

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

[AHS 0423]

APRIL 2023

Sub. Code: 1242

B.Sc. CRITICAL CARE TECHNOLOGY
FIRST YEAR (Regulation 2018-2019 onwards)
PAPER II – PHYSIOLOGY + BASIC PHYSICS

Q. P. Code: 801242

Time: Three hours

Maximum : 100 Marks

Answer ALL Questions

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

1. Define Hypoxia. Discuss in detail the classification of Hypoxia with examples.
2. Name the blood group systems. Describe ABO system. Add a note on hazards of mismatched blood transfusion.
3. Describe the visual pathway with a labeled diagram. Add a note on effect of lesion at various levels in its course.

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

1. Lung volumes and capacities.
2. Draw a normal ECG and explain the causes for different waves.
3. Functions of Neutrophils.
4. Describe any two basic laws of physics with their clinical application.
5. Write notes on the functions of Growth Hormone.
6. Explain the Micturition Reflex with a neat diagram.
7. Explain the digestion and absorption of Carbohydrates.
8. Describe the principle that Govern fluid dynamics.

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

1. Draw an oxygen dissociation curve and write two factors influencing it.
2. Mention two ECG changes in myocardial infarction.
3. Characteristics of Medical gases.
4. Liquid gas storage.
5. Name the Anterior Pituitary Hormones.
6. Two actions of Oestrogen.
7. Define Leukemia and write any two types.
8. Humidity measurements.
9. What is timed vital capacity?
10. Phases of Menstrual cycle.
