

UNIVERSITY OF SWAZILAND
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND
PLANNING
SUPPLEMENTARY EXAMINATION, JULY 2006
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

- 3. ANSWER ANY TWO QUESTIONS**
- 4. 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) Using examples explain what is meant by 'extreme geophysical events'. (12 marks)
- b) Define the following concepts: (10 marks)
- i) Environmental determinism
 - ii) Urbanization
 - iii) Carrying capacity
 - iv) Fertility rate
 - v) Total Fertility Rate
- c) Describe the basic features of a census. (4marks)
- d) Distinguish between involuntary and voluntary types of movements. (4 marks)
(30 marks)

QUESTION 2

- a)
- i) Identify the two main types of spatial diffusion processes and explain how these take place. (8 marks)
 - ii) Describe four types of barriers on the diffusion of innovation. (4 marks)
- b)
- i) Identify and describe the three components of culture. (6 marks)
 - ii) Explain what we mean when we talk of cultural differences. (4 marks)
- c) According to Haggett (2001), there are two factors explaining why cities grow. Identify and explain how these factors operate. (8 marks)
(30 marks)

QUESTION 3

- a) Explain how agglomeration economies and urban multipliers pull people into the cities. (20 marks)
- b) Explain the main functions of cities. (10 marks)
(30 marks)

QUESTION 4

- a) Identify and discuss the main geographical factors giving rise to conflicts between states. (20 marks)
- b) Explain what we mean by urbanization. (10 marks)
(30 marks)

SECTION B: TECHNIQUES AND SKILLS (40 MARKS)
COMPULSORY

QUESTION 1

The USA population in 1985 was 243 193 000 and increased by 0.9% every year until the beginning of 2000. Calculate the increment during each year (both total population and increment during the year). Show these results in a table which is titled and labelled.
(12 marks)

QUESTION 2

The degree or amount of interaction between two urban places is of considerable interest to geographers. The Gravity Model allows one to predict the amount of traffic or consumer flow between two adjacent cities.

- a) City A has 50 000 people and City B has 10 000 people. The distance between the two cities is 10 km. Calculate the amount of interaction between city A and B. (4 marks)
- b) Which city has a higher attraction force? (2 marks)
- c) What are the assumptions of the Gravity Model? (6 marks)
- d) How can you empirically verify interaction between cities? (2 marks)

QUESTION 3

- a) Explain what a pie diagram is used for? (4 marks)
 - b) Using the data provided in table 1 as your example explain clearly (step by step) how a segmented circle is drawn. (10 marks)
- (40 marks)**

Table 1: Number and Types of Registered Motor Vehicles in South Africa in 1980

Type of Motor Vehicle	Number of Motor vehicles in 000' to nearest thousand
Motor cars	2 314
Mini-buses	70
Buses	19
Commercial vehicles	803
Motorcycles	189
Tractors	296
Total	3 691