

T.Y. B.Sc. Sem. V Oct. 2014

75

Zoology-II

Physiology, Haematology and Regulation

QP Code : 05049

(2½ Hours)

[Total Marks : 75]

- N.B. (1) All questions are compulsory.
(2) Figures to the right indicate full marks.
(3) Draw neat and labelled diagrams wherever necessary.

1. Explain the following :—
 - (a) Hydrolase and isomerase. 7
 - OR
 - (a) Enzyme activation. 7
 - (b) Mechanism of enzyme action. 8
 - OR
 - (b) Derivation of Michaelis-Menten equation. 8
2. Describe the following :—
 - (a) Classification of chemical messengers. 7
 - OR
 - (a) Gama-aminobutyric acid. 7
 - (b) Mode of working of neurotransmitters. 8
 - OR
 - (b) Catecholamine. 8
3. Explain the following :—
 - (a) Heat loss. 7
 - OR
 - (a) Feedback mechanism with example. 7
 - (b) Salt water ingestion and salt excretion. 8
 - OR
 - (b) Acclimation and acclimatization. 8
4. Describe the following :—
 - (a) Cardiac output. 7
 - OR
 - (a) Endocrine regulation of male reproductive system. 7
 - (b) Myogenic heart. 8
 - OR
 - (b) Menstrual cycle. 8

5. Write short notes on the following :—

(a) Effect of pH on enzyme activity.

OR

(a) Transferase.

(b) Aspartic acid.

OR

(b) Purine -ATP.

(c) Metabolic water with reference to terrestrial environment.

OR

(c) Aestivation.

(d) Suction pump in open circulation.

OR

(d) Chemical regulation of heart.