

UG 1st Semester Examination 2021

ZOOLOGY (Honours)

Paper : DC-1

(Non-Chordates I: Protists to Pseudo-coelomates)

Full Marks: 25

Time: Two hours

The figure in the margin indicates full marks.

Candidates are requested to give their answers in their own words as far as practicable.

1. Answer any *eight* questions:

$\frac{1}{2} \times 8 = 4$

- (a) Give the scientific name of Venus flower basket.
- (b) Which cell type is exclusively found in Cnidaria?
- (c) The strobila of tape worm is made of sexual units called _____. (Fill in the blank)
- (d) Name the infective stage of *Ascaris lumbricoides*.
- (e) Give an example of class Trematoda.
- (f) Lasso cells are found in phylum _____. (Fill in the blank)
- (g) The embryo of *Wuchereria bancrofti* is known as _____. (Fill in the blank)
- (h) Which protein link connects the peripheral doublets present in the shaft of cilia?
- (i) The inhabitants of extreme environments like thermal vents belong to the kingdom _____.
- (j) Dinoflagellates are plant-like protists. (True/False)
- (k) The free-swimming larva of Cnidarians is called _____.
- (l) The causative agent of liver rot in sheep is _____.

2. Answer any *two* questions:

$2\frac{1}{2} \times 2 = 5$

- (a) Write the characteristic features of Cercaria larva with proper diagram.
- (b) Give a brief account of Atoll reef.
- (c) What are spicules? State its taxonomic significance.
- (d) Briefly describe the parasitic adaptation of *Ascaris lumbricoides*.

$(1 + 1\frac{1}{2} = 2\frac{1}{2})$

3. Answer any *four* questions

4×4=16

- (a) Describe the ultrastructure of flagella with diagram.
- (b) Briefly discuss on “metagenesis of *Aurelia*” with diagram.
- (c) Write a short note on syconoid type of canal system with diagram.
- (d) Comment on the pathogenicity and control measures of *Entamoeba histolytica*.
- (e) Why *Fasciola hepatica* is called digenetic parasite? Schematically represent the life cycle of this parasite. (1½+2½=4)
- (f) Mention two characters of class Calcarea and class Hexactinellida with an example of each. (2+2=4)
- (g) Diagrammatically represent the stages of conjugation in *Paramecium* sp. State its significance. (2+2=4)