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UNIVERISTY OF SWAZILAND

DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND PLANNING

SUPPLEMENTARY EXAMINATION, JULY 2014

B.A., B.Ed., B.Sc., BASS, JMC 3, IDE.

TITLE OF PAPER: INTRODUCTION TO THE HUMAN ENVIRONEMNT

COURSE NUMBER: **GEP 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: None

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

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GEP 121: INTRODUCTION TO THE HUMAN ENVIRONMENT - JULY 2014

SECTION A: TECHNIQUES AND SKILLS (40 MARKS)
COMPULSORY

QUESTION 1

a) Explain 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)

b) The total land area of Swaziland is 17 365 square kilometers. 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.

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

i) The density of population (2 marks)
ii) The sex-ratio at birth (2 marks)
iii) The crude birth rate (2 marks)
iv) The child-women ratio (2 marks)
v) The female infant mortality rate (2 marks)

d) Outline the procedure for constructing a linear graph using any appropriate example of your choice. Do not draw the linear graph. (5 marks)

e) Using an appropriate graphical technique, portray the hypothetical data shown on table 1. (15 marks)

Table 1: Sales of the Hub Spar in Emalangeni (E) by department from 2010-2013

YEAR	DEPARTMENT				
	Fruits	**Bakery**	**Liquor**	**Grocery**	**Meat**
2010	150	1 120	1 490	2 970	1 780
2011	1 600	1 090	1 430	2 840	1 840
2012	1 444	1 290	1 356	3 580	2 098
2013	1 098	1 570	1 275	4 608	2 240

Source: Hypothetical

(40 marks)

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

QUESTION 2

a) With the aid of examples, distinguish between renewable and non-renewable resources. (6 marks)

b) Identify and explain the parameters that are essential when estimating the size of a resource reserve. (12 marks)

c) Explain the dilemma of stock resources in non-renewable resources. (12 marks)
(30 Marks)

QUESTION 3

a) Outline the important measures in evaluating the climatic environment as a hazard. (14 marks)

b) Explain the contribution of human beings to environmental hazards. (16 marks)
(30 Marks)

QUESTION 4

Examine the link between diseases and economic development. **(30 Marks)**

QUESTION 5

Explain how socio-economic activities change with population density. **(30 Marks)**