UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER 2009

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 2 (COMPULSORY)

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

Mid-year Female Population and Live Births by Maternal Age, 1995

Age	Female Population	Live Births
10-14	17,000	35
15-19	18,000	299
20-24	20,000	3 008
25-29	21,000	2 814
30-34 35-39 40-44 45-49 50-54	19,000 27,000 24,000 22,000 20,000	1 938 1 485 456 159

NB: Total female population 1995-300,000

Sex ratio at birth – 105 General sex ratio - 96

Maternal and Infant Deaths and Still births, 1995

Maternal deaths	15
Infant deaths	250
Neonatal deaths	136
Early neonatal deaths	116
Still births	220

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 2 (4+6+6+4 marks)

- a. Outline four limitations of a population register.
- Explain why vital registration is deficient in developing countries such as Swaziland.
- c. What are the advantages of demographic surveys over population censuses?
- d. What is the difference between stock and flow data?

QUESTION 3 (4+4+4+4 marks)

DATA FOR COUNTRY X in 2000

Population 15-49	480,000
Number of women 15-49	280,000
Population under 15	640,000
Population 65 year and older	200,000
Births	120,000
Deaths	36,000
Population size	2,200,000
Girls under age 5	200,000
Children under age 5	400,000
General sex ratio	95
Sex ratio at birth	106

Based on the above data, compute the following measures:

- a. Child-woman ratio;
- b. Age dependency ratio;
- c. Total female population;
- d. Crude rate of natural increase; and
- e. Number of female births.

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

Distinguish fully between the following concepts and measures:

- a. probability and central rate;
- b. emigration and out-migration;
- c. age dependency ratio and economic dependency ratio;

- d. epidemic and endemic disease; and
- e. sampling frame and sampling error.