

**UNIVERSITY OF SWAZILAND
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND
PLANNING
FINAL EXAMINATION, MAY 2007
B.A., B.Ed., B.Sc., BASS.**

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**

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

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

QUESTION 1

a) Define the following:

- i) Ecosystem (2 marks)
- ii) Culture (2 marks)
- iii) Perception (2 marks)
- iv) Decision making (2 marks)
- v) Resource Conservation. (2 marks)

b) "Human-environment relations have two sides to them" (Haggett, 2001:16). Discuss the human-environment relationships. (10 marks)

c) "Human life is maintained by an inward flow of nutrients and an outward flow of wastes" (Haggett, 2001:131). Discuss. (10 marks)
(30 Marks)

QUESTION 2

Discuss the arguments for conservation of the tropical rainforests raised by a New Zealand Geographer John Flenley. (30 Marks)

QUESTION 3

- a) Compare and contrast morphologic and cascading systems. (10 marks)
 - b) Using examples explain what we mean by extreme geophysical events. (10 marks)
 - c) Discuss on diseases and spatial contraction. (10 marks)
- (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 kilometers. In year 1997 the population was estimated to 1 million, of which 15 percent were less than 5 years of age and 25 percent were females in the age group 15-49 years. In year 1997, 22 000 babies were born, with 48 percent 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 Emalangeni by department from 2002-2005

YEAR	DEPARTMENT				
	Fruits	Bakery	Liquor	Grocery	Meat
2002	150	1120	1490	2970	1780
2003	1600	1090	1430	2840	1840
2004	1444	1290	1356	3580	2098
2005	1098	1570	1275	4608	2240

(40 Marks)