2015

ZOOLOGY

(Major)

Theory Paper: M-2.1

(Animal Diversity-II)

Full Marks - 60

Time - 21/2 hours

The figures in the margin indicate full marks for the questions.

- 1. Answer the following questions: $1 \times 7 = 7$
 - (a) Besides 'Acron Worm', what is the other name of Balanoglossus?
 - (b) Which cyclostome does not have larval form?
 - (c) Name one fish which is a living fossil.
 - (d) Give an example of tongueless amphibian.

Turn over

- (e) Mention the order that includes horned toad.
- (f) Which pectoral muscle acts as the depressor muscle in flight?
- (g) Which mammal has prehensile tongue?
- 2. Answer the following questions: $2\times4=8$
 - (a) Write about the chorda dorsalis.
 - (b) Give a brief note on the wheel organ. 2
 - (c) Write what you know about Parental care in amphibia. 2
 - (d) What are neuromast organs? Write their functions. 1+1=2
- 3. Answer any three questions: $5 \times 3 = 15$
 - (a) Write very briefly about the patterns of migration in fishes.
 - (b) Write what you know about the buccopharyngeal respiration in Amphibia with neat labelled diagram. 3+2=5
 - (c) Discuss briefly the affinities of Sphenodon.

- (d) Write the distinctive characters of super order Neognathae.
- (e) Describe briefly the structure of a tooth of mammal with neat labelled diagram. 3+2=5
- 4. (a) (i) Write about the ammocoete larva with neat labelled diagram. 4+2=6
 - (ii) Distinguish between Lamprey and Hagfish.

Or

- (b) Describe the general structure of a cephalochordate you have studied with suitable diagram. 8+2=10
- (c) Wrhat is swim bladder? Describe the modification of swim bladder in different fish species with suitable neat diagrams. Write the function of swim bladder.

1+5+4=10

Or

(d) Write the important characters of class Reptilia. Classify it upto order mentioning at least two characters each with suitable examples. 3+7=10

(e) Write what you know about the muscles involved in perching mechanism in birds with neat diagram. In what ways these muscles help in the mechanism of perching in birds?

6+4=10

Or

(f) Give an account on the general organization and affinities of Monotremata. 6+4=10