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

[AHS 0423] APRIL 2023 Sub. Code: 2616

## B.Sc. RESPIRATORY THERAPY THIRD YEAR (Regulations 2014-2015 & 2018-2019 onwards) PAPER I – RESPIRATORY THERAPY TECHNIQUES - I

Q.P. Code: 802616

Time: Three Hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on:  $(3 \times 10 = 30)$ 

1. Define ARDS. What is Berlin's criteria? Describe different Recruitment maneuvers for ARDS management.

- 2. What are the different modes of ventilation? Describe and elaborate on them. Mention the different advantages of SIMV and ASV modes of ventilation.
- 3. What are the indications and contraindications of NIV? Draw and describe the parts of a standard Bilevel positive airway pressure machine. What are the different masks that can be used for NIV?

II. Write Notes on:  $(8 \times 5 = 40)$ 

- 1. What is PEEP? Describe Barotrauma.
- 2. Types of Respiratory Failure.
- 3. Differences between CPAP and BPAP.
- 4. Weaning from mechanical ventilator.
- 5. What is plateau pressure? What is it's significance in mechanical ventilation?

 $(10 \times 3 = 30)$ 

- 6. What are the indications of Tracheostomy?
- 7. Describe the risk factors for Nosocomial Pneumonia.
- 8. Midazolam Describe some adverse effects.

## III. Short Answers on:

- 1. Emergency treatment of Tension pneumothorax.
- 2. Chronic respiratory failure.
- 3. Respiratory muscle weakness.
- 4. Decreased ventilatory drive.
- 5. Prevention of Thromboembolism in patients on ICU care.
- 6. Invasive ventilatory management of patient with COPD.
- 7. Inspiratory time.
- 8. Complications of airway suctioning.
- 9. Deadspace ventilation.
- 10. RSBI Rapid Shallow Breathing Index.

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