

This question paper contains 3 printed pages.

5121A

Your Roll No.

Subsidiary for B.Sc. Honours J
II Examination

ZOOLOGY— Paper IV
(Animal Physiology)

(Admissions of 2003 and before)

Time : 3 hours

Maximum Marks : 50

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

*Attempt five questions in all, including
Question No. 1 which is compulsory.*

1. (a) Give the exact site of synthesis of:

(i) Adrenalin

(ii) Renin

(iii) Oxytocin.

3

(b) Give the functions of the following:

(i) Platelets

(ii) Fibrinolysin

(iii) Salivary amylase

(iv) Bile salts.

4

P. T. O.

- (c) Fill in the blanks:
- (i) A person with blood group is called universal donor and with blood group is called universal recipient.
- (ii) Renin converts to
- (iii) Pancreas is as well as gland. 3
- (d) Define:
- (i) Anemia
- (ii) Rigor mortis
- (iii) Hypoglycemia
- (iv) Graafian follicle. 4
2. (a) What are 'Secretagogues'? Give examples. 2
- (b) Outline the factors that stimulate and inhibit gastric secretion during cephalic, gastric and intestinal phases. 7
3. (a) Explain Rh factor. 2
- (b) What is 'hemostasis'? Explain the extrinsic mechanism of blood coagulation with the help of a flow diagram. 2+5
4. (a) Distinguish between obligatory and facultative water reabsorption by the renal tubule. How is facultative reabsorption controlled? 4+1

- (b) What do you understand by effective filtration pressure? Calculate its value in the renal corpuscles. 4
5. Explain, with the help of diagrams, how CO_2 is transported by blood. Explain Haldane's effect. 7+2
6. (a) What is TRIAD? What is its significance in muscle contraction? 1+3
- (b) With the help of suitable diagrams, discuss the role of muscle proteins in the process of muscle contraction. 5
7. Write short notes on any three:
- (i) Blood groups
 - (ii) Pancreatic hormones
 - (iii) Saltatory conduction of nerve impulses
 - (iv) Nutritional value of vitamins. 3,3,3