



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 4th Semester Examination, 2020

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: $2 \times 8 = 16$
- (a) What are the different types of movements of small intestine?
 - (b) Distinguish between cortical and juxtaglomerular nephrons.
 - (c) Write the function of Gall bladder.
 - (d) What is Carboxyhemoglobin?
 - (e) Name four factors which influence Haemoglobin-Oxygen Equilibrium.
 - (f) What is Cardiac cycle?
 - (g) What is haemopoiesis?
 - (h) What is afferent branchial system?
 - (i) What is Thermoregulation?
 - (j) Name two hormones and their respective roles related to urine formation.
 - (k) Name a proteolytic and a lipolytic pancreatic enzyme.
 - (l) Write about the regulation of acid – base balance by the lungs.
 - (m) What is chylomicron?
 - (n) How does cardiac muscle differ from other muscles?
 - (o) What is piloerection?

2. Answer any ***three*** questions from the following: $3 \times 3 = 9$
- (a) Explain Bohr effect with proper illustration of oxygen dissociation curve. 3
 - (b) Where does digestion of carbohydrate begin? Name the enzyme responsible for it and the fate of carbohydrates after the process. What is chyme? $1 + 0.5 + 0.5 + 1$

- (c) What is cardiac output? Comment on coronary circulation. 1+2
- (d) What is haematopoiesis? Mention its site in an adult human. State the distinguishing features between Red blood cells and White blood cells. 0.5+0.5+2
- (e) Write a short note on juxta – glomerular apparatus.
- (f) What are endotherms? How can they increase heat production in their body? 1+2
3. Answer any ***three*** questions from the following: 5×3 = 15
- (a) Discuss the composition, function and regulation of salivary secretion. 1.5+1.5+2
- (b) Describe the phases of cardiac cycle with diagram. 5
- (c) Explain the process of blood clotting and mention the role of Vitamin K in this process. 4+1
- (d) Describe the composition and functions of Bile. What is bilirubin? 4+1
- (e) Describe the mechanism of Osmoregulation in fresh water teleost and in Shark. 3+2
- (f) Describe the different parts of a nephron with a diagram. 3+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.*

