

6/H-63 (vii) (Syllabus-2015)

2018

(April)

ZOOLOGY

(Honours)

SEVENTH PAPER

**(Biochemistry, Animal Physiology and
Endocrinology)**

Marks : 56

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer Question No. 1 and any **four** from the rest

1. Answer any *three* of the following : 4×3=12
- (a) Explain the process of irreversible enzyme inhibition with an example.
 - (b) Describe briefly the structure of glycogen and hyaluronic acid.
 - (c) Discuss the process of gaseous exchange through gills.
 - (d) Write a note on various types of neurohormones.
 - (e) How is lactation regulated in mammals?

(Turn Over)

(2)

2. Deduce Michaelis-Menten equation and briefly describe the significance of K_m . 9+2=11
3. Describe the process of electron transport in mitochondria. Add a note on oxidative phosphorylation. 6+5=11
4. (a) What are amino acids? Give the classification of amino acids based on their chemical properties. 1+5=6
(b) Write a note on urea cycle. 5
5. Discuss the structure and functions of haemoglobin with suitable illustrations. 6+3+2=11
6. (a) Describe the mechanism of peptide hormone action. 6
(b) Write a note on placental hormones. 5
7. Give an account of various physiological changes that take place during menstrual cycle in human. 11

(3)

8. Write notes on any two of the following : 5½×2=11
- (a) Osmoregulation in fish
- (b) Pheromones
- (c) Embryo transfer technology
