U.G. 3rd Semester Examination - 2022

ZOOLOGY

[HONOURS]

Course Code : ZOOL-H-CC-T-05

Full Marks : 40   Time : $2\frac{1}{2}$ Hours

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 questions:

   $2 \times 5 = 10$

   a) What is endostyle?

   b) Describe two characters of Chondrichthyes.

   c) What is rete mirabile?

   d) Name common and scientific names of two poisonous snakes found in India.

   e) What are the advantages of bird migration?

   f) Write two salient features of the class Mammalia.

   g) What is the purpose of the Doppler effect in echolocation?

2. Answer any **two** of the following questions:

5×2=10

a) What is retrogressive metamorphosis. Write a short note on retrogressive metamorphosis in *Ascidia*. 2+3=5

b) What is parental care? Give a short note on direct mode of parental care in Amphibia. 2+3=5

c) What is continental drift theory? What are the main pieces of evidence that support the theory of plate tectonics? 2+3=5

d) Define the term "fish migration". Describe spawning migration, feeding migration, and seasonal migration in fish. 2+3=5

3. Answer any **two** of the following questions:

10×2=20

a) What is wheel organ? Describe mechanism of digestion in *Branchiostoma* with special reference to significance of hepatic diverticulum with proper diagram. 2+6+2=10

b) What is Wallece's line? Describe geographical limits and distinctive bird and mammalian fauna of Neotropical, Ethiopian, Oriental and Australian realms. 2+2+2+2+2=10

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c) Distinguish between poisonous and non-poisonous snakes. Name the muscles involved in biting of snakes. Describe biting mechanism of snakes with suitable diagram. 2+2+6=10

d) Write short notes on (any **two**): 5×2=10

   i) Swim bladder in fish

   ii) Migration in fish

   iii) Classification of the class Aves up to subclass with examples

   iv) Hormonal control of metamorphosis in Amphibia

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