

2018

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) Name an amphibian which carries its young on its back.

(b) *The Fall of a Sparrow*—Who wrote this book?

(c) In singing birds, sound is produced by  
(i) air sac, (ii) syrinx, (iii) larynx.

( Choose the correct answer )

(d) Fangs of poisonous snake are modified maxillary teeth. Is it true?

(e) Hemichordates are also called \_\_\_\_.

( Fill in the blank )

- (f) New world monkeys have prehensile tail but prehensile tail is absent in old world monkeys.

( Write True or False )

- (g) Electric organs are modified muscles.

( Write Yes or No )

2. Answer the following questions :  $2 \times 4 = 8$

- (a) All vertebrates are chordates but all chordates are not vertebrates. Why? 2

- (b) What are cartilaginous fishes? Give one example.  $1 + 1 = 2$

- (c) Define autotomy. What is its significance?  $1 + 1 = 2$

- (d) Write a note on weberian ossicles. 2

3. Answer any *three* of the following questions :

$5 \times 3 = 15$

- (a) What is missing link? Seymouria is a connecting link between amphibians and reptiles. Discuss it.  $1 + 4 = 5$

- (b) "Birds are glorified reptiles". Justify it. 5

- (c) Why are birds and mammals called homeothermal animals? 5

- (d) Distinguish between aestivation and hibernation.  $2\frac{1}{2} + 2\frac{1}{2} = 5$

- (e) Discuss the structure and evolutionary significance of ammocoete larva.  $2\frac{1}{2} + 2\frac{1}{2} = 5$

4. Answer any *three* questions of the following :

10×3=30

- (a) Why is Balanoglossus considered to be very close to echinoderms? Write the chordate affinities of Balanoglossus.

5+5=10

- (b) What is retrogressive metamorphosis? How does it differ from progressive metamorphosis? Discuss the phenomena by giving an account.

1+3+6=10

- (c) What are the different types of swim bladder? Describe the modifications of swim bladder in different fishes.

3+7=10

- (d) How can you distinguish a poisonous snake from a non-poisonous one? Discuss about poison apparatus and biting mechanism of a poisonous snake.

2+2+6=10

- (e) What is an air sac? How many air sacs are found in birds? Mention the benefits obtained by a bird from the air sacs.

2+5+3=10

- (f) What is dentition? Discuss the dentition patterns with mammalian reference. Mention its significance.

2+6+2=10

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