

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

[AHS 1024]

OCTOBER 2024

Sub. Code: 3202

**M.Sc. CRITICAL CARE TECHNOLOGY
FIRST YEAR (Candidates admitted from 2023-2024)
PAPER III – PRINCIPLES OF CRITICAL CARE AND MONITORING**

Q.P. Code: 283202

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. What is echocardiography? Elaborate the four views in Echocardiography. Significance of Echocardiography in critically ill.
2. Capnography monitoring- Principles, advantages and pitfalls in monitoring.

II. Write Short Notes on:

(10x6 = 60)

1. Describe FASTHUG.
2. Endotracheal tube suctioning.
3. Nutrition assessment of ICU patients.
4. What is Fluid status and Fluid responsiveness in ICU patients?
5. How will you monitor brain stem functions?
6. Bradycardia Algorithm.
7. Management of heat stroke.
8. V/Q mismatch.
9. Describe the neurological history and examination in a cerebrovascular accident patient.
10. Documentation in intensive care unit.

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

[AHS 1025]

OCTOBER 2025

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Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Describe indications, contraindications, types and complications of Non-Invasive Ventilation.
2. Write a note on Invasive Blood Pressure Monitoring.

II. Write Short Notes on:

(10x6 = 60)

1. Describe about principles and methods of Non-Invasive Blood Pressure measurement.
2. Algorithm for Advanced Cardiac Life Support – Adult Bradycardia.
3. What are the infection control practices to be followed in an ICU?
4. Care and maintenance of ECG machine.
5. Write a short note on pulse oximetry.
6. PICCO.
7. Write down the indications and steps of closed endotracheal suctioning.
8. Functional Nutritional assessment for a patient with Cardiovascular Problems.
9. Describe the uses of Pulmonary Artery Catheter in ICU.
10. Pulmonary Function Test.
