B.Sc. CARDIAC TECHNOLOGY FIRST YEAR

PAPER I – APPLIED ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY RELATED TO CARDIAC TECHNOLOGY

Q.P. Code: 801501

Time: Three Hours Maximum: 100 Marks

Answer all questions

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

1. Explain lung under the following headings:

- (i) External features (ii) Fissures and Lobes of lungs (iii) Blood supply and (iv) Note on Bronchial Tree.
- 2. Define cardiac output. Mention its normal value. Add a note on factors regulating it.
- 3. Describe sources, biochemical functions, requirement and deficiency manifestations of vitamin A.

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

- 1. Intercostal muscle.
- 2. Blood supply of Heart.
- 3. Define epithelium. Write note on transitional epithelium.
- 4. Functions of Blood.
- 5. Cardiovascular response to shock.
- 6. Clinical significance of LDH.
- 7. Lipoproteins.
- 8. Heteropolysaccharide.

III. Short answers on:

 $(10 \times 3 = 30)$

- 1. Angina pectoris.
- 2. Define supination and pronation.
- 3. Hilum of Kidney.
- 4. Syncope.
- 5. Frank starling Law.
- 6. Muscles of inspiration.
- 7. Chylomicrons.
- 8. Essential fatty acids.
- 9. Base pairing rule.
- 10. Factors influencing the calcium absorption.
