

B.Sc. Semester - 5 (CBCS) Examination**Oct/Nov - 2025 (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.

-
- Que.1(A) Answer the following question (any one out of two) (07)
1. Classify class Reptilia up to order with suitable examples.
 2. Classify class Amphibia up to order with suitable examples.
- Que.1(B) Answer the following question (any one out of two). (04)
1. Classify super class Pisces up to class with suitable examples.
 2. Classify class Mammalia up to infraclass with suitable examples.
- Que.1(C) Answer the following question (any three out of five) (03)
1. List out any two features of Urochordata, and provide an example.
 2. Provide two characteristic that distinguishes Osteichthyes and Chondrichthyes.
 3. What are the key differences between Anura and Urodela?
 4. Write any two characters of Ratite with an example.
 5. List out any two characteristics of the order Carnivora, with an example.
- Que.2(A) Answer the following question (any one out of two) (07)
1. Describe male urinogenital system of Scoliodon with suitable diagram.
 2. Describe digestive 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 Arterial system of Pigeon.
- Que.2(C) Answer the following question (any three out of five) (03)
1. What is the function of the lateral line system in shark?
 2. Write the function of the ampullae of lorenzini in shark.
 3. Name the different types of feathers found in pigeon.
 4. Write the function of the gizzard in a pigeon's digestive process.
 5. What is the function of the pecten in the eye of a pigeon?
- Que.3(A) Answer the following question (any one out of two) (07)
1. Describe Air bladder in Fishes.
 2. Write note on Neoteny.
- Que.3(B) Answer the following question (any one out of two). (04)
1. Write short note on affinities of Dipnoi.
 2. Describe parental care in Amphibia.
- Que.3(C) Answer the following question (any three out of five) (03)
1. Write the location of air bladder in fish body.
 2. What is the difference between heterocercal and diphycercal types of caudal fins?
 3. Give two examples of parental care in fishes.
 4. How midwife toad protects its eggs?
 5. Write any two economic importance of amphibia.
- Que.4(A) Answer the following question (any one out of two) (07)
1. Describe Sphenodon as a living Fossil.
 2. Write note on Marsupials.

- Que.4(B) Answer the following question (any one out of two). (04)
1. Describe types of feathers.
 2. Write a short note: Ratitae.
- Que.4(C) Answer the following question (any three out of five) (03)
1. Perching feet found in which birds?
 2. Write any two characters of archaeopteryx.
 3. What is the difference between Ratite and Carinatae?
 4. Give any two examples of aquatic mammals.
 5. Give any two examples of Egg-laying Mammals.
- Que.5(A) Answer the following question (any one out of two) (07)
1. Give a comparative account of stomach in vertebrates.
 2. Give a comparative account of brain of Pisces and reptiles.
- Que.5(B) Answer the following question (any one out of two). (04)
1. Give a comparative account of intestine in vertebrates.
 2. Give a comparative account of Pronephrous and Mesonephrous kidney in vertebrates.
- Que.5(C) Answer the following question (any three out of five) (03)
1. Give any two examples of ruminant animals.
 2. Which type of kidney found in reptiles?
 3. Metanephric kidney is found in which animals?
 4. What are the three main parts of the brain found in vertebrates?
 5. Cavity of cerebral hemisphere is known as ____.
