



JAY-003-018302 Seat No. _____

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

December – 2019

**Z - 314 : Mammalian Physiology
(Old Course)**

Faculty Code : 003

Subject Code : 018302

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

[Total Marks : 70

- 1 Answer the following very briefly : (any seven) **2×7=14**
- (a) Write names of the layers of epidermis.
 - (b) Write the digestive functions of bile.
 - (c) Name the functions of nephron.
 - (d) Name the functions of lymph.
 - (e) What the process of ventilation does?
 - (f) Give the names of salivary glands.
 - (g) What is osmoregulation?
 - (h) Write the names of skin layers.
 - (i) Give functions of juxtaglomerular cells.
 - (j) Name the bones of the middle ear.
- 2 Answer of the following (any two) **7×2=14**
- (a) Write a short note on the lymphatic system.
 - (b) Describe the physiology of thermoregulation.
 - (c) Describe the mechanism of heart beat.
- 3 Answer the following : **7×2=14**
- (a) Describe the physiology of the receptor cells for hearing.
 - (b) Describe the physiology of sense of smell.

OR

- 3 Answer the following : 7×2=14
- (a) Write a short note on the digestive functions of saliva.
 - (b) Write a short note on mammalian epidermis.
- 4 Answer the following : 7×2=14
- (A) Write a short note on the 'Chloride Shift' during the transport of CO₂ in blood.
 - (B) Write a short note on the osmoregulation in desert mammals.
- 5 Answer the following : (any two) : 7×2=14
- (a) Describe the diffusion of O₂ and CO₂ between alveoli and capillary end.
 - (b) Write a short note on the sense of taste.
 - (c) Write a brief note on the molecular events during muscle contraction.
 - (d) Write a brief note on the functional role of Bowman's Capsule.
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