

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

[AHS 0122]

**JANUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 2213

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2019-2020 onwards)
PAPER III –RESPIRATORY AND CARDIO VASCULAR DISEASES
Q.P. Code : 282213**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Chest physiotherapy and maintenance of ICD's Postural drainage.
2. Heart Block and ICU Management – Cardiac Pacemakers.

II. Write Short Notes on:

(10x6 = 60)

1. Hypertensive Crisis.
2. Hypoventilation and Hyperventilation.
3. Pneumo Thorax and Management.
4. Hypothyroidism and Hyperthyroidism.
5. Acyanotic congenital Heart diseases in Infancy.
6. Cardiac Rehabilitation services for Adults.
7. Pulmonary Thrombo embolism.
8. Neurological emergencies in ER.
9. Congestive Heart Failure management.
10. Bradycardia Treatment Algorithm.

THE TAMILNADU DR.M.G.R.MEDICAL UNIVERSITY

[AHS 0522]

MAY 2022

Sub.Code: 2213

M.Sc. RESPIRATORY THERAPY

SECOND YEAR

PAPER III – RESPIRATORY AND CARDIOVASCULAR DISEASES

Q.P.Code: 282213

Time: Three hours

Maximum: 100 marks

Answer ALL Questions

I. Elaborate notes on:

(2 × 20 = 40)

1. Define ARDS. Brief note on its pathogenesis. Mention in details about ARDS ventilatory and non-ventilatory management.
2. Write in detail about prerequisites and examination of a brain-dead patient. How will you do APNEA TEST and what are other ancillary tests?

II. Write Short Notes on:

(10 × 6 = 60)

1. What are neuromuscular disorders and how will assess the pulmonary function of a patient in bed side?
2. Effects of sleep on respiratory physiology and define OHS and its diagnostic criteria.
3. Pleural effusion – causes, pathophysiology. What is Light's criteria.
4. VAP prevention bundle.
5. Define sepsis and septic shock. What is qSOFA and its clinical significance.
6. Indication and contraindications of ICD and its complications.
7. What are the causes of pulmonary edema and its non-ventilatory management?
8. Types of respiratory failure and how will you manage Type 2 respiratory failure?
9. Define MI and mention its types. What are the risk factors of MI?
10. How will you classify congenital heart disease and write in detail about TOF.

THE TAMILNADU DR.M.G.R.MEDICAL UNIVERSITY

[AHS 1022]

OCTOBER 2022

Sub. Code: 2213

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (Candidates admitted from 2019-2020 & 2020-2021)
PAPER III – RESPIRATORY AND CARDIOVASCULAR DISEASES**

Q.P.Code: 282213

Time: Three hours

Maximum: 100 marks

Answer ALL Questions

I. Elaborate notes on:

(2 × 20 = 40)

1. Pulmonary embolism – Clinical Features, Pathogenesis, Diagnostic Criteria and Management.
2. Define shock and its types. Write in detail about hypovolemia shock and its classification and management.

II. Write short Notes on:

(10 × 6 = 60)

1. Define VAP and its preventive strategies.
2. What is Driving pressure and mention its clinical significance?
3. Define sepsis and septic shock. What is SOFA score?
4. Define heart failure and its clinical features, management.
5. Mention prerequisites of performing APNEA TEST and how will you do it?
6. Etiology and types of ILD.
7. Status asthmaticus and its management.
8. Write a note on Pulmonary hypertension signs and its management.
9. Define tension pneumothorax and its management.
10. Care of tracheostomy tube.

THE TAMILNADU DR.M.G.R.MEDICAL UNIVERSITY

[AHS 1023]

OCTOBER 2023

Sub. Code: 2213

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER III – RESPIRATORY AND CARDIO VASCULAR DISEASES**

Q.P. Code: 282213

Time: Three hours

Maximum: 100 marks

Answer ALL Questions

I. Elaborate notes on:

(2 × 20 = 40)

1. Hospital acquired pneumonia – causative organisms, risk factors, drug resistance and antibiotic therapy. Write a brief note on preventive strategies.
2. Write in details on ventilatory strategies in management of Acute Respiratory Distress Syndrome in adults.

