

U.G. 2nd Semester Examination - 2020

ZOOLOGY

[GENERIC ELECTIVE]

Course Code : ZOOH-GE-T-02

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** questions: 2×5=10
 - a) Distinguish between horn and antler.
 - b) Give the dental formula of man and elephant.
 - c) What are the types of mammalian uteri?
 - d) How the ear ossicles of human are derived?
 - e) Compare radial and spiral cleavage with examples.
 - f) What is epimorphosis?
 - g) What is dominance-diversity curve?
 - h) Name two Wildlife sanctuaries and two National parks of India.
2. Answer any **two** questions: 5×2=10
 - a) Compare the structure of heart and aortic

arches in reptiles and amphibians. Give suitable diagrams.

- b) Describe the structure of a mammalian molar teeth.
 - c) How succession occurs in hydrosere?
 - d) Write short note on – "Organizer Concept".
3. Answer any **two** questions: 10×2=20
 - a) What are the functions of 'hair' in mammals? Compare autostylic and hyostylic jaw suspensions. 4+6
 - b) Compare archaenephric, mesonephric and metanephric kidneys. Name four major cranial nerves along with their functions. 6+4
 - c) Describe the universal model of energy flow in an ecosystem. Define species diversity and species richness. How Sharron Index is calculated? 5+3+2
 - d) Write notes on (any **four**) : $2\frac{1}{2} \times 4$
 - i) Thecodont dentition
 - ii) Spermiogenesis
 - iii) Gause's principle
 - iv) Wildlife Protection Act (1972)
 - v) Fertilization cone
 - vi) Fast block of polyspermy.

[Turn over]