

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

[AHS 0321]

MARCH 2021

Sub. Code: 2401

(AUGUST 2020 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. Describe the Electrocardiograph and positioning of the various leads for ECG. Write in detail about the various waves of ECG.
2. Write in detail about the mode of action, indications, dosage and route of administration of anti anginal drugs.
3. Various parts of the Respiratory system. Explain the mechanism of gas exchange in the lungs.

II. Write notes on:

(10 x 5 = 50)

1. What are the three types of muscles? Explain about Skeletal muscles.
2. Inotropes. Explain their mode of action.
3. What is Edema? Write in detail about the various causes of edema.
4. What are Homopolysaccharides? Write in detail about any one homopolysaccharide.
5. Discuss the parts and functions of the Hepatobiliary system.
6. Beri-Beri.
7. Intravenous route of drug administration. Indications and adverse effects of IV route.
8. Composition and functions of gastric juice.
9. Lifestyle modification for obesity.
10. Composition and functions of blood.

III. Short answers on:

(10 x 2 = 20)

1. Blood supply of the heart. Mention their importance.
2. Draw a neat diagram of nephron and label.
3. Name the essential fatty acids and mention their uses.
4. Define pharmacokinetics.
5. Marasmus.
6. Branches of the aortic arch.
7. Name any two anti hypertensive drugs and mention their mode of action.
8. What is Packed cell volume and their significance?
9. Deficiency manifestations of Vitamin A.
10. What are Isoenzymes? Which isoenzyme is increased in Myocardial infarction?
