

**UNIVERSITY OF SWAZILAND
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND
PLANNING
SUPPLEMENTARY EXAMINATION, JULY 2010
B.A., B.Ed., B.Sc., BASS, JMC 3, 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:

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

GEP 121: INTRODUCTION TO THE HUMAN ENVIRONMENT - JULY 2010
SECTION A: SHORT ANSWERS / ESSAYS (60 MARKS)
ANSWER ANY TWO QUESTIONS

QUESTION 1

- a. Explain the optimistic and pessimistic views regarding the dilemma of reserves of the earth' non-renewable resources. (10 marks)
- b. Critically analyze the globalization debate. (20 marks)

QUESTION 2

- a. Identify and describe the main stages in the passage of an innovation through a region. (6 marks)
 - b. Explain what is meant by contact fields and mean information fields. (4 marks)
 - c. Using examples from Swaziland, discuss the challenges posed by urbanisation. (20 marks)
- (30 marks)**

QUESTION 3

Discuss how people cause ecosystems to change. **(30 marks)**

QUESTION 4

- a. Using examples discuss how cities destroy the existing microclimate of an environment and create new ones. (15 marks)
 - b. Explain Ester Boserup's model of agricultural intensification. (15 marks)
- (30 marks)**

SECTION B: TECHNIQUES AND SKILLS (40 MARKS)
COMPULSORY

QUESTION 1

Define the following concepts:

- i. Three-quarters rule (2 marks)
- ii. Primate city (2 marks)
- iii. Total fertility rate (2 marks)
- iv. Optimum population (2 marks)
- v. Geographical variable (2 marks)

QUESTION 2

- a. Use the most appropriate geographical technique to represent the hypothetical average sectoral capital expenditure in Swaziland for the year 2009 shown in table 1 below. Ensure that your geographical technique is clear and fully labelled.

(15 marks)

Table 1: Hypothetical Average Sectoral Expenditure in Swaziland for the Year 2009

Government Sectors	Expenditure (Millions of Emalangeni)
Education	47.4
General Administration	33.8
Public Order and Safety	12.3
Defence	50.7
Agriculture	22.3
Health	25.9
Transport and Communication	35.6
Interest	11.0
Other	32.1

- b. Looking at the representation what would you say about government commitment to diet and health of the Swazi people. (2 marks)
- c. What is your brief conclusion on the expenditure of Swaziland for the year 2009? (3 marks)

QUESTION 3

- a. Plot the data on Table 2 on a graph paper to produce two survivorship curves. (8 marks)

- b. Which survivorship curve represents highly developed countries? Explain your answer. (2 marks)

Table 2: Hypothetical Survivorship Statistics of two hypothetical countries

Population A	Population B	Age
1000	1000	0
930	980	5
880	960	10
840	940	15
810	920	20
800	895	25
760	875	30
720	850	40
700	830	50
580	815	60
390	800	70
100	300	80
10	10	90
0	0	100

(40 marks)