

B.Sc. Semester - 5 (CBCS) Examination**Oct/Nov - 2024 (NEW COURSE)****Functional Anatomy of Chordates, Systematic, Forms & Functions and Comparative Anatomy(Core)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1(A) Answer the following question. (any one out of two) (07)
1. Classify class Amphibia up to order with suitable examples.
 2. Classify super class Pisces up to order with suitable examples.
- Que.1(B) Answer the following question. (any one out of two) (04)
1. Classify class Mammalia up to infraclass with suitable examples.
 2. Classify class Reptilia up to order with suitable examples.
- Que.1(C) Answer the following question. (any three out of five) (03)
1. Write any two characters of Ratite with examples.
 2. Write any two salient features of Archaeornithes.
 3. Bats are belongs to which order?
 4. Give examples of mammalian order Edentata.
 5. Sphenodon belongs to which order?
- Que.2(A) Answer the following question. (any one out of two) (07)
1. Describe digestive system of Scoliodon with suitable diagram.
 2. Describe arterial system of Pigeon with suitable diagram.
- Que.2(B) Answer the following question. (any one out of two). (04)
1. Draw labelled diagram of cranial nerves of Scoliodon.
 2. Draw labelled diagram of male urinogenital system of Pigeon.
- Que.2(C) Answer the following question. (any three out of five) (03)
1. Why the heart of Scoliodon is called a Venous Heart?
 2. What is the function of the ampullae of Lorenzini in Sharks?
 3. How many efferent branchial arteries are there in Scoliodon?
 4. What is the role of the crop in a Pigeon's Digestive System?
 5. What is the role of the syrinx in a Pigeon's Respiratory System?
- Que.3(A) Answer the following question. (any one out of two) (07)
1. Give a general account of Dipnoi.
 2. Describe different type of caudal fins in Fishes.
- Que.3(B) Answer the following question. (any one out of two). (04)
1. Write short note on Neotony.
 2. Describe parental care in Fishes.
- Que.3(C) Answer the following question. (any three out of five) (03)
1. Where the air bladder located in Fish?
 2. What is the difference between physostomous and physoclistous types of Air Bladder?
 3. How Ichthyophis protects its Eggs?
 4. How Midwife Toad protects its Eggs?
 5. Write any two economic importance of Amphibian.

- Que.4(A) Answer the following question. (any one out of two) (07)
1. Describe different types of Beaks in Aves with suitable examples.
 2. Give a general account of dentition in Mammals.
- Que.4(B) Answer the following question. (any one out of two) (04)
1. Write a short note on Egg Laying Mammals.
 2. Write a short note: Sphenodon as a Living Fossil.
- Que.4(C) Answer the following question. (any three out of five) (03)
1. Wading feet found in which Birds?
 2. Give names of the different types of Feathers.
 3. Give examples of Pouched Mammals.
 4. What type of skull found in Rhynchocephalia and Crocodilia?
 5. Write any two characters of Archaeopteryx.
- Que.5(A) Answer the following question. (any one out of two) (07)
1. Give a comparative account of stomach in Vertebrates.
 2. Write a note on origin and evolution of brain in Vertebrates.
- Que.5(B) Answer the following question. (any one out of two). (04)
1. Sketch and label: Brain of Aves.
 2. Give a comparative account of Mesonephrous and Metanephrous kidney in Vertebrates.
- Que.5(C) Answer the following question. (any three out of five) (03)
1. Which type of kidney found in Fishes?
 2. Archinephric kidney is found in which animals?
 3. What are Ruminants?
 4. What are the three main divisions of the small intestine in Mammals?
 5. The Cavity of Cerebral Hemisphere is known as _____.
