UNIVERISTY OF SWAZILAND DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND PLANNING

FINAL EXAMINATION, DECEMBER 2009 B.Sc., B.Ed

TITLE OF PAPER:

AGRICULTURAL SYSTEMS

COURSE NUMBER:

GEP 326

TIME ALLOWED:

THREE (3) HOURS

INSTRUCTIONS:

1. ANSWER FOUR (4) QUESTIONS

2. CHOOSE TWO (2) FROM EACH SECTION

3. ILLUSTRATE YOUR ANSWERS WITH

EXAMPLES AND CLEARLY DRAWN DIAGRAMS

WHERE APPROPRIATE

ALLOCATION OF MARKS:

EACH QUESTION CARRIES

25 MARKS

THIS PAPER SHOULD NOT BE OPENED UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR

GEP 326 - AGRICULTURAL SYSTEMS - DECEMBER 2009

SECTION A: ANSWER ANY TWO (2) QUESTIONS

QUESTION 1

Discuss the implications of the interactions between the physical environmental factors and the economic circumstances on the resulting farming and land use patterns.

(25 marks)

QUESTION 2

'The assumption that each farmer has "best solution" of products to be produced under particular physical and economic environments has little relevance to real world conditions'. Discuss the relevance of this statement. (25 marks)

QUESTION 3

Based on the principles of comparative advantage, discuss why trade levels in the Southern African Development Community (SADC) remain low. (25 marks)

SECTION B: ANSWER ANY TWO (2) QUESTIONS

QUESTION 4

Discuss the factors controlling crop yield potential.

(25 marks)

QUESTION 5

Using examples, describe three methods used to estimate missing rainfall data.

(25 marks)

QUESTION 6

'Weather may sometimes be inconvenient for people, or even dangerous'. Discuss four experimental techniques designed to modify weather. (25 marks)