

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 testis.

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 Neutrophills. 1



(viii) Which lymphocyte produces immunoglobulins ?

1

NAGPURSTUDY.CO

(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