



**WEST BENGAL STATE UNIVERSITY**  
B.Sc. Honours 1st Semester Examination, 2021-22

**ZOOACOR01T-ZOOLOGY (CC1)**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.  
Candidates should answer in their own words and adhere to the word limit as practicable.*

1. Answer any **eight** questions from the following: 2×8 = 16
- Enumerate two characteristic features of phylum Sarcomastigophora.
  - Differentiate between cytostome and cytopharynx.
  - What is exflagellation?
  - What is the role of choanocytes in the canal system of Porifera?
  - Define polymorphism and state its advantage.
  - Write two distinguishing characters of class hydrozoa.
  - Write the scientific names of a free living and a parasitic Platyhelminthes.
  - Distinguish between a polyp and a medusa.
  - What is comb plate?
  - State how would you distinguish between a male and a female *Ascaris lumbricoides*.
  - Why is light a major limiting factor for the distribution of coral reef?
  - What is tegument and write its function.
2. Answer any **three** questions from the following: 3×3 = 9
- Enumerate the pathogenicity of *Entamoeba histolytica*.
  - How do symbiotic algae enhance the formation of coral skeleton?
  - Compare between Asconoid and Syconoid canal system in sponges.
  - Write three important physiological modifications for parasitic life of *Fasciola hepatica*.
  - Write short notes on modification of medusae in Cnidarians.
3. Answer any **three** questions from the following: 5×3 = 15
- Name the phylum and class of the following animals: 5
    - Euplectella* sp.
    - Echinococcus* sp.
    - Sea pen
    - Trypanosoma* sp.
    - Balantidium* sp.

- (b) To which phylum does the following structure belong and mention one function of each. 5
- (i) Nematocyst
  - (ii) Renette cell
  - (iii) Monaxon spicule
  - (iv) Acetabulum
  - (v) Coloblast
- (c) Write short notes on any **two** of the following:  $2\frac{1}{2} \times 2 = 5$
- (i) Contractile vacuole of *Paramecium* sp.
  - (ii) Hexacanth larva and bladder worm stage of *Taenia solium*
  - (iii) Spicules in sponges.
- (d) What is signet ring stage and erythrocytic schizogony in *Plasmodium vivax*? Define the term ookinete.  $2+2+1 = 5$
- (e) Explain the life cycle of *Entamoeba histolytica* supported by a flowchart. 5

**N.B. :** Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.

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