

Master's Degree Examination- November 2018

SEMESTER -I

CLASS: I PG
MAJOR: Zoology

Time : 3 Hr
Max. Marks: 60

17MZOCO2 Functional Morphology of Vertebrates

PART-A

10x1/2 = 5

Choose the correct answer

1. Example for hemichordate
(a) *Ascidian* (b) *Balanoglossus* (c) *Salpa* (d) *Branchiostoma*
2. Which among the followings is a connecting link between birds and reptiles?
(a) Drongo (b) Ostrich (c) Archaeopteryx (d) Emu
3. Femoral glands found in
(a) Birds (b) Mammals (c) Lizards (d) Fish
4. The largest feather of birds is
(a) Filoplumes (b) Down feathers (c) Rictal bristles (d) Quill feathers
5. Which of the followings are true?
(a) S- shaped heart found in Birds (b) Amphibians heart exhibits triangular shape
(c) Venus heart found in Fishes (d) b & c
6. What kind of respiration occurring in Amphibians?
(a) Gills (b) Cutaneous (c) Lungs (d) All the above
7. Cranial flexure of the brain develops from
(a) Rhombencephalon (b) Mesencephalon
(c) Diencephalon (d) Prosencephalon
8. How many numbers of cranial nerves found in birds?
(a) 12 pairs (b) 10 pairs (c) 8pairs (d) 14 pairs
9. Head kidney referred as
(a) Pronephros (b) Archinephros
(c) Mesonephros (d) Opisthonephros
10. Cowper's glands are
(a) Endocrine glands (b) Exocrine glands
(c) Bulbourethral glands (d) b&c

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PART-B

Answer all questions

5x4 =20

Answer should not exceed 200 words or one page

11 (a). Illustrate the Amphibians classification of up to order level with examples .

(Or)

(b) Give an account on Prototheria mammals

12 (a) Describe different scales in fishes with suitable diagram

(Or)

(b) Differentiate the types of feathers in Aves

13 (a) Underline the significant functions of lymphatic system

(Or)

(b) With a neat diagram explain the pulmonary respiration of frog

14 (a) Evaluate the significance of cranial nerves in vertebrates

(Or)

(b) Discuss about Autonomic nervous system

15 (a) Comment on mammalian kidney with neat diagram

(Or)

(b) Give an account on different parts in male reproductive system of rat.

PART-C

5x7 =35

Answer all questions

Answer should not exceed 600 words or three pages

16 (a) Construct outline classification of Subclass Neornithes with examples

(Or)

(b) List out the Eutheria orders with their features

17 (a) Discuss about significance of vertebrates skin

(Or)

(b) Give an account on different types of epidermal glands

18 (a) Sketch the heart evolution in vertebrates and illustrate their feature

(Or)

(b) Differentiate the various respiratory organs in vertebrates

19 (a) Interpret the spinal nerves system of amphibian

(Or)

(b) With neat diagram express CNS of Mammalia

20 (a) Describe different types of vertebrate's kidney with neat diagrams

(Or)

(b) Demonstrate the reproductive systems of vertebrates
