

U.G. 4th Semester Examination - 2021**ZOOLOGY****(HONOURS)****Generic Elective (GE)****Course Code : ZOOL-H-GE-T-02****(Comparative Anatomy, Developmental Biology of
Vertebrates and Ecology)**

Full Marks : 20

Time : 1 Hour

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in
their own words as far as practicable.*

1. Answer any **five** of the following : $1 \times 5 = 5$
 - a) What is prong horn?
 - b) What is the codont dentition?
 - c) What is venous heart?
 - d) What is head kidney?
 - e) State the functions of Olfactory nerve.
 - f) Define oogenesis.
 - g) What are the main functions of Amniotic fluid?
 - h) Define Autecology.
2. Answer any **one** question of the following: $5 \times 1 = 5$
 - a) What are main functions of Sebaceous gland?
Briefly describe structure of teeth. $2+3$

- b) State the modifications of aortic arches in reptiles with proper diagram. What is metanephros? $3+2$
- c) What is ecological succession? Give one example. What is climax community? $2+2+1$

3. Answer any **one** question of the following: $10 \times 1 = 10$
 - a) Define conservation. What are the main aims of conservation? Differentiate between in-situ and ex-situ conservation. Give one example each of national park, wildlife sanctuary and biosphere reserve of West Bengal. What is red data book? $2+2+2+3+1=10$
 - b) Define spermiogenesis. Describe the process of formation of proximal and distal centrioles during spermiogenesis. State the functions of sertoli cells. Briefly describe the gastrulation process in frog. $1+2+2+5=10$
 - c) Briefly describe the structure of avian heart with labelled diagram. What is foramen of panizza? Name different types of epidermal glands of mammals with their functions and modifications. $(3+3)+1+(1+1+1)=10$
