[This question paper contains 3 printed pages.]

Your Roll No. .....

5114 **B**

B.Sc. Prog./II

LS–202–BIODIVERSITY – II (ANIMALS)

Time : 3 *Hours* *Maximum Marks* : 75

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

There are two Sections, Section **A** and Section **B** to be answered on separate answer-books.

Draw labelled diagrams wherever necessary.

Section A

Answer *three* questions in all, including Q. No. **1** which is compulsory.

1. (*a*) Explain the following terms in one or two sentences only : 5

   (*i*) Clitellum

   (*ii*) Protonephridia

   (*iii*) Pseudocoel

   (*iv*) Cephalization

   (*v*) Deutrostomes.

   (*b*) Differentiate between : 3

   (*i*) Isogamy and Anisogamy

   (*ii*) Phagocytosis and Pinocytosis

   (*iii*) Ectoparasite and Endoparasite

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(*c*) Give the scientific names of the following : 5

(*i*) Sea pen

(*ii*) Cuttle fish

(*iii*) Feather star

(*iv*) Venus's Flower Basket

(*v*) Malarial Parasite.

2. Give a brief account of respiratory structures in Arthropoda. 12

3. Explain types of canal system in Porifera. 12

4. Write short notes on any *two* of the following : 6+6

(*a*) Parasitic adaptation in Platyhelminthes.

(*b*) Torsion in Gastropoda.

(*c*) Labelled diagram of Parapodium and Gemmule.

Section B

Attempt *three* questions in all, including Q. No. **1** which is compulsory.

1. (*a*) Define the following : 4

(*i*) Unguis

(*ii*) Pharyngotremy

(*iii*) Euryhaline

(*iv*) Endothermy.

(*b*) Differentiate between the following : 6

(*i*) Hypotonic and Hypertonic

(*ii*) Altricial and Precocial

(*iii*) Chondrichthyes and Osteichthyes.

(*c*) Classify the following : 4

(*i*) *Pristis*

(*ii*) *Hyla*

(*iii*) *Hydrophis*

(*iv*) *Herdmania.*

2. Describe respiration in fishes and also explain the respiratory function of Swim-bladder. 12

3. (*a*) Describe the different flight adaptations in birds. 6

(*b*) Describe migration in *Salmon.* 6

4. Write short notes on any *two* of the following : 6+6

(*i*) Parental care in Amphibia

(*ii*) Osmoregulation in fresh water fishes

(*iii*) Derivatives of integument

(*iv*) Affinities of Hemichordata.