

2019

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 as directed : 1×7=7

(a) Doliolum is also called as Cyclomyria.
(Write True or False)

(b) The common name of Herdmania is
_____. (Fill in the blank)

(c) Name one fish which is a living fossil.

(d) Which of the following hormones is associated with metamorphosis in Amphibia?

(i) Thyroxine

(ii) Oxytocin

(iii) Growth hormone

(Choose the correct option)

(e) Heart of Crocodile is

(i) two-chambered

(ii) three-chambered

(iii) four-chambered

(Choose the correct option)

(f) Excretory product of birds is uric acid/urea/ammonia.

(Choose the correct option)

(g) Give one example of egg-laying mammal.

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

(a) Distinguish between Cycloid and Ctenoid scales of fishes (with diagrams). 1+1=2

(b) Mention five more advanced characters of Reptiles than Amphibia.

(c) Write a note on various feathers of birds.

(d) "Metatherians are primitive mammals." Explain it.

3. Answer any *three* questions from the following : $5 \times 3 = 15$

(a) Distinguish between Lamprey and Hagfish. $2\frac{1}{2} + 2\frac{1}{2} = 5$

(b) Write a note on accessory respiratory organs in fishes with its significance. $3 + 2 = 5$

(c) Explain biting mechanism of poisonous snake with diagram. $3 + 2 = 5$

(d) Discuss receptor organs of mammals. 5

(e) Write a note on perching mechanism of birds. 5

4. Answer any *three* questions from the following : $10 \times 3 = 30$

(a) Why is Amphioxus considered under Cephalochordates? Discuss its relationship with other chordates. $2 + 8 = 10$

(b) What do you mean by migration? How do migratory birds find their routes? Discuss the different types of migration in birds. $1 + 2 + 7 = 10$

(c) What is parental care? "Parental care in Amphibia is above all organisms." Justify it. $2 + 8 = 10$

(d) What are the anatomical peculiarities of Sphenodon? Discuss it as living fossil. $4 + 6 = 10$

(e) Differentiate Monotremata from Marsupialia. Discuss the affinities of Marsupialia. $6+4=10$

(f) Mention at least ten characters of class Reptilia. Classify it up to orders with examples. $3+7=10$
