

B.Sc. Semester - 5 (CBCS) Examination**December -2020 (NEW COURSE)****Functional Anatomy of Chordates, Systematic, Forms & Functions and Comparative Anatomy (Core)****Time: 1:30 Hours****Marks: 42****Instructions:**

1. Figures to the right indicate marks.
 2. There are five questions in the question paper.
 3. Answer any three of the following questions.
-

Q. 1 (A) Answer the following questions. (Any one out of two) (07)

1. Classify super class Pisces with characters up to class and give the classification of Guitar fish up to order.
2. Classify class Reptile up to order and give the classification of wall lizzard.

Q. 1 (B) Answer the following questions. (Any one out of two) (04)

1. Classify sub phylum Urochordata up to order with suitable examples.
2. Classify class mammals up to infraclass with suitable examples.

Q. 1 (C) Answer the following questions. (Any three out of five) (03)

1. Polypterus belongs to order.....
2. List out the orders of class Amphibia.
3. Study of reptiles is known as
4. Synsacrum is the peculiar character of class.....
5. Kangaroo belongs to sub class..... and order

Q. 2 (A) Answer the following questions. (Any one out of two) (07)

1. Describe digestive system of scoliodon with suitable diagram.
2. Describe respiratory system of pigeon with suitable diagram.

Q. 2 (B) Answer the following questions. (Any one out of two) (04)

1. Draw neat and labeled diagram -Brain of scoliodon.
2. Draw neat and labeled diagram –Digestive system of pigeon.

Q. 2 (C) Answer the following questions. (Any three out of five) (03)

1. The scientific name of scoliodon is.....
2. Give the name of 5th cranial nerve in scoliodon.
3. Liver of scoliodon is..... (How many lobes?)
4. Which flight muscle is also called as depressor muscle?
5. Mark the location of interclavicular air sac in pigeon.

Q. 3 (A) Answer the following questions. (Any one out of two) (07)

1. Describe general organization and affinities of Dipnoi.
2. Describe structure, type and functions of air bladder in fishes.

Q. 3 (B) Answer the following questions. (Any one out of two) (04)

1. Write a short note on parental care in Amphibia.
2. Write a short note: Caudal fin in fishes.

Q. 3 (C) Answer the following questions. (Any three out of five) (03)

1. Homocercal type caudal fin is the characteristic of
2. In the structure of air bladder red gland of anterior chamber contains a compact mass of interlacing fine capillaries is called.....
3. Which type of scales found in dipnoi?
4. The best example of Neoteny is.....
5. In the fishcoils around fertilized eggs till hatching.

- Q. 4 (A) Answer the following questions. (Any one out of two)** (07)
1. Describe dentition in mammals in detail.
 2. Give a general account of egg laying mammals in detail.
- Q. 4 (B) Answer the following questions. (Any one out of two)** (04)
1. Write a short note on diapsid and synapsid skull.
 2. Give the general account of flight adaptation.
- Q. 4 (C) Answer the following questions. (Any three out of five)** (03)
1. List out the modes of flight.
 2. Which type of beak found in lapwing?
 3. Sphenodon belongs to order.....
 4. Whales and dolphins are the best examples of.....
 5. Presence of tarsal spur in males is a typical character of.....
- Q. 5 (A) Answer the following questions. (Any one out of two)** (07)
1. Give comparative account of kidney in vertebrates.
 2. Compare the brain of reptile and aves with suitable diagram.
- Q. 5 (B) Answer the following questions. (Any one out of two)** (04)
1. Give a comparative account of stomach in vertebrates.
 2. Write a short note on origin and evolution of brain in vertebrates.
- Q. 5 (C) Answer the following questions. (Any three out of five)** (03)
1. Encapsulated glomeruli are termed.....
 2. Kidney tubules arise in the embryo from a special part of mesoderm.....
 3. Midventral invagination of ectoderm of head called.....
 4. List out the parts of rhombencephalon.
 5. Cavity of olfactory sacs is known as.....
