

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

[AHS 1122]

NOVEMBER 2022

Sub. Code: 1242

**B.Sc. CRITICAL CARE TECHNOLOGY
FIRST YEAR (Regulation 2018-2019)
PAPER II - PHYSIOLOGY + BASIC PHYSICS
Q.P. Code: 801242**

Time: Three hours

Maximum: 100 Marks

Answer ALL Questions

I. Elaborate on: (3x10=30)

1. Define Hemostasis. Describe the various stages involved in blood coagulation. Add a note on Hemophilia.
2. Name the Thyroid hormones. Discuss in detail, the secretion and functions of Thyroid hormone. Add a note on Grave's disease.
3. Describe the factors affecting the Hemodynamics.

II. Write Notes on : (8x5= 40)

1. Classification and functions of Leucocytes.
2. Factors affecting Cardiac output.
3. Heart Sounds and its causes.
4. Oxygen dissociation curve and factors affecting it.
5. Describe the properties that characterize three states of matter.
6. Contraceptive methods.
7. Errors of refraction and its corrections.
8. Renal Functional tests.

III. Short answers on: (10x3=30)

1. Define Hypoxia and its types.
2. Functions of neuroglial cells.
3. Define Dalton's law and its application in Medicine.
4. Clinical uses of Arterial blood gas analyzers.
5. List the functions of large intestine.
6. Define cardiac cycle and name the ventricular events.
7. Types of medical gas cylinders.
8. Clinical uses of Erythrocyte Sedimentation Rate (ESR).
9. Define Vital capacity and its values.
10. List the functions of Blood.
