

Roll No. Total No. of Printed Pages : 3

Code No. : B04-305

Fourth Semester Online Examination, May-June, 2022

M. Sc. ZOOLOGY

Paper III

POPULATION ECOLOGY

Time : Three Hours] [Maximum Marks : 80

Note : ● Part A and B of each question in each unit consist of very short answer type questions which are to be answered in one or two sentences.

● Part C (Short answer type) and D (Long answer type) of each question should be answered within the word limit 200-250 and 400-450 words.

Unit-I

1. (A) What is the purpose of life table ? 2
- (B) Define abridged life table. 2
- (C) Write a note on fecundity. 4

Or

Explain Mortality.

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(D) What is population density ? What are different methods to determine population density ? 12

Or

Describe different growth forms of population.

Unit-II

2. (A) Define Emigration. 2
- (B) Define Immigration. 2
- (C) Write short note on population cycle. 4

Or

Write a note on age ratio. How it affects the population ?

(D) What are different factors which regulate population size ? 12

Or

Describe different types and uses of age pyramids.

Unit-III

3. (A) Define niche. 2
- (B) State Liebig's law of minimum. 2

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(C) Write a short note on r and k selection. 4

Or

Breeding age and sex ratio.

(D) Write in detail about niche segregation. 12

Or

What is competition ? Describe different types of competition and its effect on population.

Unit-IV

4. (A) What is antibiosis ? 2

(B) Define neutralism. 2

(C) Write a note on Proto co-operation. 4

Or

Explain mutualism.

(D) Write in detail-Host-parasite relationship.

Or

What is predation ? What are its components ?

Describe role of predation in nature ?

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