

**DIPLOMA IN CRITICAL CARE TECHNOLOGY
SECOND YEAR**

**PAPER III – CRITICAL CARE TECHNOLOGY, AIRWAYS O₂ THERAPY,
CARE OF PATIENT ON VENTILATOR EQUIPMENT
MAINTENANCE AND TROUBLESHOOTING**

Q.P. Code : 841213

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Write in detail about initial ventilator settings and write briefly about ventilator modes.
2. A 31 year male has multiple rib fracture and he is having a cardiac tamponade and what is the immediate management? Enumerate about the procedure.
3. What is the principle of pulse oximetry? What are the various sites where the pulse oximetry can be placed? Give the advantages and disadvantages of this device.

II. Write notes on:

(10 x 5 = 50)

1. Ventilator timings.
2. Defibrillation.
3. High pressure alarm on ventilator, trouble shoot the alarm.
4. Indication for intra-arterial line, leveling, calibration.
5. Weaning.
6. Indication and contra-indication for NIV.
7. Multiparameter and alone monitor.
8. PEEP.
9. Describe about nebulization.
10. Bronchoscopy.

III. Short answers on:

(10 x 2 = 20)

1. ABG.
2. Inspiratory expiratory ratio.
3. Contraindication for intra arterial line.
4. Advantages and disadvantages of pulse oximetry.
5. Medications used in Nebulization.
6. Common mechanical problem in ventilator.
7. Write the types of flow patterns.
8. Parameters to be monitored in mechanically ventilated patients.
9. 12 lead ECG.
10. Measurement of cardiac output.
