

This question paper contains 3 printed pages.

4421

Your Roll No.

Subsidiary for B.Sc. Honours / II AS

ZOOLOGY— Paper IV

(Physiology w.r.t. Human)

(Admissions of 2004 and onwards)

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) Distinguish between the following:

(i) Diabetes mellitus and insipidus

(ii) Fatigue and tetany

(iii) Plasma and serum

(iv) Endocrine and exocrine glands.

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(b) Define the following:

(i) Diuresis

(ii) Rouleaux formation

(iii) Rigor mortis

(iv) Hyperglycaemia.

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P. T. O.

- (c) Substitute one term for each of the following:
- (i) Disease due to lack of iodine in diet
 - (ii) Ions that trigger muscular contraction. 2
2. (a) How is oxygen transported in blood? 4
- (b) Describe the phenomenon of *chloride shift*. 5
3. Provide a detailed account of the physiology of female reproduction. 9
4. (a) Provide an account of the composition of blood. 3
- (b) Discuss the process of blood coagulation. 6
5. Describe in detail the structure of skeletal muscles. Explain the basic mechanism of muscular contraction and relaxation. 9
6. (a) Provide a detailed account of the functioning of thyroid gland. 7
- (b) Briefly describe the disorders involving thyroid gland functioning. 2
7. Write short notes on any *three* of the following:
- (a) Respiratory volumes