



**P-003-1016021**      Seat No. \_\_\_\_\_

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

March / April - 2020

## Zoology : Paper - 601

**(Functional Anatomy of Chordata and 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 on the right side indicate full marks of the question.

1 (A) Give the answers of following questions : 4

- (1) In which animal retrogressive metamorphosis is found?
- (2) Enlist two orders of class Cyclostomata.
- (3) Give names of any two genera belonging to Dipnoi
- (4) Penguin belongs to class \_\_\_\_\_ and Superorder \_\_\_\_\_

(B) Write Any **One** out of Two : 2

- (1) Discuss salient characters of agnatha
- (2) Give any two examples of Marsupialia.

(C) Write Any **One** out of Two : 3

- (1) Describe salient characters of Cephalochordata
- (2) Describe salient characters of Holocephalii.

(D) Write Any **One** out of Two : 5

- (1) Describe general characters of Amphibia
- (2) Describe general characters of Reptilia.

**2** (A) Give the answers of following questions : 4

- (1) Pigeon milk is manufactured in \_\_\_\_\_
- (2) Write scientific name of Rat.
- (3) Cocygeomesenteric vein collects blood from \_\_\_\_\_
- (4) Write function of Pons Varoli (Rat brain).

(B) Write Any **One** out of Two : 2

- (1) Describe structure of Pecten in Pigeon.
- (2) Describe function of Prostate gland and Cowper's gland

(C) Write Any **One** out of Two : 3

- (1) Draw labelled diagram of air sac in Pigeon.
- (2) Draw labelled diagram of internal structure of heart in rat.

(D) Write Any **One** out of Two : 5

- (1) Describe digestive system of Rat.
- (2) Describe arterial system of Pigeon.

**3** (A) Give the answers of following questions : 4

- (1) Red gland in air bladder receives blood from \_\_\_\_\_ artery.
- (2) Define Neoteny.
- (3) Give any two examples of living fish in possessing heterocercal caudal fin.
- (4) Define hibernation.

(B) Write Any **One** out of Two : 2

- (1) Discuss affinities of Urochordates with Hemichorates.
- (2) Explain any one example of parental care in fish.

(C) Write Any **One** out of Two : 3

- (1) Define Physostomous and Physoclistus airbladder with suitable example.
- (2) Give affinities of Dipnoi with Amphibia

(D) Write Any **One** out of Two : 5

- (1) Write note on Parental care in Amphibia.
- (2) Describe general characters of Dipnoi

4 (A) Give the answers of following questions : 4

- (1) Write the example of flower probing beak.
- (2) How many temporal openings are present in skull diapsidan animals?
- (3) Give any two examples of cetaceans mammals.
- (4) Define longitudinal migration.

(B) Write Any **One** out of Two : 2

- (1) Describe Raptorial feet.
- (2) Define monotremes with suitable examples.

(C) Write Any **One** out of Two : 3

- (1) Write note on chiropteran mammals.
- (2) Draw labelled diagram of Anapsida skull

(D) Write Any **One** out of Two : 5

- (1) Write an essay on living fossil - Sphenodon
- (2) Describe different types of feathers.

5 (A) Give the answer of following questions : 4

- (1) Give dental formula of Pig.
- (2) Enlist name of different parts of Prosencephalon.
- (3) Which type of kidney found in amniotic animals?
- (4) Give example of animals in which teeth are absent at any stage of their life.

(B) Write Any **One** out of Two : 2

- (1) Enlist names of different chambers found in stomach of ruminant animals.
- (2) Describe selenodont and lophodont teeth with examples.

(C) Write Any **One** out of Two : 3

- (1) Describe types of teeth based on their attachments with jaw bones.
- (2) Give brief comparative account of small intestine vertebrate animals.

(D) Write Any **One** out of Two : 5

- (1) Give comparative account of brain in Elasmobranch and Aves.
- (2) Give comparative account of kidney in Pisces and Reptilia

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