

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

**[AHS 0122]**

**JANUARY 2022**

**Sub. Code: 2401**

**(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)**

**DIPLOMA IN CARDIAC NON-INVASIVE TECHNOLOGY**

**FIRST YEAR (Regulation 2014-2015 & 2018-2019)**

**PAPER I – ANATOMY & PHYSIOLOGY, BIOCHEMISTRY & PHARMACOLOGY**

***Q.P. Code : 842401***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Discuss the structure and functions of different parts of the heart, including blood supply. Add a note on the conducting system of the heart.
2. Enumerate the water soluble vitamins. Describe the sources, active form, functions, daily requirement and deficiency manifestations of Vitamin C.
3. Write in detail about the various blood group antigen systems.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Bronchopulmonary segments.
2. What is arteriosclerosis? Mention the various risk factors for arteriosclerosis.
3. Functions of saliva.
4. Statins.
5. Gout – causes, features and management.
6. Write in detail about the mode of action, indications and adverse effects of various diuretics.
7. Explain the mode of action, route of administration, indications and adverse effects of Nitrates.
8. Types and functions of White blood cells.
9. Classify lipids. Add a note on phospholipids and their functions.
10. Structure of skin.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Functions of Calcium.
2. Papillary muscles of the heart.
3. What is bile? Mention its uses.
4. Pellagra.
5. What is blood pressure? Name any two anti hypertensive drug.
6. Neuromuscular junction.
7. What is glycosuria? Mention any two causes.
8. Pericardium.
9. Indications for thrombolytic agents.
10. Name any four causes for hemolytic anemia.

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