B.Sc. IN ANAESTHESIA AND CRITICAL CARE TECHNOLOGY (BACT)

29200

Term-End Examination June, 2014

BAHI-076 : EQUIPMENT CARE AND MAINTENANCE

Time: 3 hours Maximum Marks: 70

PART - A

Answer **any five** questions. Each question carries **5x8=40**

- 1. What are the basic components of any electronic medical instrumentation system?
- 2. What are the types of transducers? Write in detail about pressure transducers.
- 3. Describe the different electrodes used for recording. What are the merits and demerits? Mention the characteristics of an ideal electrode.
- Draw a normal ECG pattern in a cardiac cycle mentioning the time interval and the event responsible for the wave.
- 5. How will you set the ventilatory parameters for a 60 kg man in ICU who is paralysed (CMV) controlled mode of ventilation?

- 6. How is the monitoring of the patient and the ventilator done during mechanical ventilation?
- 7. What are the different types of sterilization used in D.T. ?
- **8.** With the help of a diagram briefly describe the different sources of biomedical signals.

PART - B

Write short notes on **any five** of the following. Each question carries **6** marks : 5x6=30

- 1. Laser application in biomedical field
- 2. Indications for mechanical ventilation
- **3.** CPAP treatment
- 4. Tracheal sectioning in ICU
- 5. ABG (Arterial Blood Gas)
- 6. Ethylene oxide sterilization
- 7. Microbiological surveillance
- 8. Indicators for sterilization