

121/Zool

UG/1st Sem/ZOOL(H)/CC-01-T/19

U.G. 1st Semester Examination - 2019

ZOOLOGY

[HONOURS]

Course Code : ZOOL(H)/CC-01-T

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.*

Answer all the questions.

1. Answer any **five** questions:

2×5=10

- a) State the function of gastrozooids.
- b) What is homonym?
- c) Write down the scientific name of portuguese man-of-war and mention the phylum it belongs to.
- d) What is mesenchyme?
- e) State the role of archeocytes.
- f) What do you mean by synapomorphy?
- g) Name two enidarian larvae.
- h) What is law of priority?

[Turn over]

2. Answer any **two** questions: $5 \times 2 = 10$

a) Describe the architecture of Sycon type canal system with suitable diagram. State the role of prosopyle and apopyle. $(2+1)+2=5$

b) Write a note on miracidium larva. Enumerate the salient features of phylum platyhelminthes. $3+2=5$

c) Name the phylum in which 'comb jellies' belong to. State the characteristic features of that phylum. $2+3=5$

d) Justify the systematic position of :

i) *Gorgonia* sp.

ii) *Chaetopterus* sp. $2.5+2.5=5$

3. Answer any **two** questions: $10 \times 2 = 20$

a) Discuss conjugation in *Paramecium* sp. with proper diagram. Explain pseudopodia formation with the help of the 'surface tension theory' and 'change of viscosity theory'. $(4+2)+(2+2)=10$

b) What is atoll? Mention the different types of hydrozoan polyps. Describe the life history of *Obelia* with suitable diagram. $2+3+(3+2)=10$

c) Name the causative agent of elephantiasis and mention the definitive host of it. Discuss the

sexual cycle of *Plasmodium vivax* with suitable diagram. Comment on the pathogenicity and control measures of *Ascaris lumbricoides*.

$$(1+1)+(3+1)+(2+2)=10$$

- d) Enumerate the characteristic features of metazoa. Distinguish between bilateral, radial and biradial symmetries. Classify corals on the basis of structural organization. Give an example of solitary coral.

$$3+3+3+1=10$$