

[LL 0817]

AUGUST 2017

Sub.Code :1222

**B.Sc. CRITICAL CARE TECHNOLOGY
THIRD YEAR**

Paper II – ICU EQUIPMENTS

Q.P Code : 801222

Time: Three Hours

Maximum : 100 Marks

Answer All Questions

I. Elaborate on:

(3 x 10 = 30)

1. What are the basic common modes of invasive mechanical ventilation? Write brief notes on each mode of ventilation.
2. Define Sterilization, name the methods (types) of different sterilization techniques and write autoclaving method in detail.
3. What are the sites considered for collection of blood for arterial blood gas analysis and which is the most preferred site? Write in detail about the procedure of collection of blood including site, preparation, type of syringe, preferable anticoagulant and the factors that may adversely interfere in the accuracy of ABG results.

II. Write Notes on:

(8 x 5 = 40)

1. What are Base excess and write their significance?
2. What are the roles or function of each bottle in three bottle system of chest drainage?
3. Describe the preparation of used pneumatic circuit for Gas sterilization.
4. Explain the assessment of Glasgow Coma Scale.
5. Write down the six steps of Hand washing.
6. Write short notes on Defibrillator.
7. Write down the indication and steps of open Endotracheal tube suctioning?
8. Write down the names of the equipments to be kept in the Intubation tray.

III. Short Answers on:

(10 x 3 = 30)

1. Define pH.
2. In a patient breathing at a rate of 10/minute with an I:E ratio of 1:2, What is the inspiratory time in seconds?
3. Interpret the following ABG result:
pH: 7.2; PaCO₂ : 25 mmHg, HCO₃ : 8 mmol/lit.
4. In which colored bags, would you dispose an infected gauze piece and food wastes?
5. What is the condition in which you would find an elevated covered up ST segment in an ECG tracing?
6. What is the mean arterial blood pressure if the actual blood pressure of the patient is 70/40 mmHg?
7. Write one important difference between Ambu bag and Bain's circuit?
8. What are the difference between syringe pump and Infusion pump?
9. What is earthing to enable us for safe usage of electric power driven equipments in ICU?
10. Write down the current sequence of action in the setting of cardiac arrest.
