

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

[AHS 1123]

NOVEMBER 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. Describe in detail the intrinsic pathway of Coagulation. Add a note on Hemophilia.
2. Describe the Transport of Oxygen in the Blood. Add a note on Hypoxia.
3. Draw a labelled diagram showing nerve supply to the Urinary Bladder. Explain the Micturition reflex.

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

1. Explain Hazards of Mismatched Blood Transfusion.
2. Explain Passive transport.
3. Describe the digestion of Fats.
4. Describe Heart sounds.
5. Describe the principle that govern fluid dynamics.
6. Describe functions of Insulin.
7. Write about a) Coulomb's Law b) Ohm's Law.
8. Explain the role of surfactant in Pulmonary Function.

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

1. Classify Anemia.
2. Types of Colour blindness.
3. What is Gag reflex?
4. Two functions of Oxytocin.
5. Define Systolic Blood Pressure. What is the normal Blood Pressure in an Adult?
6. Write any three contraceptive methods in Males.
7. Liquid gas storage.
8. Draw a labelled diagram of ECG and what are the causes of P and Q waves?
9. Features of Cushing syndrome.
10. What is Bernouille's principle?
