

## ZOOLOGY Paper-II

(Biochemistry and Animal Physiology – II (Zoo-402))

Time Allowed : 3 hours

Maximum Marks : 36

Note : Attempt five questions selecting one question from each Unit. Question No. 1 is compulsory.

1. Explain briefly :

- (a) Site of fatty acid oxidation
- (b) Fate of glycerol in lipolysis
- (c) Aminotransferase
- (d) Amino acids as fuel in muscle
- (e) Nephron
- (f) Juxtaglomerular apparatus
- (g) Epinephrine
- (h) Myoneural junction.

8×1

### UNIT-I

2. (a) Describe energy yield from complete oxidation of a fatty acid. 4
- (b) Describe steps required for oxidation of unsaturated fatty acids. 3
3. (a) Explain process of formation of ketone bodies. 4
- (b) How glucose is generated from sources other than glycogen in emergency ? 3

## UNIT-II

4. (a) How does amino acid degradation take place ? 4  
(b) How decarboxylation of amino acids takes place ? 3  
5. Describe catabolism of amino acids to form urea. 7

## UNIT-III

6. (a) How does kidney help to regulate water and electrolyte balance of body ? 3  
(b) Describe process of urine formation by kidneys. 4  
7. (a) Describe sliding filament mechanism of muscle contraction. 4  
(b) What is sarcomere ? 3

## UNIT-IV

8. Write notes on :  
(a) Propagation of impulse along axon  
(b) Structure of neuron 4+3  
9. (a) Describe structure and functions of hormones secreted by THYROID. 4  
(b) Describe role of FSH and LH in regulation of ovarian cycle. 3