II. Write short Notes on:

(10 × 6 = 60)

1. Diabetic ketoacidosis – clinical features, diagnosis and management.
2. Mitral stenosis – clinical features, diagnosis and management.
3. Alveolar hypoventilation – causes and treatment.
4. Occupational asthma.
5. Obstructive Sleep Apnea – clinical features and management.
6. Flail Chest.
7. Discuss briefly on complications of pulmonary tuberculosis.
8. Pulmonary edema – clinical features and management.
9. Tuberculous pericarditis.
10. Cor Pulmonale – definition, causes and pathophysiology.

THE TAMILNADU DR.M.G.R.MEDICAL UNIVERSITY

[AHS 0524]

MAY 2024

Sub. Code: 2213

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER III – RESPIRATORY AND CARDIO VASCULAR DISEASES**

Q.P. Code: 282213

Time: Three hours

Maximum: 100 marks

Answer ALL Questions

I. Elaborate notes on:

(2 × 20 = 40)

1. Write in detail on Sepsis – definition, evaluation and management.
2. Respiratory failure – causes, pathogenesis, types and clinical features. Write details on noninvasive ventilation in management of respiratory failure.

II. Write short Notes on:

(10 × 6 = 60)

1. Pathophysiology and management of septic shock.
2. Atrial fibrillation: causes, diagnosis and management.
3. Diagnostic criteria for brain death.
4. Non pharmacological management of bronchiectasis: nutritional therapy, chest physiotherapy and rehabilitation measures.
5. Indications and contraindications for noninvasive ventilation.
6. Management of Paroxysmal supraventricular tachycardia.
7. Discuss briefly on complications of blunt injury of chest.
8. Pneumonia Severity Index (PSI).
9. Paraneoplastic manifestations of lung cancer.
10. Insulin dependent diabetes mellitus.

THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY

[AHS 1024]

OCTOBER 2024

Sub. Code: 2213

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER III – RESPIRATORY AND CARDIO VASCULAR DISEASES**

Q.P. Code: 282213

Time: Three hours

Answer ALL Questions

Maximum: 100 marks

I. Elaborate on:

(2 × 20 = 40)

1. Flexible bronchoscopy – Indications and complications. Discuss in detail various diagnostic bronchoscopic procedures.
2. Acute heart failure – Causes, Pathophysiology, Clinical features and management.

II. Write Short Notes on:

(10 × 6 = 60)

1. Nosocomial pneumonia.
2. What is primary tuberculosis? Describe various laboratory investigations to diagnose tuberculosis.
3. Occupational lung diseases.
4. Venous thromboembolism.
5. Respiratory interventions in bed ridden patients with chest trauma.
6. Acute pulmonary edema.
7. What is OSA? Discuss the role of positive pressure therapy in OSA.
8. Respiratory failure – types, causes and clinical features.
9. Supraventricular arrhythmias.
10. Acute myocardial infarction.

THE TAMILNADU DR.M.G.R.MEDICAL UNIVERSITY

[AHS 1025]

OCTOBER 2025

Sub. Code: 2213

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER III – RESPIRATORY AND CARDIOVASCULAR DISEASES**

Q.P.Code: 282213

Time: Three hours

Answer ALL Questions

Maximum: 100 marks

I. Elaborate notes on:

(2 × 20 = 40)

1. Pulmonary edema – definition, causes, clinical features and its ventilatory and non-ventilatory management.
2. Define VAP. Mention in detail about the risk factors of VAP and its preventive strategies. What are the causes of pulmonary infiltrates mimicking nosocomial pneumonia?

II. Write Short Notes on:

(10 × 6 = 60)

1. BODE INDEX.
2. Define ARDS. What are the different rescue strategies in ARDS?
3. What are the indications of ICD and draw the bottle system for connection after ICD In pleural effusion with trapped lung, with suction?
4. Define shock and its types. Write in detail about mechanical causes of shock.
5. Write short note on OSA and its management.
6. How will you differentiate obstructive and restrictive lung disease? Write note on GOLD definition of COPD.
7. How will you classify angina pectoris? Define STEMI and NSTEMI.
8. Write in about the risk factors and preventive strategies of coronary artery disease.
9. What is Patent ductus arteriosus and write in detail about cyanotic heart diseases.
10. What are the signs and symptoms of right heart failure and its management?
