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S-2154

M. Sc. (Second Semester)

Examination, 2024-25

ZOOLOGY

Paper – Second

(Animal Physiology)

(SOLS/Zool/C-008)

Time : Two Hours]

[Maximum Marks : 60

Note : Attempt any *four* questions. All questions carry equal marks.

1. Describe the exchange of respiratory gases at the pulmonary surface and their transport by blood during respiration.
2. Draw well labeled diagram of mammalian nephron explaining the mechanism of urine formation. Describe the functions of aldosterone, ADH and rennin-angiotension system in renal physiology.
3. Define haemopoiesis and haemostasis? Explain the series of biochemical reactions involved in blood coagulation by giving the schematic diagram.

[P.T.O.]

4. Write short notes on any two of the following :
 - (a) Cardiac cycle and Cardiac out put.
 - (b) Conduction and regulation of Heart Beat.
 - (c) Secretions of gastrointestinal tract.
 5. Describe the physiologic anatomy of synapse along with mechanism of synaptic transmission.
 6. Explain with the suitable diagrams about the sliding filament theory of muscle contraction.
 7. What is thermo regulation? Explain how poikilotherms compensate their body temperature during cold and hot.
 8. Write explanatory notes on the following :
 - (a) Aestivation and hibernation.
 - (b) Photochemistry of Vision.
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