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

[MD 0723] JULY 2023 Sub. Code: 2018

## (MAY 2023 EXAM SESSION)

#### M.D. DEGREE EXAMINATION

# BRANCH V – PHYSIOLOGY PAPER I – GENERAL PHYSIOLOGY, BLOOD, DIGESTION AND TISSUES OF THE BODY

Q.P. Code: 202018

Time: Three Hours Maximum: 100 Marks

## I. Essay Questions:

 $(2 \times 15 = 30)$ 

- 1. Discuss the Mechanism of Secretion of HCl in stomach and enumerate various experimental evidences of HCl Secretion. Add a note on its Applied Physiology.
- 2. What is Second Messenger and explain in detail about role of Various Second Messengers in our body? Add a note on its Applied Physiology.

II. Short notes:  $(10 \times 5 = 50)$ 

- 1. Agranulocytes.
- 2. Succus Entericus.
- 3. Large Intestinal Movements.
- 4. ABO incompatibility.
- 5. All or None Law.
- 6. Natural Killer Cells.
- 7. Role of Maturation factors in Erythropoiesis.
- 8. Rigor mortis.
- 9. How is fluidity of the blood is maintained in the blood vessels?
- 10. Cell Organelles.

### **III. Reasoning Out:**

 $(4 \times 5 = 20)$ 

- 1. Explain the Physiological basis of prolonged clotting time in a case of Pathological Jaundice.
- 2. Conduction is possible in only one direction at chemical synapse. Why?
- 3. Absorption of Fluids and Electrolytes are more in Large Intestine. Explain.
- 4. Neutrophil count is decreased in Typhoid. Reason out.