

U.G. 4th Semester Examination - 2022

ZOOLOGY

[HONOURS]

Generic Elective Course (GE)

Course Code : ZOOL-H-GE-CC-T-02

Full Marks : 40 Time : 2½ 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:

2×5=10

- Differentiate between sebaceous gland and sudoriferous gland in mammals.
- What do you mean by polyphyodont dentition?
- What is the function of 'foramen of Panizza'?
- Write down the names for IXth and Xth cranial nerves in humans.
- What is meroblastic cleavage? Where it is found?
- What is compensatory hypertrophy?

g) What is ecesis?

h) Define synecology with example.

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

5×2=10

a) How is oxygenated and deoxygenated blood separated in a double circuit heart? What is Retia mirabilia? 3+2=5

b) What do you mean by extra embryonic membranes? What are the different kinds of extra embryonic membranes found in chick? 1+4=5

c) Differentiate between exponential and logistic growth. What is carrying capacity? 3+2=5

d) What does an ecological pyramid represent? How many types of ecological pyramids are found? What kind of pyramid is found in parasitic food chain? 1+2+2=5

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

10×2=20

a) What is mesonephros? Explain formation of mesonephric kidney with proper diagram. In which animal it is found? What is vasa efferentia? 2+4+2+2=10

- b) What is spermiogenesis? Explain this process in detail with labelled diagram. Comment on the hormonal control of spermatogenesis.

$$2+5+3=10$$

- c) Define succession. What are the basic types of succession found? Explain the process of succession by giving suitable example. Comment on any one theory of climax concept.

$$1+3+4+2=10$$

- d) What is the difference between *in-situ* and *ex-situ* conservation? What is Tiger project? Which sanctuary in West Bengal is reserved for tiger? What are main features of wildlife protection act established in 1972?

$$3+2+1+4=10$$
