

(i) Printed Pages : 2

Roll No.

(ii) Questions : 9

Sub. Code :

0	1	5	6
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Exam. Code :

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B.A./B.Sc. (General) 2nd Semester

1048

ZOOLOGY

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

Time Allowed : Three Hours]

[Maximum Marks : 36

Note :— (i) Question No. 1 is compulsory.

(ii) In all, **five** questions are to be attempted including the compulsory question.

(iii) Select any **one** question from each unit.

1. Explain the following :—

(i) Malpighian tubules.

(ii) Rostrum.

(iii) Ecdyson.

(iv) Tentorium.

(v) Hyperparasitism.

(vi) Ecological density.

(vii) Bioluminescence.

(viii) Eurythermal.

1×8

UNIT—I

2. Describe the structure and working of the eye of the cockroach. 7
3. Give an account of the social life of honey bee. 7

UNIT—II

4. (a) Give an account of cephalothoracic appendages of prawn. 4
(b) Describe life cycle of Anopheles. 3
5. Classify up to order and give a brief ecological note and economic importance of :
 - (a) *Eupagurus* (Hermit crab). 3
 - (b) *Palamnaeus* (Scorpion). 2
 - (c) *Limulus* (King crab). 2

UNIT—III

6. Discuss the influence of light on the animals in their environment. 7
7. (a) Explain the concept of flow of energy in an ecosystem. 5
(b) Define niche. 2

UNIT—IV

8. Discuss the different characteristics of population in detail and also mention different ways to regulate it. 7
9. Describe briefly :—
 - (a) Mimicry 3
 - (b) Carbon cycle. 4