



B.Sc. (Semester – V) Examination, October/November 2018

ZOOLOGY

Human Physiology and Biochemistry

Duration : 2 Hours

Total Marks : 80

- Instructions :** 1) Attempt **all** questions.
2) Figures to the **right** indicate marks **allotted** to the question.
3) Illustrate your answer **wherever** necessary.

1. Answer **any four** of the following :

16

- a) Structure and functions of eosinophils.
- b) Fibrinogen as plasma protein.
- c) Basic structure of neuron.
- d) Epinephrine as neurotransmitter.
- e) Linear and ring structure of glucose.
- f) Composition of lactose.

2. Answer **any four** of the following :

16

- i) Structural formulae of amino acids Glycine and Alanine.
- ii) Biological importance of waxes.
- iii) Coenzymes.
- iv) Significance of V max.
- v) Chain elongation in transcription.
- vi) Primer in replication.

3. A) Give an account of anaemia and its clinical significance.

6

OR

A) Describe briefly various stages of leucopoiesis.

6

B) Describe the structure and functions of erythrocytes.

6



4. A) Explain physiological process of synaptic transmission. 6
- OR
- A) Give an account of neurophysiological basis of memory. 6
- B) Write a note on the occurrence, composition and biological role of Starch. 6
5. A) Describe α helical structure of protein. 6
- OR
- A) Discuss briefly tertiary structure of proteins. 6
- B) Give an account of occurrence and biological importance of saturated fatty acids. 6
6. A) Illustrate isoenzymes and their physiological significance. 6
- OR
- A) Describe Non competitive inhibition of enzyme activity. 6
- B) Give an account of chain initiation during biosynthesis of proteins. 6
-