

B.Sc. Semester - 5 (Remedial) (CBCS) Examination
March/April-2024 (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.
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- Que.1(A) Answer the following. (Any one out of two) (07)
- 1) Discuss general characters of phylum Mollusca and classify up to class with its characters and examples.
 - 2) Write down the general characters of phylum porifera and give an outline of classes, its characters with suitable examples.
- Que.1(B) Attempt any one out of two. (04)
- 1) Write down the characters of phylum Platyhelminthes with classification up to class.
 - 2) Discuss general characters of largest phylum of the animal kingdom on the earth.
- Que.1(C) Attempt any three out of five. (03)
- 1) Give any two examples of phylum Protozoa.
 - 2) In which phylum polymorphism occurs?
 - 3) Name the phylum having pseudocoelom.
 - 4) Animals of _____ phylum are having pentamerous radial symmetry.
 - 5) There are total 5 coelomate phylums present. (True/False)
- Que.2(A) Answer the following. (Any one out of two) (07)
- 1) Describe Digestive system of Scorpion with neat and labelled diagram.
 - 2) Describe Nervous system of Sepia with neat and labelled diagram.
- Que.2(B) Attempt any one out of two. (04)
- 1) Write a short note on book lungs.
 - 2) Write a note on Ink gland of Sepia.
- Que.2(C) Attempt any three out of five. (03)
- 1) What is the function of statocysts found in Sepia?
 - 2) Excretory organs in Scorpion are _____ .
 - 3) What is the respiratory organ in Scorpion?
 - 4) Sepia show the direct development. (True/False)
 - 5) What is the function of salivary glands found in Sepia?
- Que.3(A) Answer the following. (Any one out of two) (07)
- 1) Give a detail account of Nutrition in Protozoa.
 - 2) What is Polymorphism? Explain the concept of polymorphism in coelenterata with its forms, patterns and modifications.
- Que.3(B) Attempt any one out of two. (04)
- 1) Describe asexual reproduction in phylum Porifera with suitable diagrams.
 - 2) Write down symptoms of disease caused by *Leishmania*.
- Que.3(C) Attempt any three out of five. (03)
- 1) Give names of different types of pseudopodia found in Protozoa.
 - 2) Calcareous spicules are formed by which cells?
 - 3) Name the types of coral reefs depending on how they are formed.
 - 4) Which disease is caused by *Plasmodium*?
 - 5) Conjugation is a mode of sexual reproduction in phylum Protozoa. (True/False)

- Que.4(A) Answer the following. (Any one out of two) (07)
- 1) Explain diagnostic characters, mode of infection and disease caused by *Ascaris*.
 - 2) Give a detail account of crustacean larva with labelled diagram.
- Que.4(B) Attempt any one out of two. (04)
- 1) Write a short note on parasitic adaptations of *Fasciola*.
 - 2) Write a short note on Metamerism in Annelida.
- Que.4(C) Attempt any three out of five. (03)
- 1) Give definition of Metamerism.
 - 2) _____ Larva resembles to the adult crab.
 - 3) Name the disease caused by *Trichinella spiralis*.
 - 4) What is the function of JH (Juvenile hormone)?
 - 5) What are the symptoms of *Ancylostomiasis*?
- Que.5(A) Answer the following. (Any one out of two) (07)
- 1) Give detail account of Water vascular system of Starfish with labelled diagram.
 - 2) Discuss in detail the various types of foot found in Mollusca.
- Que.5(B) Attempt any one out of two. (04)
- 1) What is Torsion? Describe effects of torsion.
 - 2) Describe any two larvae found in phylum Echinodermata.
- Que.5(C) Attempt any three out of five. (03)
- 1) In which class madreporite is absent?
 - 2) Which animal is known as connecting link between invertebrate and chordate?
 - 3) Animal of which class possess hatchet-shaped foot?
 - 4) Give names of phylums with whom *Balanoglossus* shows affinities.
 - 5) Name the larva of *Balanoglossus*.
