

PD-385 CV-19
(553) M.Sc. ZOOLOGY (THIRD SEMESTER)
Examination DEC. 2020
Compulsory/Optional
Paper- I

Name/Title of Paper- COMPARATIVE ANATOMY OF VERTEBRATES

Time:- Three Hours

Maximum Marks- 080

Note: Answer From Both the Section as Directed. The Figures in the right-hand margin indicate marks.

Section-A

1. Answer the following questions: **1x10**

- (a) Which is the earliest known amphibian?
- (b) Write the main difference between Lacertilia and Ophidia.
- (c) Write the name of gland participate in synthesis of vitamin D?
- (d) Write the name of first feather which develop in birds?
- (e) What is Foramen of Panizzae?
- (f) Write three main difference between elasmobranch and teleost fishes.
- (g) Prepubis is the characteristic feature of which bone?
- (h) Cotyloid bone is the characteristic feature of which bone?
- (i) Write the type of uterus present in Pig, cattle etc.
- (j) In Mammalian brain the four optic lobes are collectively called as....?

2. Answer the following short-answer type questions: **2x5**

- (a) Write the salient feature of apoda and give example.
- (b) Explain the uropygeal gland and its function.
- (c) Write the names of non-placoid scales with examples.
- (d) Explain the structure of pectoral girdle of fowl. How foramen of triosseum is form?
- (e) Write the name (in sequence) of cranial nerves of fishes.

Section-B

Answer all questions:

15x4

3. Give an account of origin of amphibia.

Or

Classify the class amphibian up to orders with suitable examples.

4. Draw labeled diagrams and give a comparative account of skin of fish, amphibia, bird and mammal.

Or

Describe the evolution of aortic arches in Chordates.

5. Give an account of pectoral girdle of amphibian, reptile, bird and mammal. Write the main differences between them.

Or

Describe the structure of lungs in amphibian, reptile, bird and mammal.

6. Give an account of brain in vertebrates.

Or

Draw labeled diagrams of female genital system of amphibian, reptile, bird and mammal and. Write their salient features.