

2024

ZOOLOGY — HONOURS

Paper : CC-9

(Animal Physiology : Life Sustaining System)

Full Marks : 50

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Question no. 1 is compulsory and answer any four questions from the rest.

1. Answer *any five* questions : 2×5
 - (a) What do you mean by Cardiac output?
 - (b) Distinguish between trypsin and pepsin.
 - (c) Define Haldane effect.
 - (d) Differentiate between chyme and chyle.
 - (e) What is anatomical dead space?
 - (f) Mention the functions of SA node and AV node.
 - (g) State the functions of clotting factors IV and X.
 - (h) What is carbon monoxide poisoning?
2.
 - (a) Describe the process of digestion of carbohydrate.
 - (b) Name two Gastrointestinal hormones. State one function of each.
 - (c) Mention the function of HCl in Gastric juice. 4+(2+2)+2
3.
 - (a) Mention the stages of erythropoiesis with diagram.
 - (b) Write a note on myocardial fibre. (3+2)+5
4.
 - (a) What do you mean by thermoregulation? Discuss the mechanism of thermoregulation in camel.
 - (b) Comment on the structure and function of JGA. (2+4)+4
5. Define Cardiac Cycle. Discuss the different phases that occur in a Cardiac Cycle. What is coronary circulation? 2+6+2

Please Turn Over

6. (a) Describe the mechanism of Tubular Reabsorption in the Nephron.
(b) State the function of Vasa recta.
(c) Discuss the role of ADH in Urine formation. 5+3+2
7. (a) What is fibrinolysis?
(b) Name two anticoagulants.
(c) Discuss the steps involved in blood clotting in human. 2+2+6
8. Write short notes on (*any two*) : 5+5
(a) Osmoregulation in freshwater fish
(b) CO₂ transport
(c) Glomerular ultrafiltration
(d) Absorption of fat in human.
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