

B.Sc. 2nd Semester (Honours) Examination, 2019

ZOOLOGY

(Non Chordates II)

Paper : 201/C-3

Course ID : 22611

Time : 1 Hour 15 Minutes

Full Marks : 25

*The figures in the right hand side margin indicate marks.
Candidates are required to give their answers in their own words
as far as practicable.*

1. Answer *any five* questions: 1×5=5
- (a) What is schizocoelic coelom?
 - (b) What you mean by exonephric nephridia.
 - (c) What are spiracles?
 - (d) What are ommatidia?
 - (e) Define detorsion?
 - (f) Define odontophore.
 - (g) Distinguish between commissures and connectives.
 - (h) Why hemichordates are called invertebrate chordates?
2. Answer *any two* questions: 5×2=10
- (a) Give an account of the water vascular system of *Asterias* with proper diagram 4+1=5
 - (b) Classify phylum Annelida upto class with characters and examples. 4+1=5
 - (c) “Onychophorans exhibit both Arthropod and Annelid characters”. Justify the statement. 5
 - (d) Describe the respiratory organs of *Pila* sp. with labelled diagram. 3+2=5
3. Answer *any one* question: 10×1=10
- (a) What do you mean by “ Critical period” in insect metamorphosis? Mention the names of endocrine gland involved in metamorphosis along with the chemistry of hormones in Lepidopteran insects. Schemetically represent the hormonal regulation of metamorphosis in Lepidoptera.

(b) Write short notes on the following echinoderms larve: (*any two* with suitable diagram):

5×2=10

- (i) Bipinnaria Larva
 - (ii) Echinopluteus Larva
 - (iii) Doliolaria Larva
 - (iv) Auricularia Larva
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