



**WEST BENGAL STATE UNIVERSITY**  
B.Sc. Honours 4th Semester Examination, 2022

**ZOOACOR09T-ZOOLOGY (CC9)**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.  
Candidates should answer in their own words and adhere to the word limit as practicable.*

1. Answer any **eight** questions from the following: 2×8 = 16
- (a) Which part is known as pacemaker and why?
  - (b) Mention two differences between lymphocyte and monocyte.
  - (c) What is Bohr effect?
  - (d) What are polycythemia and erythropania?
  - (e) What do you understand by Uricotelism?
  - (f) Distinguish between plasma and serum.
  - (g) Write down two functions of Saliva.
  - (h) What are stenohaline and euryhaline animals?
  - (i) What is the function of buffer solution?
  - (j) Mention the location and function of podocyte.
  - (k) What do you know about HbA and HbF?
  - (l) What is vasa recta?
2. Answer any **three** questions from the following: 3×3 = 9
- (a) Mention the fate of different components of Hb during metabolism.
  - (b) How does Kidney regulate acid-base balance in our body?
  - (c) What is TMAO? State its role in osmoregulation. 1+2
  - (d) Discuss about various forms of CO<sub>2</sub> transport through blood in humans.
  - (e) What is 2, 3 BPG? State its effect on oxygen-haemoglobin dissociation curve. 1+2
  - (f) Mention the composition of gastric juice. State the function of oxyntic glands. 1+1+1  
Name one carbohydrate digesting enzyme.
3. Answer any **three** questions from the following: 5×3 = 15
- (a) What is renal corpuscle? Draw a labelled diagram of glomerulus. 1+4
  - (b) What is hyperthermia? How does the acclimatization of heat take place? 2+3

- (c) Delineate the formation and function of chylomicrons.
- (d) Name three accessory organs of digestion. Mention the role of bile in digestion.
- (e) Elaborate the osmoregulatory process in marine teleost.
- (f) Name different parts of lower respiratory tract. Distinguish between breathing and respiration.

$1\frac{1}{2} + 3\frac{1}{2}$

**N.B. :** *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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