

**2020-21**

**Time - 3 hours**

**Full Marks - 60**

*Answer all groups as per instructions.  
Figures in the right hand margin indicate marks.  
Draw labelled diagrams wherever necessary.*

**GROUP – A**

1. Answer all questions or fill in the blanks as required. [1 × 8]
- (a) What are the photoreceptor apparatus of *Euglena* ?
  - (b) The reserve food material of *Euglena* is \_\_\_\_\_.
  - (c) The most widely accepted theory of locomotion in *Amoeba* is \_\_\_\_\_.
  - (d) *Amoeba* respire through its \_\_\_\_\_.
  - (e) The most active, motile and feeding form of *Entamoeba histolytica* is \_\_\_\_\_.
  - (f) The malarial parasite is introduced into the blood of man as a \_\_\_\_\_.
  - (g) What is holozoic nutrition ?
  - (h) What is the role of choanocytes in *Sycon* ?

[ 2 ]

**GROUP – B**

2. Answer any eight of the following questions within two to three sentences each. [1½ × 8

- (a) What is the role of contractile apparatus in *Euglena* ?
- (b) What is Euglenoid movement ?
- (c) What are the pseudopodiospores in *Amoeba* ?
- (d) What are the three distinct forms of *Entamoeba histolytica* in its life cycle ?
- (e) What are the various types of skeletal bodies present in Sponges ?
- (f) Differentiate between polyp and medusa of *Obelia*.
- (g) What is an Atoll ?
- (h) What is miracidium larva ?
- (i) What is hexacanth ? Where it is found ?
- (j) What is Elephantiasis ?

**GROUP – C**

3. Explain any eight of the following within 75 words each.

[2 × 8

- (a) Morphological adaptations of Helminthes for parasitic life
- (b) Rhabditiform larva

- (c) General characteristics of phylum Nematoda with examples
- (d) Phylogenetic significance of phylum Platyhelminthes
- (e) What are the various modifications of polyps ?
- (f) Economic importance of sponges
- (g) Leucon type canal system
- (h) Erythrocytic schizogony
- (i) Encystation
- (j) Why Euglena is considered as an animal ?

**GROUP – D**

Answer **any four** questions within 500 words each.

- 4. Discuss the asexual life cycle of *Plasmodium vivax* in man. [6]
- 5. Give an account of reproduction in Protista. [6]
- 6. Discuss about the life cycle of *Fasciola hepatica*. [6]
- 7. Give an account of metagenesis in *Obelia*. [6]
- 8. Explain the life cycle of *Wuchereria bancrofti*. [6]
- 9. Give an account on the reproduction and life cycle of *Entamoeba histolytica*. [6]
- 10. Discuss the general characteristics and classification upto classes of phylum Porifera with examples. [6]