2017

ZOOLOGY

(Major)

Paper : 2·1

(Animal Diversity—II)

Full Marks : 60

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Answer the following questions : 1×7=7

(a) What is the larval form of Hemichordata?

(b) In which animal wheel organ is located?

(c) What is the other name of uropygial gland?

(d) Name the volant adapted Amphibia.

(e) Which organ is responsible for the secretion of pigeon milk?

(f) Give the example of order Rhynchocephalia.

(g) What is the scientific name of freshwater cetacean?

2. Answer the following questions : 2×4=8

(a) What is neoteny? Give an example of it. 1+1=2

(b) Give a brief note on syrinx. 2

(c) Why 'Draco' is called flying lizard? 2

(d) What are the importance of cheek teeth? 2

3. Answer any *three* of the following questions : 5×3=15

(a) Write the affinities of Urochordata with Chordata and Vertebrata. 5

(b) Write a short note on Ampullae of Lorenzini. 5

(c) Mention the important function of swim bladder of fish. 5

(d) Describe briefly on flight muscles of bird. 5

(e) Write a short note on *Ornithorhynchus*. 5

4. Answer any *three* questions of the following : 10×3=30

(a) What are the basic causes of fish migration? Write different patterns of migration of fish with their significance. 2+8=10

(b) What are the respiratory organs found in different stages of life cycle in Amphibia? Write briefly the mechanism of respiration in Toad. 4+6=10

(c) What is parental care? Describe briefly the direct nursing by the parents in Amphibia. Mention the significance of parental care. 2+6+2=10

(d) Why reptiles are called more advanced group of vertebrate than Amphibia? Write briefly the affinities of Sphenodon. 4+6=10

(e) What is perching mechanism? Write the muscles related to perching with suitable diagram. 2+6+2=10

(f) What are the basic characteristics of Metatheria? Describe their affinities with prototherians and Eutheria. 4+3+3=10

(g) What are receptors? Describe the phonoreceptors in mammals with neat labelled diagram. 2+8=10

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