

B.Sc. CRITICAL CARE TECHNOLOGY

(New Syllabus 2014-2015 & 2015-2016)

THIRD YEAR**PAPER I – ICU MONITORING – II + MAINTENANCE OF EQUIPMENT***Q.P. Code: 801236***Time: Three Hours****Maximum: 100 Marks****Answer all questions****I. Elaborate on:****(3 x 10 = 30)**

1. What are the types of Hemodynamic monitoring used in your ICU? What are the advantages and disadvantages of an arterial line? How is an arterial line maintained?
2. What is airway resistance? What are the methods of reducing airway resistance?
3. What is Cardiac arrest? What is the role of early Defibrillation? What are the rhythms that respond to Defibrillation?

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

1. How to approach high pressure alarm in ventilator?
2. Compliance.
3. Draw flow time graphic showing airtrapping?
4. What are the measurements possible with Pulmonary artery catheter?
5. How many triggering (sensitivity) types are available in mechanical ventilators? Write briefly about each of them.
6. Clinical features of malnutrition in adults.
7. Draw flow time graph of Pressure control vs Pressure support mode.
8. Pulse oximeter and its uses.

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

1. Types of Pacing.
2. Uses of ECHO in ICU.
3. Importance of Cough reflex and Gag reflex in ICU.
4. Methods in assessing fluid responsiveness in ICU.
5. Ventilatory settings for a patient septic shock.
6. Importance of Pain relief in upper abdominal surgery.
7. Meaning of Protocolized weaning.
8. Capillary refill time.
9. Importance of neuromuscular assessment in weaning and extubation.
10. Nutrition and respiratory system.
