

**KNT/KW/16/5086**

**Bachelor of Science (B.Sc.) Semester—II (C.B.S.) Examination**  
**ZOOLOGY**  
**(Life and Diversity of Animals-Non-Chordates)**  
**Compulsory Paper—1**

Time : Three Hours]

[Maximum Marks : 50

**N.B. :**— (1) **ALL** questions are compulsory.  
 (2) All questions carry equal marks.  
 (3) Illustrate your answers with suitable diagrams.

1. Give an account of social behaviour in honey bee.

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**OR**

Write notes on :

(A) Alimentary canal of Cockroach  
 (B) Larval forms in Crustacea.

2. Describe in detail pearl formation in Mollusca.

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**OR**

Write notes on :

(A) Pallial complex  
 (B) Veliger larva.

3. Describe the water vascular system in Starfish.

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**OR**

Write notes on :

(A) Aboral surface of Starfish  
 (B) Pedicillariae.

4. Give an account of reproductive system and larval form of *Balanoglossus*.

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**OR**

Write notes on :

(A) T.S. *Balanoglossus* through collar (diagram only).  
 (B) Chordate affinities of *Balanoglossus*.

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5. Write **four** or **five** lines on the following (Any **TEN**) :

(i) Culex  
 (ii) Tse-tse fly  
 (iii) Spermatheca  
 (iv) Radula  
 (v) Nuchae lobe  
 (vi) Lime cell  
 (vii) Dermal branchiae  
 (viii) Bipinnaria larva  
 (ix) Buccal diverticulum  
 (x) Parabranchial ridges  
 (xi) Post hepatic region  
 (xii) Ambulacrual groove.

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