

4 SEM TDC ZOOH (CBCS) C 9

2023

(May/June)

ZOOLOGY

(Core)

Paper : C-9

(Animal Physiology : Life Sustaining Systems)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. (a) Fill in the blanks : 1×5=5
- (i) Salivary amylase converts starch into ____.
 - (ii) ____ prevents the process of blood clotting.
 - (iii) Oxyhaemoglobin after giving up its oxygen is called ____.
 - (iv) The ____ prevents the entry of food into the respiratory tract.
 - (v) Deficiency of oxygen in body tissue is called ____ condition.

(2)

(b) Write short notes on (any two): $4 \times 2 = 8$

(i) Urine formation

(ii) Regulation of water balance

(iii) Nephron

2. Describe the chemical digestion of carbohydrate and protein in the mammalian digestive tract. $4 + 4 = 8$

Or

Describe briefly the mechanism of hormonal control of secretion of enzymes in gastrointestinal tract. 8

3. What is carbon monoxide poisoning? Write a note on chemical control of respiration. $3 + 5 = 8$

Or

Draw a labelled diagram of trachea. Write a note on respiratory pigments. $4 + 4 = 8$

4. Describe the structure of mammalian heart with a labelled diagram. What is ECG? $6 + 2 = 8$

Or

Discuss about nervous and chemical regulation of heart rate. What is blood pressure? Distinguish blood pressure from pulse pressure. $4 + 2 + 2 = 8$

(3)

5. Write about the different components of blood and their functions. Write a note on structure and functions of haemoglobin. $3 + 5 = 8$

Or

Define hemostasis. Write a note on the process of blood coagulation. $1 + 7 = 8$

6. What is Rh factor? Give an account of different blood groups. $2 + 6 = 8$

Or

Discuss the Kallikrein-Kininogen system. What is the difference between complement system and fibrinolytic system? $4 + 4 = 8$
