

(i) Printed Pages: 2

Roll No. ....

(ii) Questions : 9

Sub. Code : 

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Exam. Code : 

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**B.A./B.Sc. (General) 2<sup>nd</sup> Semester  
(2054)**

**ZOOLOGY**

**Paper—I : Biodiversity & Ecology—I (ZOO-201)**

**Time Allowed : Three Hours]**

**[Maximum Marks : 36**

**Note :—**Attempt **FIVE** questions in all, selecting **ONE** question from each Unit. Question No. 1 is compulsory. Draw well labelled diagrams wherever required.

1. Write notes on :

- (a) Armarium
- (b) Epipodites
- (c) Spermathecae
- (d) Absconding
- (e) Food Web
- (f) Soil horizon
- (g) S-shaped growth curve
- (h) Patagia.

8×1

**UNIT—I**

2. (a) Describe male reproductive system of cockroach. 6
- (b) What is Hypopharynx ? 1

3. (a) Give an account of social organization in termites. 3
- (b) Classify and give ecological note and economic importance of : *Lepisma* (Silver fish), *Gryllus* (Cricket). 4

### UNIT—II

4. (a) Describe in detail cephalic appendages of *Palaemon*. 4
- (b) Write a note and explain with diagram of central nervous system of *Palaemon*. 3
5. (a) Differentiate between life histories of *Anopheles* and *Culex* mosquitoes. 3
- (b) Classify and give ecological note of :  
*Cancer* (Crab), *Aranea* (Spider) 4

### UNIT—III

6. (a) Define the food chain. Explain types of food chain taking one example of each. 5
- (b) Give a brief note on productivity. 2
7. (a) Write a note on water conservation in land animals. 3
- (b) Explain the pond ecosystem. 4

### UNIT—IV

8. Explain the carbon cycle in detail. Why it is called a perfect cycle ? 7
9. Define natatorial adaptations. Give details of these adaptations in animals. 7