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- (b) What is Mosaic vision? Describe the functioning of compound eye of Arthropods in different intensities of light. (9+6)

6. Write short notes on the following: (15)

(a) Evolutionary significance of Onychophora

(b) Types of metamorphosis

(c) General characteristics of Mollusca

(1000)

[This question paper contains 4 printed pages.]

26 JUL 2023

Your Roll No.



Sr. No. of Question Paper : 1209

Unique Paper Code : 2232011201

Name of the Paper : Non-Chordata: Coelomates

Name of the Course : B.Sc. (H) Zoology- UGCF

Semester : II

Duration : 2 Hours

Maximum Marks : 60

**Instructions for Candidates**

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Answer any **FOUR** questions in all.
3. **Question No. 1** is compulsory.
4. Draw well-labelled diagrams wherever necessary.

1. (i) Define the following terms (any four): (4)

(a) Ecdysis

(b) Epitoky

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(c) Pseudo-metamerism

(d) Ocelli

(e) Tagmosis

(ii) Differentiate between the following (any two):  
(4)

(a) Schizocoelous and Enterocoelous

(b) Septal and pharyngeal nephridia

(c) Tracheal gills and book gills

(iii) Give the location and function of the following  
(any four): (4)

(a) Malpighian gland

(b) Radula

(c) Tiedmann's body

(d) Statocyst

(e) Typhlosole

(iv) Give generic of the following and classify upto  
classes (any three): (3)

(a) Brittle star

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(b) Water flea

(c) Clamp worm

(d) Tusk shell

2. (a) Give an account on the social life of Honey bee  
and add note on their economic importance.

(b) Describe the evolution of Metamerism.  
(9+6)

3. (a) Explain the mechanism of Torsion and detorsion  
in Gastropoda.

(b) Give the detailed description of excretion in  
Annelida with diagrams. (9+6)

4. (a) Discuss the water-vascular system in Asteroidea  
and write about its significance.

(b) Explain the process of Pearl formation in bivalves.  
(9+6)

5. (a) Give the brief account on respiratory organs. in  
Arthropods and discuss the mechanism of  
respiration in insects.

P.T.O.