



**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 Holocephail.

- (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) Coccygeomesenteric 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 Hemichordates.
  - (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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