

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

2 0 2 3

(May/June)

ZOOLOGY

(Honours)

**(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/Write on any three of the following :

4×3=12

- (a) Explain the effect of substrate concentration on enzyme activity with the help of Michaelis-Menten curve.
- (b) Coagulation factors involved in blood coagulation
- (c) Write a note on various types of neurohormones.

(2)

- (d) Modes of contraception in males and females
- (e) Transamination reaction
2. (a) Explain with suitable examples, the different types of enzyme inhibition. 6
- (b) Discuss the importance of diffusion and osmotic pressure in living organism. 2+3=5
3. Describe the process of electron transport in mitochondria. Add a note on oxidative phosphorylation. 6+5=11
4. (a) What are amino acids? Classify amino acids based on their chemical properties. 1+5=6
- (b) Write a note on urea cycle. 5
5. Describe the structure and functions of haemoglobin with suitable illustrations. 6+3+2=11
6. What is *in-vitro* fertilization? Describe in detail the process of IVF in human. 2+9=11

(3)

7. (a) Describe the mechanism of action of peptide hormones. 6
- (b) Write a note on placental hormones. 5
8. Write notes on any *two* of the following : 5½×2=11
- (a) Hormones of gastrointestinal tract
- (b) Glycogenolysis
- (c) Osmoregulation in fishes
