UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER 2007

TITLE OF PAPER:

INTRODUCTION TO DEMOGRAPHY

COURSE CODE :

DEM 101

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS:

ANSWER QUESTION 1 AND ANY OTHER TWO

(2) QUESTIONS.

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QUESTION 1 (Compulsory) (6+4+5+5)

Use the following data for Country X to answer the questions below:

DATA FOR COUNTRY X

Population 15-49 in 2000	480,000
Number of women 15-49 in 2000	280,000
Population in 1990	2,000,000
Population in 2000	2,200,000
Births in 1990	100,000
Births in 2000	120,000
Deaths in 1990	40,000
Deaths in 2000	36,000
Births between 1990 and 2000	550,000
Deaths between 1990 and 2000	190,000
Girls under age 5 in 2000	200,000
Children under age 5 in 2000	400,000

- a. What happened to the rate of crude birth rate and crude death rate for country X between 1990 and 2000?
- b. Calculate the general fertility rate for country X in 2000.
- c. What was the net migration of country X between 1990 and 2000?
- d. Calculate the annual rate of growth of the population between 1990 and 2000.

QUESTION 2

(4+4+4+4+4 marks)

Mid-year Female Population and Live Births by Maternal Age, 1991

Age	Female Population	Live Births	
15-19	18,000	299	
20-24	20,000	3 008	
25-29	21,000	2 814	
30-34	19,000	1 938	
35-39	27,000	1 485	
40-44	24,000	456	
45-49	22,000	159	

NB: Total population in 1991-600,000

Maternal and Infant Deaths and Still births, 1991

Maternal deaths	10	
Infant deaths	210	
Neonatal deaths	126	
Early neonatal deaths	106	
Still births	200	

Using the above data, calculate the following measures and interpret them:

- i. Crude Birth rate
- ii. General fertility rate
- iii. Total fertility rate
- iv. Infant mortality rate
- v. Maternal mortality rate.

QUESTION 3 (4+5+5+6marks)

- a. List four features of a population census.
- b. Outline four limitations of a population register.
- c. Explain why vital registration is deficient in developing countries such as Swaziland?
- d. What are the advantages of demographic surveys over population censuses?

QUESTION 4 (4+4+4+4 marks)

Distinguish fully between the following concepts and measures:

- a. Population structure and population composition;
- b. Fecundity and fecundability;
- c. Mortality and morbidity;
- d. Epidemic and endemic disease; and
- e. Sampling frame and sampling error.