

B.Sc. RESPIRATORY THERAPY
THIRD YEAR
PAPER I – RESPIRATORY THERAPY TECHNIQUES - I
Q.P. Code: 802616

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Define weaning. Explain protocol on weaning and its criteria in detail.
2. Define PEEP. Explain its effect on hemodynamics and pulmonary system in detail.
3. Define NIV – its indication and complications. Discuss on initiation and monitoring of NIV.

II. Write Notes on: **(8 x 5 = 40)**

1. Differentiate asthma and COPD. Explain in detail on ventilator management in a exacerbation of COPD.
2. Neuromuscular blocking agents.
3. Pressure regulated volume control (PRVC).
4. Define Auto PEEP. Illustrate Auto PEEP in a flow volume loop. How will you optimize Auto PEEP in a patient on mechanical ventilation?
5. Alarm settings.
6. Write a note on care of artificial airways in mechanical ventilation.
7. Nutrition in COPD.
8. Postural drainage.

III. Short Answers on: **(10 x 3 = 30)**

1. Airway resistance.
2. Tension pneumothorax.
3. How do you troubleshoot high peak airway pressure in a patient on mechanical ventilation?
4. ECMO criteria.
5. Diffusion defect.
6. Ventilator strategy in traumatic brain injury.
7. EtCo₂ – draw a normal capnogram and label its phases.
8. Alveolar – arterial tension gradient (P(A-a)O₂).
9. Heliox therapy.
10. Inverse ratio ventilation.
