

U.G. 4th Semester Examination - 2022

ZOOLOGY

[HONOURS]

Course Code : ZOOL-H-CC-T-8

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** questions of the following:

2×5=10

- Mention the position of Ductus Botalli and Ductus Cuvieri.
- Give an example of mixed type cranial nerve and mention its functions.
- What is the difference between duplex and bipartite uterus?
- Define Foramen Ovale and fossa ovalis.
- Which air sac of pigeon is not present in pair? Mention either it is inspiratory or expiratory air sac.
- What are the functions of papilla amphibiorum and papilla basilaris?

[Turn Over]

- In mammals Meckel's cartilage transforms into _____ and pterygoquadrate transforms into _____.
- What are the different sub-layers of amphibian skin?

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

5×2=10

- If someone blows suddenly in your eye why you see flashes of light? Describe the law that is followed in this type of phenomenon. Mention the functions of Pacinian corpuscle. 2+2+1
- Differentiate the stomach of monotremes with marsupials.
- Briefly describe different types of mammalian uteri.
- Differentiate between pseudobranch and holobranch. Mention the name of the bar present between two bronchi of birds. 4+1

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

10×2=20

- Write down a comparative account of jaw suspension in different vertebrates. Why grain eating birds take pebbles along with their food?

8+2

- b) Describe the structure of a typical feather.
What functions the coverts play in birds? What
is function of alula? 6+2+2
- c) Describe the evolution of kidney in vertebrates.
What is the advantage of silica deposition in
Selenodont teeth? 8+2
- d) Briefly describe the evolutionary changes in
aortic arches with proper diagrams. How claws
are different from nails? 8+2
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