

U.G. 1st Semester Examination - 2021**ZOOLOGY****[HONOURS]****Course Code : ZOOL-H-CC-T-01**

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: $2 \times 5 = 10$
- What is Schuffner's dots?
 - Distinguish hydrorhiza and hydrocaulus.
 - Draw a schematic diagram of water flow in syconoid canal system.
 - Describe the structure of a tetranucleated cyst of *Entamoeba*.
 - Describe the structure of microfilaria.
 - Mention the morphological differences between male and female *Ascaris*.
 - What are the components of coral reef?

- How many labia found in *Ascaris*? Mention their name.
2. Answer any **two** questions: $5 \times 2 = 10$
- How does Taxonomy differ from Systematics and Classification? 5
 - Describe with the help of suitable diagram the locomotory organ of *Euglena*. 5
 - Enumerate important characters which help the Platyhelminthes to lead a parasitic mode of life. 5
 - Write the characters of the phylum Ctenophora with example. 5
3. Answer any **two** questions: $10 \times 2 = 20$
- Write down the systematic position of the following and justify your answer mentioning at least two characters of each taxon: i) *Amoeba* (up to Phylum), ii) *Sycon* (up to Class), iii) *Obelia* (up to Class) and iv) *Wuchereria bancrofti* (up to Class)
 - What is Binominal nomenclature? Write down the international rules for Binominal nomenclature. Enumerate the law of priority. $2+3+5=10$

- c) Give an account of nuclear changes during conjugation in *Paramecium* sp. Discuss briefly the conditions of conjugation.

6+4=10

- d) i) Describe the life cycle of *Plasmodium vivax* in mosquito vector with suitable diagram. 5

- ii) Describe the structure of a trophozoite or vegetative stage of *Entamoeba histolytica*. 5
