

B.Sc. Semester - 5 (CBCS) Examination**Oct/Nov. - 2021(Old Course)****FUNCTIONAL ANATOMY OF NON-CHORDATES (CORE)****Time: 2:30 Hours****Marks: 70****Instructions:**

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

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

1. Give the classification of phylum Arthropoda upto class with reasons and suitable examples.
2. Give the classification of phylum Protozoa upto class with reasons and suitable examples.

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

1. Classify phylum Porifera upto class with reason.
2. Classify phylum Hemichordata upto class with reason.

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

1. Pinctada vulgaris belongs to class.....
2. Chaetopterus belongs to phylum.....class.....
3. Flame cells are found in phylum.....
4. Aristotle's lantern is a characteristics of phylum.....
5. Cephalothorax is seen in.....class.

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

1. Describe: Nervous system of Scorpion.
2. Describe: Digestive system of Sepia.

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

1. Write a short note on female reproductive system of Scorpion.
2. Draw a labelled diagram of Nervous system of Sepia.

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

1. List out the food of Sepia.
2. Give scientific name of scorpion.
3. Respiratory organ of scorpion is.....
4. Give the function of Pectine.
5. Respiratory pigment of Sepia is.....

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

1. Give an account of polymorphism in Coeleonterates.
2. Give an account of locomotion in Protozoans.

- Q.3(B) Answer the following questions. (Any one out of two) (04)
1. Write short note on: Asexual Reproduction in sponges.
 2. Write short note on: Types of coral reefs.
- Q.3(C) Answer the following questions. (Any three out of five) (03)
1. Disease caused by *Plasmodium vivax* is.....
 2. What is conjugation?
 3. Locomotory organ found in paramecium is.....
 4. Give an example of a polymorphic colony of coelenterates.
 5. List out the types of spicules in sponges.
- Q.4(A) Answer the following questions. (Any one out of two) (07)
1. Describe parasitic adaptations with reference to Fasciola.
 2. Describe: Ancylostoma as a parasitic nematode of man.
- Q.4(B) Answer the following questions. (Any one out of two) (04)
1. Write a short note on hormonal control of metamorphosis in Insects.
 2. Write a short note on: Metanauplius and Mysis larva.
- Q.4(C) Answer the following questions. (Any three out of five) (03)
1. Give scientific name of common round worm.
 2. Write two symptoms of disease Ascariasis.
 3.type of metamerism is seen in nereis.
 4. Zoeae is a larva of..... animal.
 5. Peripatus is a connecting link between..... and.....phylum.
- Q.5(A) Answer the following questions. (Any one out of two) (07)
1. Describe: Water vascular system of Starfish.
 2. Describe the affinities of Balanoglossus.
- Q.5(B) Answer the following questions. (Any one out of two) (04)
1. Write a short note on Tornarialarva.
 2. Write a short note on types of Gastropod foots.
- Q.5 (C) Answer the following questions. (Any three out of five) (03)
1. Auricularia is the larva of.....class.
 2. Tornaria larva is the larva of.....animal.
 3. Write the function of tide mann's bodies.
 4. Boring foot is found in.....Animal.
 5. Madreporite is absent is class.....
