

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

[AHS 0122]

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

Sub. Code: 2212

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2019-2020 onwards)
PAPER II –CRITICAL CARE MEDICINE
Q.P. Code : 282212**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on: (2 x 20 = 40)

1. Define cardiac arrest. Detail about Adult advanced cardiac life support algorithm and post cardiac arrest algorithm.
2. Difference between Cardio version and defibrillation, Types of defibrillation, Management of Ventricular fibrillation.

II. Write Short Notes on: (10x6 = 60)

1. Acute renal failure.
2. Indications for thrombolytic therapy.
3. Fluid management in patient with circulatory shock.
4. Management in SVT.
5. Target Temperature management in Post cardiac arrest patients.
6. Airway management in emergency unit.
7. Cervical spine production in cardiac arrest.
8. Procedure of CVP.
9. Management of Cerebral edema.
10. Indications for Hemodialysis.

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

[AHS 0522]

MAY 2022

Sub. Code: 2212

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2019-2020 onwards)
PAPER II –CRITICAL CARE MEDICINE
Q.P. Code : 282212**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on: (2 x 20 = 40)

1. Define shock, Types of shock, Management of Haemorrhagic shock.
2. Define cardiac output, factors affecting cardiac output, Monitoring cardiac output in thermo dilution technique.

II. Write Short Notes on: (10x6 = 60)

1. Algorithm of acute coronary syndrome.
2. Surgical management of Myocardial infarction.
3. Detail about Septic shock.
4. Intra-aortic balloon pump.
5. Infective endocarditis.
6. Disease of Aortic valve.
7. AED.
8. Transvenous Pacemaker.
9. Drugs for Ventricular fibrillation.
10. ETCO₂ wave form in cardiac arrest patients.

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

[AHS 1022]

OCTOBER 2022

Sub. Code: 2212

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2019-2020 & 2020-2021 onwards)
PAPER II – CRITICAL CARE MEDICINE**

Q.P. Code : 282212

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Define ECG, Detail about Acute Myocardial infarction.
2. Define Hypertension, Types of Hypertension. Management of secondary hypertension in ICU.

II. Write Short Notes on:

(10x6 = 60)

1. High quality CPR.
2. Reversible Causes of PEA.
3. Arrhythmias.
4. Define heart block and types.
5. Detail about Pulmonary edema.
6. Congestive heart failure.
7. Define Pericarditis.
8. What are the ventricular assist devices?
9. Management of cardiac tamponade.
10. Post operative management of cardiac surgery patients.

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

[AHS 0523]

MAY 2023

Sub. Code: 2212

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER II – CRITICAL CARE MEDICINE**

Q.P. Code: 282212

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Define Congestive Heart failure. Explain about its types, causes, symptoms, diagnosis and prognosis.
2. What is Transvenous Pacemaker? Explain its Indication, Contraindication, Principle, Procedure and Complications.

II. Write Short Notes on:

(10x6 = 60)

1. Procedure of Intra-Aortic Balloon Pump.
2. Define Cardio Version and its types and uses.
3. What is the management of low cardiac output states patient?
4. Describe the Universal Algorithm for adult emergency cardiac care.
5. Describe about Asystole treatment algorithm.
6. Rehabilitation of Post-operative CABG.
7. Describe Arrhythmias.
8. Explain about Rapid sequence intubation.
9. Care of Patient in mechanical ventilation.
10. Fluid responsiveness in septic and cardiogenic shock.

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

[AHS 1023]

OCTOBER 2023

Sub. Code: 2212

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER II – CRITICAL CARE MEDICINE**

Q.P. Code: 282212

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Explain in details about initial assessment and triaging ABCDE of trauma.
2. Define Myocardial Infarction. Explain about its Pathophysiology, Clinical Manifestation and Management.

II. Write Short Notes on:

(10x6 = 60)

1. Describe about Bradycardia Algorithm and treatment.
2. What are the causes of cardiac arrest?
3. Importance and uses of automated external defibrillator.
4. Chronic Renal Failure.
5. Rehabilitation of post craniotomy patients.
6. Define AMBU. Draw and label the parts of AMBU.
7. Indications of cardiac transplantation.
8. Procedure of ICD.
9. Define Cardiomyopathy and its types.
10. What are the fluid management in pulmonary edema?

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

[AHS 0524]

MAY 2024

Sub. Code: 2212

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER II – CRITICAL CARE MEDICINE**

Q.P. Code: 282212

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Explain in detail about the Neurological Emergencies and its management in Intensive Care Unit.
2. Elaborate notes on Cardiac Transplantation.

II. Write Short Notes on:

(10x6 = 60)

1. Ethical aspects of Emergency Cardiac care.
2. Hypertensive crisis.
3. Acute renal failure – Types and management.
4. Clinical classification of myocardial infraction.
5. Manual C spine stabilization.
6. Mitral valve regurgitation.
7. Write notes on Electrolyte imbalance.
8. Define GCS and FOUR score.
9. Paediatric Advanced Life Support.
10. Define Respiratory acidosis – causes and management.

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

[AHS 1024]

OCTOBER 2024

Sub. Code: 2212

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER II – CRITICAL CARE MEDICINE**

Q.P. Code: 282212

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on: (2 x 20 = 40)

1. Write in detail about Valvular heart disease, Types, Management.
2. Initial assessment of a patient in Intensive Care Unit.

II. Write Short Notes on: (10x6 = 60)

1. Venturi mask – Principle, Colour coding and uses.
2. SVT and its management.
3. Thrombolytic agents.
4. Explain about one rescuer CPR in adult.
5. Role of inotropes in septic shock.
6. How will you manage foreign body airway obstruction in unconscious child?
7. Assessment of Difficult airway.
8. Define signs and symptoms of Cardiac tamponade.
9. Infective endocarditis.
10. Define Shock. What are the stages of shock?

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

[AHS 1025]

OCTOBER 2025

Sub. Code: 2212

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER II – CRITICAL CARE MEDICINE**

Q.P. Code: 282212

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. What is chain of survival in adult cardiac arrest? Discuss about adult cardiac arrest algorithm, preventable causes, recommendations for advance airway use during CPR.
2. What is POCUS? Its current uses in critical care. Discuss about the role of POCUS in hypoxia and cardiac arrest.

II. Write Short Notes on:

(10x6 = 60)

1. Difficult airway management in a trauma patient.
2. Challenges in transport of critically ill patient.
3. Tracheostomy – indications procedure and post tracheostomy care.
4. Infection prevention in ICU.
5. Nutrition optimization in ICU. Discuss about the routes of administration.
6. Discuss E-FAST in trauma.
7. Define brain death. Discuss about bedside tests to confirm brain death.
8. ABG Vs VBG. Discuss about factors affecting ABG analysis.
9. Write notes on defibrillator. Its uses in cardiac arrest.
10. Driving pressure.
