

**UNIVERSITY OF SWAZILAND  
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND  
PLANNING  
FINAL EXAMINATION, MAY 2011  
B.A., B.Ed., B.Sc., BASS, JMC3, IDE.**

**TITLE OF PAPER: INTRODUCTION TO THE HUMAN ENVIRONMENT**

**COURSE NUMBER: GEP 121**

**TIME ALLOWED: THREE (3) HOURS**

**INSTRUCTIONS: THIS PAPER IS DIVIDED INTO TWO SECTIONS**

**SECTION A: SHORT ANSWERS / ESSAYS**

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

**SECTION B: TECHNIQUES AND SKILLS**

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

**SPECIAL REQUIREMENTS: None**

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

**GEP 121: INTRODUCTION TO THE HUMAN ENVIRONMENT – MAY 2011**  
**SECTION A: SHORT ANSWERS / ESSAYS (60 MARKS)**  
**ANSWER ANY TWO QUESTIONS**

**QUESTION 1**

- a) Using examples explain extreme environmental events. (16 marks)  
b) Outline the measures which are used in evaluating the climatic environment as a hazard. (14 marks)  
**(30 marks)**

**QUESTION 2**

- a) Using examples discuss the spatial variation of culture. (20 marks)  
b) Explain the role played by religious beliefs in cultural differentiation. (10 marks)  
**(30 marks)**

**QUESTION 3**

Critically analyze the factors affecting the growth and development of cities.  
**(30 marks)**

**QUESTION 4**

Using examples discuss the factors responsible for conflicts between states.  
**(30 marks)**

**SECTION B: TECHNIQUES AND SKILLS (40 MARKS)**  
**COMPULSORY**

**QUESTION 1**

Define the following concepts:

- i. Three-quarters rule (2 marks)  
ii. Lorenz curve (2 marks)  
iii. Population doubling time (2 marks)  
iv. Quantitative variable (2 marks)  
v. Optimum population (2 marks)

**QUESTION 2**

The total land area of Swaziland is 17 365 square kilometres. In year 1997 the population was estimated to be 1 million, of which 15 per-cent were less than 5 years of age and 25 per cent were females in the age group 15-49 years. In year 1997, 22 000 babies were born, with 48 per cent being female, and only 10 020 of these babies survived the first year of life.

Using the information above, calculate the following, showing the formula and workings:

- a) The density of population (2 marks)  
b) The sex-ratio at birth (2 marks)

- c) The crude birth rate (2 marks)  
 d) The child-women ratio (2 marks)  
 e) The female infant mortality rate (2 marks)

**QUESTION 3**

- a) Outline the procedure for constructing a linear graph using any appropriate example of your choice. Do not draw the linear graph. (5 marks)  
 b) Using an appropriate graphical technique portray the hypothetical data shown on table 1. (15 marks)

**Table 1: Sales of the Hub Spar in Emalangeneni (E) by department from 2002-2005**

YEAR	DEPARTMENT				
	Fruits	Bakery	Liquor	Grocery	Meat
2002	150	1 120	1 490	2 970	1 780
2003	1 600	1 090	1 430	2 840	1 840
2004	1 444	1 290	1 356	3 580	2 098
2005	1 098	1 570	1 275	4 608	2 240

**(40 marks)**