

B.Sc. CARDIAC TECHNOLOGY**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. Describe the heart under the following headings with suitable diagrams:
a) Coverings, b) Anatomical location, c) External features,
d) Surface markings of cardiac valves and auscultatory areas.
2. Describe in detail the various events of the cardiac cycle?
3. What is the normal blood pH? How is it maintained?

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

1. Muscles of respiration.
2. Trachea.
3. Features of thoracic vertebra with suitable diagram.
4. Resistance vessels.
5. What is the normal blood flow through coronary circulation? Explain the phasic changes, measurement and regulation of coronary blood flow?
6. ABO system.
7. Classification of hetero polysaccharides.
8. Give a note on pellagra.

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

1. Describe the three layers of blood vessels including their histology.
2. External features of kidney.
3. Describe the various anatomical positions.
4. Cardiac output.
5. Plasma proteins.
6. Land steiner's law.
7. Hazards of mismatched blood transfusion.
8. Basal metabolic rate.
9. Beri-beri.
10. Write the names of three Essential fatty acids.
