



RX-003-1016021 Seat No. _____

B. Sc. (Sem. VI) (CBCS) Examination

March - 2019

Zoology : Paper - 601

(Functional Anatomy of Chordates & Comparative Study)
(New Course)

Faculty Code : 003

Subject Code : 1016021

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) Illustrate your answers with neat and labelled diagrams.
(2) Figures to the right side indicate full marks of the question.

- 1 (A) Give the answer of following questions : 4**
- (1) Give any two example of subphylum Urochordata.
 - (2) Write three fundamental characters of phylum Chordata.
 - (3) Which animal classes are parts of amniotic group?
 - (4) Give the name of three orders of subclass Stegocephalia.
- (B) Write any one out of two : 2**
- (1) Discuss salient features of Agnatha.
 - (2) Write names of different orders of class Reptilia along with their subclass.
- (C) Write any one out of two : 3**
- (1) Discuss salient features of Prototheria.
 - (2) Discuss salient features of Neognathae.

- (D) Write any **one** out of two : 5
- (1) Discuss general characters of Cephalochordata.
 - (2) Discuss general characters of Chondrichthyes.
- 2** (A) Give the answer of following questions : 4
- (1) Write scientific name of Pigeon.
 - (2) Write only name of accessory glands in male reproductive system of rat.
 - (3) The large intestine of rat is divided into _____
 - (4) Which systemic arch is found in rat?
- (B) Write any **one** out of two : 2
- (1) Describe Pecten in Pigeon.
 - (2) Write name of different salivary glands which are found in rat.
- (C) Write any **one** out of two : 3
- (1) Draw labelled diagram of air sac in Pigeon.
 - (2) Draw labelled diagram of female reproductive system of rat.
- (D) Write any **one** out of two : 5
- (1) Describe digestive system of rat.
 - (2) Describe structure and function of brain in Pigeon.
- 3** (A) Give the answer of following questions : 4
- (1) Which reptilian animal is known as living fossil?
 - (2) Feeding mechanism and respiratory system in Urochordata and Cephalochordata are similar: True or False
 - (3) Members of order Dipnoi are commonly known as _____
 - (4) Define Mermaid's purses.

- (B) Write any **one** out of two : 2
- (1) Give different functions of air bladder or swim bladder in fish.
 - (2) Define Neoteny with example.
- (C) Write any **one** out of two : 3
- (1) Define Aestivation and Hibernation in Amphibia.
 - (2) Give affinities of Urochordata with Hemichordate.
- (D) Write any **one** out of two : 5
- (1) Write note on different types of fins in fishes.
 - (2) Write note on parental care in Amphibia by direct caring.
- 4 (A) Give the answer of following questions : 4
- (1) Define Chiropteran animals.
 - (2) Which type of beak is found in House Sparrow?
 - (3) Give any two examples of Monotremes.
 - (4) Define latitudinal migration in birds.
- (B) Write any **one** out of two : 2
- (1) Describe climbing type feet in birds with suitable example.
 - (2) Define Marsupium. Name the animal in which marsupium found.
- (C) Write any **one** out of two : 3
- (1) Discuss salient features of infraclass Eutheria.
 - (2) Write a brief note on Contour feather.
- (D) Write any **one** out of two : 5
- (1) Discuss aquatic adaptation of Cetacean animals.
 - (2) Describe temporal fossae in reptiles.

- 5 (A) Give the answer of following questions : 4
- (1) In which animal Monophyodont type of teeth is found ?
 - (2) Define the function of cerebellum.
 - (3) Which type of kidney is found in Reptilia.
 - (4) Define the function of Scroll valve present in intestine of Dogfish.
- (B) Write any one out of two : 2
- (1) Give the Dental formula of Horse.
 - (2) Differentiate external glomeruli from internal glomeruli.
- (C) Write any **one** out of two : 3
- (1) Describe the structure of stomach found in ruminant animals.
 - (2) Discuss different types of teeth based on their attachment with jaw bones.
- (D) Write any **one** out of two : 5
- (1) Give comparative account of brain in Elasmobranch and Amphibia.
 - (2) Give comparative account of pronephric and mesonephric kidney in vertebrates.
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