



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