removal.
7. Radiofrequency Ablation in Management of Lung Cancer.
8. Lung Microbiome.
9. Asthma – COPD over Lap (ACO).
10. Line Probe Assay (LPA).

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

[MD 1224] **DECEMBER 2024** **Sub. Code: 4048**

(OCTOBER 2024 EXAM SESSION)

M.D. DEGREE EXAMINATION

RESPIRATORY MEDICINE

PAPER IV – RECENT ADVANCES IN PULMONARY MEDICINE AND RESEARCH METHODOLOGY

Q.P. Code: 204048

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

I. Elaborate on: **(2 x 15 = 30)**

1. A 60-year-old male with intestinal lung disease is planned for lung transplantation.
   a) What are the guidelines for listing in ILD?
   b) Post operative immunosuppression.
   c) Complications after transplantation.

2. Describe various advance techniques in diagnostic bronchoscopy.

II. Write notes on: **(10 x 7 = 70)**

1. Anti IL 5 treatment for asthma.
2. Measured variables in CPET (Cardio Pulmonary Exercise Testing).
3. Salient features of EMBARC – India study.
4. Ultrasound signs in pleural effusions.
5. Newer changes in gold guidelines 2024.
6. Targeted therapy in advanced NSCLC.
7. Endotypes in Obstructive sleep apnoea.
8. Positron emission tomography.
9. Diagnosis and management of CTEPH.
10. Write about gender as a determinant for TB care in India.

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

[MD 1025] **OCTOBER 2025** **Sub. Code: 4048**

M.D. DEGREE EXAMINATION

RESPIRATORY MEDICINE

PAPER IV – RECENT ADVANCES IN PULMONARY MEDICINE AND RESEARCH METHODOLOGY

Q.P. Code: 204048

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

I. Elaborate on: **(2 x 15 = 30)**

1. Classify Influenza viruses. Clinical manifestation, management and prevention of H1N1 influenza.

2. Write a detailed note on Pulmonary Rehabilitation.

II. Write notes on: **(10 x 7 = 70)**

1. Tumor markers in management of Lung Cancer.
2. Pharmacotherapy of Pulmonary Hypertension.
3. Preoperative assessment of Lung function.
4. Recurrent Pleural Effusion.
5. Management of Acute Pulmonary Thromboembolism.
6. Role of Fiberoptic Bronchoscopy in Lung Transplant.
7. Bronchoscopic Lung Cryobiopsy.
8. Extracorporeal membrane oxygenation.
9. Vaccines in respiratory medicine.
10. Impulse Oscillometry.

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

[MD 0526] **MAY 2026** **Sub. Code: 4048**

M.D. DEGREE EXAMINATION

RESPIRATORY MEDICINE

PAPER IV – RECENT ADVANCES IN PULMONARY MEDICINE AND RESEARCH METHODOLOGY

Q.P. Code: 204048

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

I. Elaborate on: **(2 x 15 = 30)**

1. Explain in detail about various modes of Mechanical Ventilation.
2. Define Malignant Pleural Effusion. Discuss in detail about the approach to diagnosis and treatment of Malignant Pleural Effusion.

II. Write notes on: **(10 x 7 = 70)**

1. Prone ventilation.
2. Monitoring and Management of QTc Prolongation in MRD Regimen.
3. Radiation pneumonitis.
4. Cryptogenic Organizing Pneumonia – diagnosis and management.
5. Endobronchial Ultrasound.
6. Anti-inflammatory therapy for Bronchiectasis.
7. Pathogenesis and treatment of Invasive Aspergillosis.
8. Inhalational antibiotics.
9. Therapeutic Bronchoscopic Ablation Modalities.
10. High Altitude Pulmonary Edema.

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