



TKN/KS/16-5807

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. Describe the structure and functions of Sex Hormones.

OR

Give a detail account of mechanism of urine formation.

10

2. Explain the mechanism of transport of CO_2 by blood.

OR

Describe the intrinsic mechanism of blood coagulation.

10

3. Describe the mechanism of conduction of impulse in nerve fibre.

10

OR

(a) Describe the structure of neuron.

5

(b) Describe the structure of synapse.

5

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Contd.

4. Describe the mechanism of action of steroid hormone. 10

OR

(a) Name the hormones secreted by posterior pituitary gland and describe their functions. 5

(b) Describe functions of insulin and glucagon. 5

5. Solve any **Ten** of the following :—

(i) Name the important cells of juxtaglomerular apparatus. 1

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

(iii) What are nephrons ? 1

(iv) Name the divalent cation required for coagulation. 1

(v) How many pyrrole ring are present in hememolecule ? 1

(vi) Name any two plasma proteins. 1

(vii) What is meant by bipolar neuron ? 1

(viii) Name any two neurotransmitters. 1

(ix) What is all or none law ? 1

(x) Name two hormones secreted by adrenal gland. 1

(xi) What is meant by T_3 and T_4 . 1

(xii) Name any two second messengers involved in hormone action. 1