

B.Sc. CRITICAL CARE TECHNOLOGY
(New Syllabus 2014-2015)

SECOND YEAR

**PAPER III – ICU MONITORING I (BASIC) AND
BIOMEDICAL ENGINEERING**

Q.P. Code: 801218

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Describe the following:
 - a) Invasive Arterial Blood Pressure
 - b) CVP Monitoring.
 - c) Zeroing, Calibrating, Trouble shooting of Pressure Transducer
2. List the indications for Intubation. How to assess difficult Airway?
Describe the procedure for Rapid Sequence Intubation.
3. What are the Parameters to monitor daily in a severe Head injury patient going into Multi organ dysfunction?

II. Write notes on:

(8 x 5 = 40)

1. Brain death and organ donation.
2. What is Phase, Neutral and Earth in Electrification?
3. Management of Hyperkalemia.
4. Inductance and Transformers.
5. Evaluation of Tachycardia.
6. 12 Leads ECG – positions.
7. Parameters of Electricity – voltage, current, power.
8. Monitoring Hypoglycemia in ICU.

III. Short answers on:

(10 x 3 = 30)

1. Ohm's Law.
2. Three causes for Bradycardia.
3. Indications for CPAP ventilation.
4. Capillary Refilling Time.
5. Parts of Laryngoscope.
6. Apnoea Alarm.
7. Complications of Arterial Line.
8. List out the things to check before using Defibrillator.
9. Capnography.
10. Airway protection in unconscious patient.
