

**B.Sc. (Honours) Examination, 2019**  
**Semester–II**  
**Zoology**  
**Course – CCT-IV**  
**(Biology of Invertebrates : Arthropoda to Mollusca)**  
**(For Back Candidates)**

**Time: Three Hours**

**Full Marks: 40**

*Questions are of value as indicated in the margin.*

Answer *any five* questions.

1. Describe the digestive system of *Periplanetia* sp. with proper diagram. Add a note on digestion mechanism of it. 6+2=8
  2. Mention the sexual dimorphic characters of *Periplaneta* sp. Describe its male reproductive with a suitable diagram. 2+6=8
  3. Write briefly the structure and life history of *Sacculina* sp. 4+4=8
  4. Describe with suitable diagram the nervous system of *Pila* sp. 8
  5. What is torsion? Write the mechanism, effects and significance of torsion in gastropod. 1+2+2+3=8
  6. Describe with diagram the respiratory system of *Lamellidens* sp. 8
  7. Answer *any two* of the following questions: 4×2=8
    - (a) Examine the affinities of *Neopilina* with annelid.
    - (b) Write the physiology of excretion in *Periplaneta* sp.
    - (c) Write a short note of Osphradium.
    - (d) Write on the events of ootheca formation in *periplaneta* sp.
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