

(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
(2042)

ZOOLOGY

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

Time Allowed : Three Hours]

[Maximum Marks : 36

Note :—Attempt five questions in all, including Question No. I, which is compulsory and selecting one question from each Unit. Draw well labelled diagram where required.

I. Explain the following :

- (a) Mosaic vision
- (b) Gonapophysis/Phallomeres
- (c) Conglobate gland
- (d) Statocysts
- (e) Ecological hierarchy
- (f) Population
- (g) Rectrices
- (h) Bergaman's Rule.

8×1=8

UNIT—I

- II. (a) Describe the mouth parts of cockroach. 4
- (b) Write a note on trachea of cockroach. 3

III. (a) Define social insects. Describe the social organization in honey bee. 4

(b) Classify upto order and write ecological note on :

(i) *Forficula*

(ii) *Bombyx*. 3

UNIT—II

IV. (a) Describe circulatory system of Prawn. 5

(b) Write a note on Antennary glands. 2

V. (a) Write a note on habitat and habits of *Anopheles* mosquito. 4

(b) Classify upto order and write ecological note on :

(i) *Cancer*

(ii) *Eupagurus*. 3

UNIT—III

VI. (a) Discuss the significance of ecology to mankind. 2

(b) Define food chain. Explain two types of food chains taking one example of each chain type. 5

VII. (a) Enlist the characteristics of a Biotic Community. 3

(b) Explain various types of productivity. 4

UNIT—IV

VIII. (a) Give detailed account of carbon cycle in nature. 5

(b) Write a short note on fossorial adaptations of animals. 2

IX. Write briefly on :

(a) Growth curve 5

(b) Natality rate. 2