

B.Sc. Semester - 5 (Remedial) (CBCS) Examination
March/April-2022(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 (Any one out of two) (07)

1. Discuss general characters of phylum Arthropoda and classify up to class with examples.
2. Discuss general characters of animals having porous body and give an outline of classes.

Q.1(B) Attempt any one out of two. (04)

1. Write down the characters of phylum Platyhelminthes with classification up to class.
2. Write down classification of Butterfly upto order giving reasons.

Q.1(C) Attempt any three out of five. (03)

1. Amoeba belongs to which phylum?
2. In which phylum polymorphism occurs?
3. Write down names of classes found in phylum Aschelminthes.
4. Animals of which phylum are having tube feet?
5. Animals of which phylum are having muscular foot?

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

1. Describe Nervous system of Scorpion with neat and labelled diagram.
2. Describe Digestive system of Sepia with neat and labelled diagram.

Q.2(B) Attempt any one out of two. (04)

1. Write a short note on pectine.
2. Write a note on Ink gland of Sepia.

Q.2(C) Attempt any three out of five. (03)

1. Give name of protective device found in Sepia.
2. What is function of telson in Scorpion?
3. Give names of Scorpion appendages.
4. What is the respiratory organ in Scorpion?
5. What is the function of salivary glands found in Sepia?

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

1. Give a detail account of Nutrition in Protozoa.
2. Give a detail account of Reproduction in Porifera.

- Q.3(B) **Attempt any one out of two.** (04)
1. What is Polymorphism? Explain polymorphism with its types.
 2. Write down symptoms of disease caused by *Leishmania*.
- Q.3(C) **Attempt any three out of five.** (03)
1. Give names of locomotory organelles found in Protozoa.
 2. Give the name of cells secrete the spicules in sponges.
 3. Give names of coral reef types which are found on earth.
 4. Which protozoan parasite is responsible for Malaria?
 5. Conjugation is a mode of sexual reproduction in phylum Protozoa. (True/False)
- Q.4(A) **Answer the following (Any one out of two)** (07)
1. Explain diagnostic characters, mode of infection and disease caused by *Ancylostoma duodenale*.
 2. Write a note on crustacean larva.
- Q.4(B) **Attempt any one out of two.** (04)
1. Write down the parasitic adaptations of *Fasciola*.
 2. Write a short note on Metamerism.
- Q.4(C) **Attempt any three out of five.** (03)
1. If newly hatched creature looks like an adult except in size and armature, it is called incomplete metamorphosis. (True/False)
 2. Which animal is connecting link between annelida and arthropoda?
 3. Name the disease caused by *Ascaris*.
 4. Which hormone is chemically Ecdysone?
 5. Which larva is most simple and commonest in Crustacea?
- Q.5(A) **Answer the following (Any one out of two)** (07)
1. Describe Water vascular system of Starfish with neat and labelled diagram.
 2. Give a detail account of Torsion-detorsion.
- Q.5(B) **Attempt any one out of two.** (04)
1. Explain foot of any one class in Mollusca.
 2. Describe any two larvae found in phylum Echinodermata.
- Q.5 (C) **Attempt any three out of five.** (03)
1. Which animal is known as connecting link between invertebrate and chordate?
 2. What is function of tubefeet?
 3. Animal of which class possess single shell?
 4. Give names of phylum with whom *Balanoglossus* shows affinities.
 5. Tornaria larva belongs to which phylum?
