

UNIVERSITY OF SWAZILAND
DEPARTMENT OF BIOLOGICAL SCIENCES
MAIN EXAMINATION PAPER MAY 2018

TITLE OF PAPER: POPULATION ECOLOGY

COURSE CODE: BIO 332

TIME ALLOWED: THREE HOURS

INSTRUCTIONS:

1. ANSWER ANY FOUR QUESTIONS IN
THIS PAPER
2. ILLUSTRATE YOUR ANSWERS WITH LARGE
AND CLEARLY LABELLED DIAGRAMS WHERE
APPROPRIATE

SPECIAL REQUIREMENTS: NONE

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN
GRANTED BY THE INVIGILATORS

Answer any four questions in this paper

Question 1

Discuss density-dependent population growth.

[Total marks = 25]

Question 2

Discuss how the exponential human population growth is a threat to biodiversity.

[Total marks = 25]

Question 3

The Management of Malolotja Nature Reserve wants to cull some of their animals from their nature reserve. Unfortunately they do not know which factors to consider for this exercise. Please discuss the factors that they have to consider in this task.

[Total marks = 25]

Question 4

Discuss the different ways in which populations can be distributed in an ecosystem.

[Total marks = 25]

Question 5

Discuss the different mechanisms through which predators and prey are adapted to survive.

[Total marks = 25]

END OF EXAMINATION PAPER