

Time allowed: 3hrs

Max. Marks 74

The Paper consists of three sections A, B & C. Section A and B have four questions and each question from Section A and Section B will carry 11 marks each. Candidates are required to do two questions from each section A and B. Section C is compulsory consisting of 15 short answer type questions of 2 marks each.

## SECTION A

- Q1 Discuss the mechanism of digestion and absorption of proteins? (11)
- Q2 Write short notes on the following:
- (i) Oxygen dissociation curve (6)
- (ii) Chloride Shift (5)
- Q3 What is Haemopoiesis? Describe the process in detail. (11)
- Q4 Write short notes on the following:
- (i) Cardiac cycle and cardiac output (5)
- (ii) Origin and conduction of heart beat (6)

## SECTION B

- Q5 Describe in detail physical, chemical and electrical events of mechanism of muscle contraction. (11)
- Q6 Write short notes on the following:
- (i) Modes of excretion (6)
- (ii) Ornithine cycle (5)
- Q6 Discuss the mechanism of urine formation? (11)
- Q7 Briefly explain and draw structure of synapse. Differentiate between synaptic conduction and saltatory conduction? (11)
- Q8 Write short notes on the function of the following glands:
- (i) Thymus (6)
- (ii) Adrenal (5)

## SECTION C

- (15x2)
- I. Bile
- II. Gastric juice
- III. Transport of carbon dioxide
- IV. Hemoglobin
- V. Nucleic acid digestion
- VI. Platelets
- VII. Prothrombin
- VIII. Systole
- IX. Ventricles
- X. Heart beat
- XI. Threshold stimulus
- XII. Hypothalamus
- XIII. Hyposecretions
- XIV. All or none rule
- XV. Isotonic contractions