

[LD 0212]

**AUGUST 2013**                      **Sub. Code: 1213**  
**DIPLOMA IN CRITICAL CARE TECHNOLOGY**  
**SECOND YEAR**

**PAPER III –CRITICAL CARE TECHNOLOGY AIRWAYS, O<sub>2</sub>**  
**THERAPY, CARE OF PATIENT ON VENTILATOR, EQUIPMENT**  
**MAINTENANCE AND TROUBLE SHOOTING**

*Q.P. Code : 841213*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I Elaborate on**

**3 x 10 = 30**

1. Venturi principle of Oxygen therapy
2. Troubleshooting high peak pressure alarm on a ventilator
3. Various methods to ensure proper placement of endotracheal intubation

**II Write notes on**

**10 x 5 = 50**

1. Indications and contraindications of Non invasive ventilation
2. Advantages of inhaled mode of drug administration
3. Measures to ensure successful extubation
4. Information derived from a pressure volume loop
5. Importance of maintaining adequate cuff pressure
6. Compare closed suction versus open suction techniques
7. Advantages of adaptive support ventilation (ASV) over SIMV mode of ventilation
8. Harmful effects of positive end expiratory pressure
9. Advantages and contraindications of nasal intubation
10. Disadvantages of high oxygen administration

**III Write short answers on**

**10 x 2 = 20**

1. Draw pressure time curve depicting peak and plateau pressures
2. Where should the endotracheal tube be anchored for a five year old boy?
3. What is biotrauma? How is it caused?
4. Elaborate on advantages of tracheostomy tube over oral endotracheal tube
5. How can you assess on the bedside of an impending respiratory failure?
6. What level of tracheal ring should the tracheostomy tube be placed?
7. What are the precautions to be taken before endotracheal suctioning?
8. When should the ventilatory tubings be changed?
9. What are the various recruitment manoeuvres possible?
10. What are the factors affecting the waveform of a pulse oximetry?

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