

UNIVERSITY OF SWAZILAND

DEPARTMENT OF GEORAPHY, ENVIRONMENTAL SCIENCE AND PLANNING

MAIN EXAMINATION: MAY, 2016

MSc

TITLE OF PAPER : CLIMATE CHANGE AND THE ENVIRONMENT

COURSE NUMBER : ERM 621/GEP 632

TIME ALLOWED : THREE (3) HOURS

**INSTRUCTIONS : ANSWER ONE QUESTION FROM EACH SECTION
ILLUSTRATE YOUR ANSWERS WITH
APPROPRIATE DIAGRAMS**

MARKS ALLOCATED : ALL QUESTIONS CARRY 50 MARKS EACH

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

ERM 621/GEP 632: CLIMATE CHANGE AND THE ENVIRONMENT (May, 2016)

SECTION A: ANSWER ONE QUESTION

QUESTION 1

- (a) 'The natural greenhouse gas emissions are beneficial to our environment'. Discuss the validity of the statement. (25 marks)
 - (b) 'Climate change is really happening'. Discuss this statement citing examples. (25 marks)
- (50 Marks)**

QUESTION 2

- (a) With the help of chemical equations explain how the ozone layer is depleted in the atmosphere. (25 marks)
 - (b) Discuss the consequences of an ozone layer depleted atmosphere. (25 marks)
- (50 Marks)**

SECTION B: ANSWER ONE QUESTION

QUESTION 3

Discuss the similarities and differences between General circulation models (GCMs) and Numerical Weather Prediction Models (NWPM).

(50 Marks)

QUESTION 4

'Least developed countries will be hit hard by expected climate change. Discuss the validity of the statement.

(50 Marks)