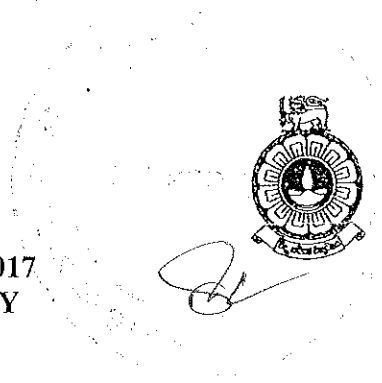


THE OPEN UNIVERSITY OF SRI LANKA
 DEPARTMENT OF ZOOLOGY
 B. Sc. DEGREE PROGRAMME - LEVEL 4- 2016/2017
 COURSE TITLE: FUNDAMENTALS OF ECOLOGY
 COURSE CODE -ZLU2281
 OPEN BOOK TEST



REGISTRATION NUMBER

DATE: 23.09.2017

TIME -4.00PM-5.30 PM

Answer all questions in both parts A and B. Answers for part A should be indicated with a "X" in the answer sheet provided.

Both part, A and B should be handed over after the examination.

PART A

Answer sheet for PART A

Question no	a	b	c	D
1.1				
1.2				
1.3				
1.4				
1.5				
1.6				
1.7				
1.8				
1.9				
1.10				
1.11				
1.12				
1.13				
1.14				
1.15				

Question no	a	b	c	d
1.16				
1.17				
1.18				
1.19				
1.20				
1.21				
1.22				
1.23				
1.24				
1.25				

00031

PART B

REGISTRATION NUMBER

1.1. Define the terms population and age structure

a) Population

.....

b) Age structure.

.....

1.2. Write the importance of determining the age structure of a population of organisms.

.....

.....

.....

....

1.3. Explain briefly how you would determine the population size of a fish species in a pond.

.....

.....

.....

.....

.....

.....

1.4. Fill in the blanks in the sentences with appropriate word/s. given below

Clumped, regular, Spatial, Temporal,1. The distribution of an animal within an area is considered as its.....
distribution.2. The distribution pattern of an animal with time is considered as its
distribution.3. distribution pattern is usually common among animals than
..... distribution pattern.

2.

2.1. What is a closed population?

.....
.....

2.2.a) What are the major forces that influence the population growth in a closed population?

2.2. b) Write 3 types of population growth observed in a closed population.

.....
.....
.....

2.3.

a) Two major population growth patterns have been derived by Lotka and Voltera using mathematical models and equations. List them.

1.....

2.....

b). Explain the above growth models briefly with examples.

1.....
.....
.....

2.....
.....
.....

2.4 Explain the logistic population growth, using relevant equation and a labeled diagram.

2.5. Briefly describe the three possible outcomes of interspecific competition between two species?

- 1.....
- 2.....
- 3.....

2.6 a) Name the categories of predation found among animals and briefly discuss each category.

- 1.....
.....
- 2.....
.....
- 3.....
.....
- 4.....
.....

2.7 Draw the prey and predator isoclines prepared by Lotka-Volterra in one diagram. Explain the outcome of this interaction.

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