

**UNIVERSITY OF SWAZILAND
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND
PLANNING**

**FINAL EXAMINATION, MAY 2017
B.A., B.Ed., B.Sc., BASS, JMC3 (FT/PT)**

TITLE OF PAPER: INTRODUCTION TO THE HUMAN ENVIRONMENT

COURSE NUMBER: GEP112/121

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS: THIS PAPER IS DIVIDED INTO TWO SECTIONS

SECTION A: TECHNIQUES AND SKILLS

- 1. ANSWER ALL QUESTIONS (COMPULSORY)**
- 2. THIS SECTION CARRIES 40 MARKS**

SECTION B: SHORT ANSWERS / ESSAYS

- 1. ANSWER ANY TWO QUESTIONS**
- 2. EACH QUESTION CARRIES 30 MARKS**

SPECIAL REQUIREMENTS: Graph paper

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

GEP112/121: INTRODUCTION TO THE HUMAN ENVIRONMENT – MAY 2017**SECTION A: TECHNIQUES AND SKILLS (40 MARKS)
COMPULSORY****QUESTION 1**

- a) Outline the procedure for constructing a Lorenz curve. (6 marks)
- b) Using an appropriate graphical technique portray the hypothetical data shown in Table 1. (15 marks)

Table 1: Sales of Pick n Pay in Emalangeni (E) by department from 2013-2016

YEAR	DEPARTMENT				
	Fruits	Bakery	Liquor	Grocery	Meat
2013	2 500	3 320	3 690	5 070	3 980
2014	3 800	3 590	3 630	5 240	3 040
2015	3 644	3 790	3 556	5 780	3 298
2016	3 298	3 970	3 475	6 808	3 440

Source: Hypothetical

- c) With reference to Figure 1, calculate the amount of interaction between Manzini and the urban centres in the Shiselweni district of Swaziland. (Use a straight line distance) (9 marks)
- d) Using an appropriate graphical technique, represent the data in Table 2 below. (10 marks) (40 Marks)

Table 2: Survivorship statistics of two hypothetical countries

Population A	Population B	Age
12 000	12 000	0
10 300	10 080	5
9 800	10 600	10
9 400	10 400	15
9 100	10 200	20
9 000	9 950	25
8 600	9 750	30
8 200	9 500	40
8 000	9 300	50
6 800	9 150	60
4 900	8 000	70
2 000	4 000	80
1 000	1 000	90
0	0	100

Source: Hypothetical

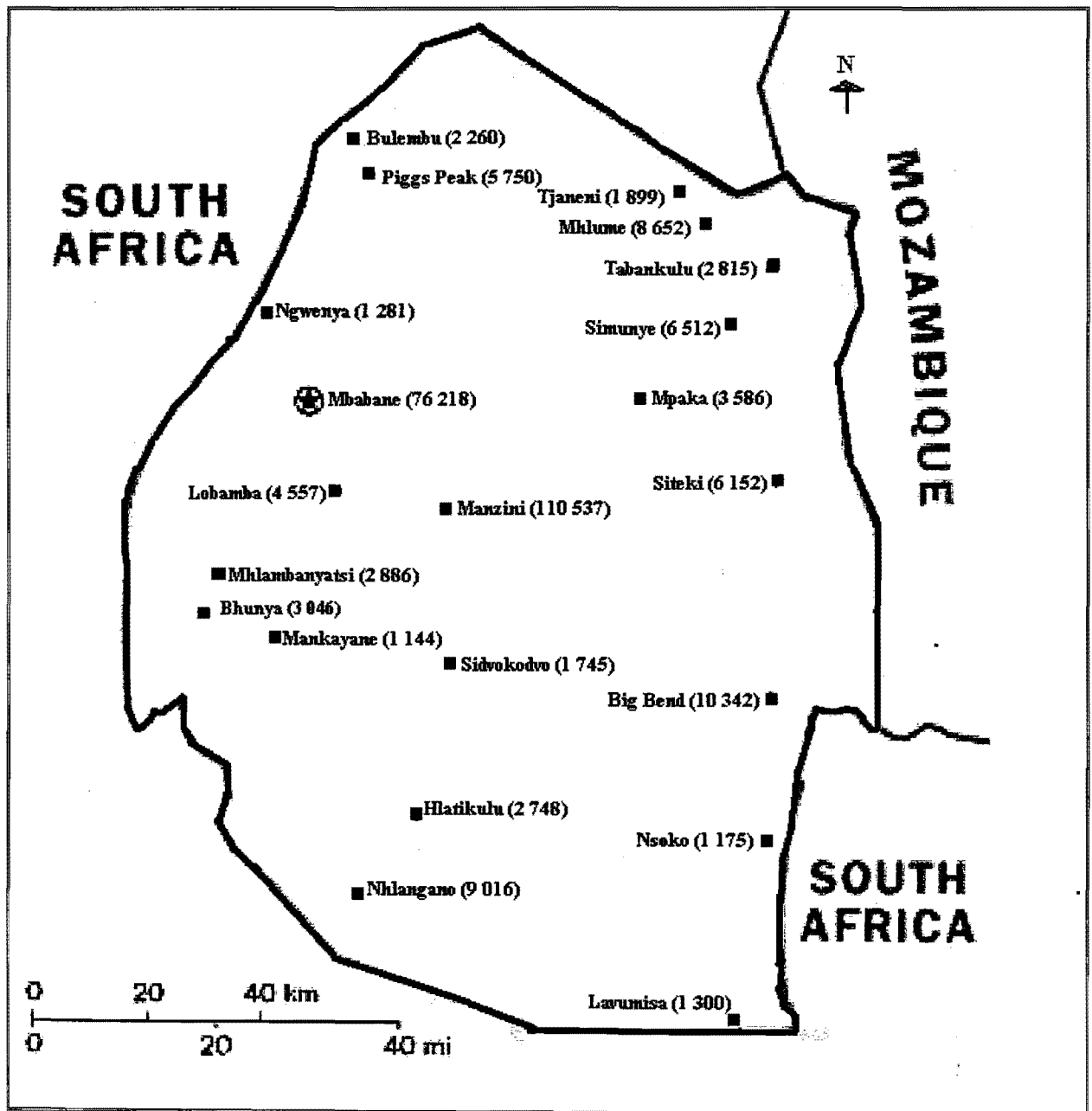


Figure 1: Urban Settlements and Population in Swaziland

Source: Swaziland Census Report (2007)

SECTION B: SHORT ANSWERS / ESSAYS (60 MARKS)
ANSWER ANY TWO QUESTIONS

QUESTION 2

- a) With reference to any community water scheme, demonstrate the relevance of the tragedy of the commons model. (10 marks)
 - b) 'According to Norton (1992) the drive towards a sustainable world requires a significant and deliberate change in attitude'. Explain the essential components to the new attitude. (10 marks)
 - c) Using examples, explain how diseases are linked to global warming. (10 marks)
- (30 Marks)**

QUESTION 3

- a) Using examples, explain how perception and behaviour differ among individuals. (10 marks)
 - b) Discuss how human activities threaten wetlands as an ecosystem. (20 marks)
- (30 Marks)**

QUESTION 4

- Using examples, discuss the challenges posed by invasive plant species on the environment. (30 Marks)

QUESTION 5

- a) Discuss the factors affecting population change. (10 marks)
 - b) Identify and explain two measures of population change which take into account the structure of the population. (10 marks)
 - c) Explain how population constrain economic development in developing countries. (10 marks)
- (30 Marks)**