



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY

Question Paper

B.SC. Honours Examinations 2022

(Under CBCS Pattern)

Semester - IV

Subject: ZOOLOGY

Paper: C 9-T

(Animal Physiology : Life Sustaining Systems)

Full Marks : 40

Time : 2 Hours

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

The figures in the margin indicate full marks.

1. Answer any **four** from the following questions : 5×4=20
- (a) Write short note on Hamburger Phenomenon. 5
- (b) Draw and describe the structure of haemoglobin. 5
- (c) Define Osmoregulator and Osmoconformer with suitable example. 2½+2½
- (d) What is diuretics? State the role of Epinephrine and ANP in blood pressure regulation. 1+2+2

(e) Describe the process of Blood Clotting system. 5

(f) With suitable diagram, describe the Renin-Angiotensin Aldosterone system. 5

2. Answer any *two* from the following questions : 10×2=20

(a) Write the mechanism of HCl secretion in stomach. Write the role of bile in fat digestion. 6+4

(b) Write a short note on carbon monoxide poisoning. Describe the mechanism of carbon dioxide transport in blood. 3+(2+5)

(c) Define Cardiac output. Briefly describe the origin and conduction of cardiac impulses through conducting myocardial fibers of mammalian heart with diagram. 2+8

(d) Differentiate between shivering and non-shivering thermogenesis. Comment on the intrinsic and extrinsic pathway of prothrombin activator formation. Write a note on the mechanism of dilute urine formation. 2+3+5
