B.Sc. CRITICAL CARE TECHNOLOGY

(New Syllabus 2015-2016)

FIRST YEAR

Paper II – PHYSIOLOGY AND BASIC PHYSICS

Q.P Code: 801232

Time: Three Hours Maximum: 100 Marks

Answer All Questions

I. Elaborate on: $(3 \times 10 = 30)$

- 1. Define Cardiac cycle. Explain the events in different phases of cycle with illustrative diagram.
- 2. Describe the transport of carbon-di-oxide in the blood. Add a note on types of hypoxia.
- 3. Write in detail the mechanism of urine formation.

II. Write Notes on: $(8 \times 5 = 40)$

- 1. Rh factor and Erythroblastosis fetalis.
- 2. Digestion of Carbohydrate.
- 3. Glucose homeostasis.
- 4. Spermatogenesis.
- 5. Conducting system of heart.
- 6. Lung volumes and capacity.
- 7. Cerebrospinal fluid (CSF).
- 8. Pupillary light reflex.

III. Short Answers on:

 $(10 \times 3 = 30)$

- 1. Endocytosis and exocytosis.
- 2. Functions of plasma proteins.
- 3. ESR.
- 4. Any 3 Pulmonary function tests.
- 5. Respiratory acidosis.
- 6. ABG (arterial blood gases).
- 7. Functions of bile.
- 8. Heart rate.
- 9. Functions of oxytocin.
- 10. Cretinism.