

Roll No.....

Total No. of Units : 04

Total No. of Printed Pages : 03

Code No. : 03/105

Third Semester Examination, Dec. 2018

M.Sc. ZOOLOGY

Paper - I

COMPARATIVE ANATOMY OF VERTEBRATES

Time : 3 Hrs.

Max. Marks : 80

- Part A and B of each question in each unit consist of very short answer type questions which are to be answered in one or two sentences.
Part C (Short answer type) of each question will be answered in 200-250 words.
Part D (Long answer type) of each question should be answered within the word limit 400-450.

Unit - I

Q.1 A. Write examples of first chordates on the earth. (2)

Q.1 B. Write two characters and two examples of flightless birds. (2)

Q.1 C. Write short note on evolution of vertebrates. (4)

OR

Write main characteristics of Pisces.

Q.1 D. Write classification of Reptiles. (12)

OR

Write classification of Aves giving suitable examples.

P.T.O.

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Unit - II

Q.2 A. Draw labelled diagram of skin of frog. (2)

Q.2 B. Draw a labelled diagram of Lumbar vertebra of Mammals. (2)

Q.2 C. Write short note on skin derivations of fish skin. (4)

OR

Write four main differences in the skin of Mammals and Amphibians.

Q.2 D. Give an illustrated description of the bones of forelimbs and hindlimbs of Mammals. (12)

OR

Write the structure of skull of Mammals.

Unit - III

Q.3 A. What is venous heart and in which vertebrate such heart is found? (2)

Q.3 B. Write components of Bronchial tree of Mammals in correct sequence. (2)

Q.3 C. Write an essay on the comparative structure of hearts of vertebrates. (4)

OR

Write comparative and illustrated short account of respiratory system of birds and mammals.

Q.3 D. Write an essay on the evolution of heart in vertebrates. (12)

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OR

Describe respiratory systems of Fish and Amphibia with suitable diagrams.

Unit - IV

Q.4 A. Draw a labelled diagram of brain of fish, description not necessary. (2)

Q.4 B. Write olfactory organs of vertebrates. (2)

Q.4 C. Describe histological structure of ovary of Mammals. (4)

OR

Write with examples the types of kidneys found in vertebrates.

Q.4 D. Write illustrated comparative account of brain of vertebrates. (12)

OR

Describe comparative account of Urino-genital systems of vertebrates.

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