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

[AHS 0222] FEBRUARY 2022 Sub. Code: 1702 (OCTOBER 2021 EXAM SESSION)

M.Sc. CRITICAL CARE TECHNOLOGY FIRST YEAR

(Candidates admitted from 2017-2018 onwards - Paper II) (Candidates admitted from 2020-2021 onwards - Paper III)

PAPER II & III – APPLIED BIOCHEMISTRY AND PHARMACOLOGY RELATED TO CRITICAL CARE

Q.P. Code: 281702

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate notes on:

 $(2 \times 20 = 40)$

- 1. Write in detail about the functions of Calcium and the factors regulating the blood calcium level. Explain in detail about hypercalcemia and hypocalcemia.
- 2. Enumerate Atropine substitutes. Describe the pharmacological actions, uses and adverse effects of Atropine.

II. Write Short Notes on:

(10x6 = 60)

- 1. Pyruvate dehydrogenase complex.
- 2. Vitamin K cycle.
- 3. Comparison between Kwashiorkor and Marasmus.
- 4. Classification of Enzymes.
- 5. Explain: Molarity and Molality.
- 6. Adrenaline in critical care.
- 7. Pre anaesthetic Medication.
- 8. Uses & adverse effects of Aspirin.
- 9. Antitussives.
- 10. Kinetics of elimination.