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UG/1st Sem/ZOO(H)/T/19

2019

B.Sc.

1st Semester Examination

ZOOLOGY (Honours)

Paper - C 1-T

Full Marks : 40

Time : 2 Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

1. Answer any *five* questions of the following :

5×2=10

- (a) 'Nuclear dimorphism is shown by *Paramecium* sp' — Explain. 2
- (b) Differentiate between metamerism and pseudometamerism. 2
- (c) State the basic differences between conjugation and sexual reproduction. 2
- (d) Diagrammatically show the course of water current in syconoid and leuconoid types of canal system of sponges. 2

[Turn Over]

1/49-2500

(2)

✓(e) Define synonymy and homonymy. 2

✓(f) Name the larval forms of platyhelminthes. 2

✓(g) What are phasmids ? Name one animal having phasmids. 2

(h) What is polyembryony ? Where do you witness such phenomenon ? 2

2. Answer any *four* questions : 4×5=20

(a) What do you understand by principle of priority in Biological Nomenclature system ? Name the six kingdoms and three domains as proposed by Carl Woese. 2+3

✓(b) (i) Differentiate between radial symmetry and bilateral symmetry.

(ii) Throw some light on the evolutionary significance of bilateral symmetry. 2+3

✓(c) (i) Enumerate the sexual dimorphism witnessed in male and female *Ascaris* sp.

(ii) Write a note on primary migration of larva of *Ascaris* sp within the infected host.

(iii) What is Loeffler's syndrome ? 2+2+1

(3)

(d) (i) Name any two flagellated protozoa.

(ii) Describe the ultrastructure of a flagellum.

2+3

(e) (i) Discuss polymorphism in *Physalia* sp.

(ii) Comment on the significance of polymorphism.

3+2

(f) (i) Classify spicules found in sponges on the basis of its size and also of its chemical composition.

(ii) What is spongin ?

4+1

3. Answer any *one* question :

1×10=10

(a) (i) Give a brief description of the asexual phase of life-cycle of *Plasmodium vivax*.

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(ii) Name the phylum to which *P. vivax* belongs to and also state two important features of that phylum.

2½

(iii) Differentiate primary host from secondary host.

1½

[Turn Over]

(4)

- (b) (i) Diagrammatically compare Fringing Reef
Barrier Reef & Atoll. Where would one get
to see coral reefs in India ? 3+1.
- (ii) List the important ecological functions of
coral reefs. 3
- (iii) Write a note on the global conservation
strategies of coral reefs. 3
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