

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0321]

MARCH 2021

Sub. Code: 1508

(AUGUST 2020 EXAM SESSION)

B.Sc. CARDIAC TECHNOLOGY

FIRST YEAR (Regulation 2014-2015)

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

Q.P. Code : 801508

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Describe in detail about the Chambers of the Heart. Add a note on the Coronary circulation.
2. Describe in detail about the mechanical events of Cardiac cycle. Also mention about the Heart sounds.
3. Describe in detail about the plasma Lipoproteins. Add a note on Fatty liver.

II. Write notes on:

(8 x 5 = 40)

1. Tracheobronchial tree.
2. Intercostal muscles.
3. Coronary Sinus.
4. Structure of kidney with a diagram.
5. Cardiac output.
6. Biochemical functions of Potassium.
7. Glycosaminoglycans.
8. Enzymes that aid in diagnosis of Myocardial Infarction.

III. Short answers on:

(10 x 3 = 30)

1. Femur.
2. Sinoatrial Node.
3. Transitional Epithelium.
4. Blood group antigens.
5. Valsalva manoeuvre.
6. Primary mechanism of hemostasis.
7. Hormones produced from Anterior Pituitary,
8. Types of RNA and their functions.
9. Define Isoenzyme with an example.
10. Write the normal reference values of:
(a) Blood pH, (b) Serum Cholesterol, (c) Postprandial Blood Glucose.
