



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 CO₂ 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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WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 4th Semester Examination, 2022

ZOOACOR08T-ZOOLOGY (CC8)

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) What is Syninx? State its function.
 - (b) How many air sacs are found in birds? Name them.
 - (c) What is carnassial teeth?
 - (d) Name the integumentary derivatives found in man.
 - (e) Define ARO.
 - (f) What do you mean by Holostylic Jaw Suspension? Where do you find it?
 - (g) What do you mean by tripartite concept?
 - (h) Define aortic arch. How many aortic arches are found in man?
 - (i) What is your dental formula?
 - (j) Mention origin and distribution of V-th and VII-th cranial nerves.
 - (k) Define double respiration.
 - (l) Name the different valves of mammalian heart and mention their position.

2. Answer any **three** questions from the following: 3×3 = 9
 - (a) Draw and describe briefly about reptilian heart. 1 $\frac{1}{2}$ + 1 $\frac{1}{2}$ = 3
 - (b) Explain mesonephric Kidney with simple diagrams. 3
 - (c) Describe the anatomy of mammalian ruminant stomach with suitable diagram. 1 $\frac{1}{2}$ + 1 $\frac{1}{2}$ = 3
 - (d) What do you mean by true horn? Where are they found? 2+1=3
 - (e) Explain Rheoreceptors with examples. 3

3. Answer any **three** questions from the following: 5×3 = 15
 - (a) Give a comparative account of aortic arches from fishes to birds through evolutionary lineage. 5
 - (b) Describe the structure of mammalian Skin with diagram. 3 $\frac{1}{2}$ + 1 $\frac{1}{2}$ = 5
 - (c) Classify different types of teeth found in mammals. 5
 - (d) Define cranial nerve. Mention the names of cranial nerves found in Vertebrates. 1+4=5
 - (e) Write short notes on: (Any **two**) 2 $\frac{1}{2}$ × 2 = 5
 - (i) Foramen of Panizza (ii) Choroid Plexus (iii) Stomach of Birds

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