

**B.Sc. CARDIAC TECHNOLOGY**  
(New Syllabus 2014-2015)

**FIRST YEAR**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY AND BIO-CHEMISTRY**  
**RELATED TO CARDIAC TECHNOLOGY**

*Q.P. Code: 801508*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:** **(3 x 10 = 30)**

1. Explain anatomy of coronary circulation with a neat diagram.
2. Explain the mechanism of exchange of gases.
3. Describe in detail the classification of proteins with examples.

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

1. Watson and Crick model of DNA.
2. Classification of Fatty acids.
3. Structure and function of nephron.
4. Pulmonary Circulation.
5. Describe the ABO system of blood grouping.
6. Thoracic vertebrae.
7. Atrioventricular node function.
8. Denaturation of proteins.

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

1. Frank Starling's law.
2. Marasmus.
3. Coenzyme and Isoenzyme.
4. Chargaff's rule.
5. Scapula.
6. Ureter.
7. Sternum.
8. Stroke volume.
9. List the clotting factors.
10. Molarity and normality.