This question paper contains 2 printed pages]

Roll No. | | | | | | | | | | |

S. No. of Question Paper : 881

Unique Paper Code : 223101 G

Name of the Paper : **Biodiversity I : Non-Chordata**

Name of the Course : **B.Sc. Honors Zoology**

Semester : I

Duration : 3 Hours Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt *five* questions in all.

Question No. 1 is compulsory.

1. (*a*) Define the following : 1×6

(*i*) Laurer's canal

(*ii*) Scleroblast

(*iii*) Holotrophic nutrition

(*iv*) Radial symmetry

(*v*) Prosopyle

(*vi*) Flame cells.

(*b*) Give location and function/significance of the following : 2×4

(*i*) Pinacocytes

(*ii*) Trophozoite stage of *Plasmodium vivax*

(*iii*) Stigma in *Euglena*

(*iv*) Hexacanth larvae.

P.T.O.

(*c*) Distinguish between : 2×4

(*i*) Spongocoel and Coelenteron

(*ii*) Miracidium and Metacercaria larvae

(*iii*) Protostomes and Deuterostomes

(*iv*) Schyphozoa and Anthozoa.

(*d*) Give the systematic classification of the following (upto class) : 1×5

(*i*) Euglena

(*ii*) Glass rope sponge

(*iii*) Jelly fish

(*iv*) Liver fluke

(*v*) Mushroom coral.

2. Draw a well labeled diagram and explain the life cycle of *Plasmodium vivax.* 12

3. (*a*) Briefly explain the life cycle of *Taenia solium.* 7

(*b*) Explain the various theories of locomotion in Sarcodina. 5

4. (*a*) Give an account of polymorphism in Cnidaria, using suitable diagrams. 8

(*b*) Briefly discuss the affinities of Ctenophora. 4

5. Describe the life cycle of *Wuchereria bancrofti.* Add a note on its pathogenicity. 12

6. (*a*) Define metamerism. Explain the evolution of metamerism in metazoa. 9

(*b*) Briefly discuss about spicules in sponges. 3

7. Write short notes on any *three* of the following : 4×3

(*i*) Leuconoid canal system

(*ii*) Autogamy

(*iii*) Coral reefs

(*iv*) Metagenesis

(*v*) Ascariasis.