



JA-003-1016021

Seat No. _____

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

August - 2019

Zoology : Z-601

(Functional Anatomy of Chordates & Comparative)

(New Course)

Faculty Code : 003

Subject Code : 1016021

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

[Total Marks : 70

Instructions :

- (1) Draw neat and labelled diagram wherever necessary.
- (2) Numbers to the right side indicate full marks of the questions.

- 1 (A) Objective type questions : 4
 - (1) Give any two important characters of cephalochordate.
 - (2) Which type of scale found in cartilaginous fish?
 - (3) Write two example egg-laying mammals.
 - (4) Write the scientific name of Rat.

- (B) Answer in brief : (any 1 out of 2) 2
 - (1) Explain characteristics of class cyclostomes with example.
 - (2) Explain class osteichthyes with example.

- (C) Answer in detail : (any 1 out of 2) 3
 - (1) Describe the division gnathostomata of subphylum vertebrata.
 - (2) Important of Archaeopteryx in animal kingdom.

- (D) Write a note on : (any 1 out of 2) 5
 - (1) Classify up to order with characteristics : krait
 - (2) Classify up to order with characteristics : Eagle

- 2 (A) Objective type questions : 4
- (1) Function of gizzard in birds?
 - (2) How many chambered heart in rat?
 - (3) Write the name of feathers which found in pigeon.
 - (4) Which veins of Rat is collect blood from the tail region?
- (B) Answer in brief : (any 1 out of 2) 2
- (1) Hepatic portal vein system of Pigeon.
 - (2) Explain pulmonary arteries in rat.
- (C) Answer in detail: (any 1 out of 2) 3
- (1) Draw and labelled diagram : brain of pigeon.
 - (2) Draw and labelled diagram : Male reproductive system rat.
- (D) Write a note on : (any 1 out of 2) 5
- (1) Venous system of Rat.
 - (2) Digestive system of pigeon.
- 3 (A) Objective type questions : 4
- (1) Define hibernation.
 - (2) Define Anapsida skull in Reptiles.
 - (3) Give two example of parental care in fish.
 - (4) Which of caudal fins found in Elasmobranch?
- (B) Answer in brief: (any 1 out of 2) 2
- (1) Direct Parental care in Amphibian. (any two example)
 - (2) Air bladder of fishes.
- (C) Answer in detail : (any 1 out of 2) 3
- (1) Neotony in amphibians.
 - (2) Types of fins in fishes.
- (D) Write a note on : (any 1 out of 2) 5
- (1) Explain Affinities of dipnoi.
 - (2) Affinities of Urochordata.

- 4 (A) Objective type questions : 4
- (1) Define temporal fossae?
 - (2) Give two example of order cetacean.
 - (3) Sphenodon is well known example of.....
 - (4) What is longitudinal migration in birds
- (B) Answer in brief : (any 1 out of 2) 2
- (1) Explain in Bird two claws.
 - (2) Diagram of filoplume feathers and comments.
- (C) Answer in detail: (any 1 out of 2) 3
- (1) Egg-laying mammals.
 - (2) Pectone in Pigeon.
- (D) Write a note on : (any 1 out of 2) 5
- (1) Types of beaks.
 - (2) Explain placental mammals.
- 5 (A) Objective type questions : 4
- (1) Which type of teeth are absent in milk dentition?
 - (2) In mammals, cerebral hemisphere is connected internally by.....
 - (3) Give the Dental formula of pig.
 - (4) Which type of kidney present in birds?
- (B) Answer in brief : (any 1 out of 2) 2
- (1) Differentiation of teeth in mammals.
 - (2) Describe ruminant stomach.
- (C) Answer in detail : (any 1 out of 2) 3
- (1) Aortic arches in fishe. (Shark)
 - (2) Types of teeth according to attachment with Jaw.
- (D) Write a note on : (any 1 out of 2) 5
- (1) Comparative account of excretory system in Amphibian and mammals.
 - (2) Evolution of brain in chordates.