

B.Sc. Semester - 5 (Remedial) (CBCS) Examination**March/April-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.

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- Que.1(A) Answer the following questions. (Any one out of two) (07)**
- 1) Classify sub phylum Urochordata up to order with suitable examples.
 - 2) Classify superclass Pisces up to class with suitable examples.
- Que.1(B) Answer the following questions. (Any one out of two) (04)**
- 1) Classify class Amphibia up to order.
 - 2) Classify class Reptiles up to order.
- Que.1(C) Answer the following questions. (Any three out of five) (03)**
- 1) Which type of scales found in bony fishes?
 - 2) Bombinator belongs to class.....
 - 3) Paired limbs and pentadactylous claws are the peculiar character of class.....
 - 4) Archaeopteryx is the connecting link between class..... and
 - 5) Hippopotamus belongs to class.....
- Que.2(A) Answer the following questions. (Any one out of two) (07)**
- 1) Describe brain of Scoliodon.
 - 2) Describe digestive system of Pigeon.
- Que.2(B) Answer the following questions. (Any one out of two) (04)**
- 1) List out the names of 5th, 7th, 9th and 10th cranial nerves of Scoliodon.
 - 2) Sketch and label Arterial system of Pigeon.
- Que.2(C) Answer the following questions. (Any three out of five) (03)**
- 1) How many lobes are there in the liver of Scoliodon ?
 - 2) In Scoliodon, which artery carries blood to pelvic fins?
 - 3) Which type of scales found in Scoliodon ?
 - 4) Scientific name of Pigeon
 - 5) In Pigeon, which artery carries blood to gizzard, liver and spleen?
- Que.3(A) Answer the following questions. (Any one out of two) (07)**
- 1) Give a general account of Dipnoi.
 - 2) Describe types, structure and function of air-bladder in fishes.
- Que.3(B) Answer the following questions. (Any one out of two) (04)**
- 1) Write a short note on caudal fins in fishes.
 - 2) Write a short note on parental care in Amphibia with any two suitable examples.
- Que.3(C) Answer the following questions. (Any three out of five) (03)**
- 1) Homocercal type caudal fin is the characteristic of
 - 2) In fishes, when air bladder is attached to pharynx through pneumatic duct, this type of air bladder is known as.....
 - 3) Which hormone is responsible for the neoteny during metamorphosis?
 - 4) Which type of parental care found in hippocampus?
 - 5) How many air bladder found in protopterus?

- Que.4(A) Answer the following questions. (Any one out of two) (07)**
- 1) Give a general account and affinities of egg laying mammals.
 - 2) Give a general account of Dentition in mammals.
- Que.4(B) Answer the following questions. (Any one out of two) (04)**
- 1) Write a short note on Sphenodon as living fossil.
 - 2) Write a short note on types of feathers in birds.
- Que.4(C) Answer the following questions. (Any three out of five) (03)**
- 1) Which type of skull found in lizard and crocodile?
 - 2) Which type of beak found in woodpecker?
 - 3) Which type of feet found in sparrow and crow?
 - 4) Give any two examples of aquatic mammals.
 - 5) Epipubic bone and marsupial pouch are the peculiar characteristic of order.....
- Que.5(A) Answer the following questions. (Any one out of two) (07)**
- 1) Give only origin and evolution of brain in vertebrates.
 - 2) Give comparative account of mesonephric and metanephric kidney.
- Que.5(B) Answer the following questions. (Any one out of two) (04)**
- 1) Give the comparative account of small intestine in vertebrates.
 - 2) Sketch and label: Brain of Reptiles.
- Que.5(C) Answer the following questions. (Any three out of five) (03)**
- 1) Which enzyme secrete by salivary gland of mammals?
 - 2) Which type of functional kidney found in reptiles?
 - 3) The first part of small intestine is known as
 - 4) List out the parts of hind brain.
 - 5) Cavities of optic lobe is known as
