

**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

- What happened to the rate of crude birth rate and crude death rate for country X between 1990 and 2000?
- Calculate the general fertility rate for country X in 2000.
- What was the net migration of country X between 1990 and 2000?
- 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+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.