

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

[AHS 0423]

APRIL 2023

Sub. Code: 2603

**B.Sc. RESPIRATORY THERAPY
FIRST YEAR (Regulation 2014-2015 & 2018-2019 onwards)
PAPER III – BIOCHEMISTRY & PHARMACOLOGY
Q.P. Code: 802603**

Time: Three Hours

Answer All questions

Maximum : 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Describe in detail TCA cycle with its energetics.
2. Write in detail about sources, functions, RDA, deficiency manifestations of Vitamin D.
3. Classify Neuromuscular Blocking Agents. Explain in detail the mechanism of action, uses and adverse effect of Succinyl Choline.

II. Write Notes on:

(8 x 5 =40)

1. Define Pharmacokinetics. Add a note on First order and Zero order kinetics.
2. Classify Antihistamines. List their clinical applications.
3. Inhalational steroids.
4. Insulin and its analogue.
5. Structure of tRNA.
6. Enumerate Plasma proteins and their functions.
7. Respiratory acidosis.
8. Regulation of blood glucose.

III. Short Answers on:

(10 x 3 = 30)

1. Uses of sodium cromoglycate.
2. Any three factors governing choice of route of drug administration.
3. Loading dose.
4. Terbutaline.
5. Surface anaesthesia.
6. Any three uses of pyridoxine.
7. Hypokalemia.
8. Omalizumab.
9. Name the hormones secreted by adrenal gland.
10. Name three homopolysaccharides.
