

Second Semester B. Sc. Examination

BIOCHEMISTRY

Paper - I

(Human Physiology)

Time : Three Hours]

[Max. Marks : 50

N. B. : (1) All questions are compulsory and carry equal marks.
 (2) Draw diagrams wherever necessary.

1 Explain in detail the mechanism of acid-base balance by the Kidney.

OR

Describe the histological structure of ovary and testes.

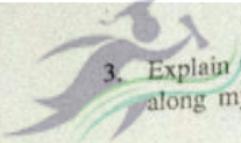
10

2. (a) Describe the structure and functions of Haemoglobin. $2 \frac{1}{2}$
 (b) Write a note on Bohr's effect. $2 \frac{1}{2}$
 (c) Write the fate of R.B.C. $2 \frac{1}{2}$
 (d) Write short note on plasma proteins. $2 \frac{1}{2}$

OR

Explain the mechanism of transport of CO_2 by blood.

10



3. Explain the mechanism of conduction of nerve impulse along myelinated and non-myelinated nerve fibre.

OR

Describe synapse and mechanism of synaptic transmission. 10

4. Explain Storage, Secretion and functions of Thyroxine. 10

OR

(a) Name the hormones secreted by anterior pituitary gland. Give one function of each hormone. 2 $\frac{1}{2}$

(b) What are hormones, how are they classified on the basis of their chemical nature ? 2 $\frac{1}{2}$

(c) Write the functions of Parathormone. 2 $\frac{1}{2}$

(d) Write short notes on cortisol. 2 $\frac{1}{2}$

5. Answer any ten of the following :—

(i) Name any two neurotransmitters. 1

(ii) What is meant by the Motor Neuron ? 1

(iii) Name any two properties of nerve fibres. 1

(iv) What is the functions of Progesterone ? 1

(v) What is second messengers ? 1

(vi) What is meant by T_3 ? 1

(vii) Write one function of Neutrophils. 1



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(viii) Which lymphocyte produces immunoglobulins ? 1

(ix) Which vitamin is necessary for blood coagulations? 1

(x) Name important cells of Juxtaglomerular Apparatus. 1

(xi) Name any two phases of menstrual cycle. 1

(xii) Write two functions of Androgens. 1