

## HDV-003-1183002

Seat No.

## M. Sc. (Zoology) (Sem. III) (CBCS) Examination

November / December - 2017

**ZOOL-314**: Mammalian Physiology

Faculty Code: 003

Subject Code: 1183002

Time :  $2\frac{1}{2}$  Hours]

[Total Marks: 70

- 1 Answer the following very briefly: (Any Seven) 2×7=14
  - (a) Draw the structure of a lymph node
  - (b) Name few skin glands
  - (c) Draw the ultrastructure of glomerulus
  - (d) Name few functions of the lymph
  - (e) Name few protein digesting enzymes
  - (f) Name the layers of epidermis
  - (g) Give the names of salivary glands
  - (h) Name the digestive functions of bile
  - (i) Name functions of juxtaglomerular cells
  - (j) Name the bones of the middle ear.
- 2 Answer the following: (Any Two)

 $2 \times 7 = 14$ 

- (a) Write a short note on the functions of saliva
- (b) Describe the physiology of sense of smell
- (c) Briefly describe the structure of the lymphatic system
- **3** Answer the following:

 $2 \times 7 = 14$ 

- (a) Describe the physiological processes of thermoregulation in mammals
- (b) Write an illustrated note on the receptors for hearing

OR

**3** Answer the following:

 $2 \times 7 = 14$ 

- (a) Briefly describe the functional role of Bowman's Capsule
- (b) Describe the Chloride Shift in RBC

4 Answer the following:

 $2 \times 7 = 14$ 

- (a) Give an illustrated account of the mechanism of heart beat
- (b) Write a short note on the osmoregulation in marine mammals
- 5 Answer the following: (Any Two)

 $2 \times 7 = 14$ 

- (a) Write a diagrammatic note on the mammalian epidermis
- (b) Describe the exchange of gases between alveoli and capillary
- (c) Describe the stepwise events during muscle contraction
- (d) Give an illustrated account on the sensory cells of taste.