

B.Sc. Semester - 5 (Remedial) (CBCS) Examination**March/April-2026 (NEW COURSE)****Functional Anatomy of Non chordates and Systematic(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. Give the Classification of Phylum Porifera up to class.
 2. Give the Classification of Phylum Annelida up to class.
- Que.1(B) Attempt any one. (Out of two) (04)
1. Give the Classification of Phylum Platyhelminthes up to class.
 2. Give the Classification of Phylum Arthropoda up to class.
- Que.1(C) Attempt any three. (Out of five) (03)
1. Describe any two characters of class insecta.
 2. Name the locomotory organelles found in phylum Protozoa.
 3. Animals of which phylum are having flame cells?
 4. Water vascular system is characteristic of which phylum?
 5. *Nereis* belongs to which phylum?
- 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 Pila with neat and labelled diagram.
- Que.2(B) Attempt any one. (Out of two) (04)
1. Write a short note on book-lungs of Scorpion.
 2. Write a short note on Osphradium.
- Que.2(C) Attempt any three. (Out of five) (03)
1. Give the Scientific name of Pila.
 2. How many teeth are found in a row of radula?
 3. Give only names of body division of Scorpion.
 4. What is the function of pectine?
 5. Give the names of excretory organs found in Scorpion.
- Que.3(A) Answer the following. (Any one out of two) (07)
1. Give detailed account of Nutrition in Protozoa.
 2. What is Polymorphism? Give detail account on it.
- Que.3(B) Attempt any one. (Out of two) (04)
1. Write a short note on sponge spicules.
 2. Write a short note on coral and coral reefs.
- Que.3(C) Attempt any three. (Out of five) (03)
1. Name the disease caused by *Trypanosoma gambiense*.
 2. Malaria causes by _____.
 3. What are gemmules?
 4. Give examples of cnidarians showing metagenesis.
 5. Bikine coral (famous for atomic and hydrogen bomb tests) are of which kind of coral reefs?

- Que.4(A) Answer the following. (Any one out of two) (07)
1. Write a detail account of diagnostic characters, mode of infection and disease caused by *Ancylostoma duodenale*.
 2. Describe segmental organs in annelids.
- Que.4(B) Attempt any one. (Out of two) (04)
1. Write down the parasitic adaptations of *Fasciola*.
 2. Describe Any two larval forms of Crustacea with diagrams.
- Que.4(C) Attempt any three. (Out of five) (03)
1. Animals of which phylum shows true metamerism first time?
 2. Which hormone is responsible for metamorphosis in insects.
 3. What is the disease Loiasis caused by?
 4. How many hosts does *Fasciola hepatica* have? Explain.
 5. Give Any two of economically important arthropodan animals.
- Que.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 detail account of process of pearl formation.
- Que.5(B) Attempt any one. (Out of two) (04)
1. Explain torsion in Mollusca.
 2. Describe Bipinnaria larva.
- Que.5(C) Attempt any three. (Out of five) (03)
1. Which animal is known as connecting link between invertebrate and chordate?
 2. What is locomotory organ found in phylum Echinodermata?
 3. Animals of which class possess byssus gland?
 4. List out any two type of foot found in Mollusca.
 5. Write any two affinities of *Balanoglossus* with Annelida.
