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

[AHS 0423] APRIL 2023 Sub. Code: 1402

## B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY FIRST YEAR (Regulations 2010-2011, 2014-2015 & 2018-2019 onwards) PAPER II - BIOCHEMISTRY & PATHOLOGY

O.P. Code: 801402

Time: Three Hours Maximum: 100 Marks

**Answer All questions** 

I. Elaborate on :  $(3 \times 10 = 30)$ 

1. Define Enzyme. Explain in detail about factors affecting Enzyme activity.

- 2. Define Lipids. Classify Lipids and write the importance of Essential Fatty Acids in diet.
- 3. Define Inflammation. Mention its signs and explain in detail about vascular and cellular events of Acute Inflammation.

II. Write Notes on :  $(8 \times 5 = 40)$ 

- 1. Pathogenesis of Viral infections.
- 2. Causes of cell injury.
- 3. Give an account on disorders of immune system.
- 4. Classification and functions of proteins.
- 5. Kwashiorkor and Marasmus.
- 6. Sources and functions of Calcium.
- 7. Write the sources, functions and deficiency manifestations of Vitamin A.
- 8. Enzyme inhibition.

## III. Short Answers on: $(10 \times 3 = 30)$

- 1. Define cell injury and its types.
- 2. What is Gangrene?
- 3. Mention three fungal infections and its causes.
- 4. T cell and its function.
- 5. Define hyperplasia.
- 6. Define isoenzyme with example.
- 7. Protein denaturation.
- 8. Normal value in blood (Reference range)
  - i) Sodium
- ii) Potassium
- iii) Chloride.
- 9. Mention the calorific value of foods.
- 10. Define (a) pH
- (b) Molarity.