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 <u>ANY OTHER TWO</u> <u>(2)</u> 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	19,000	1 938
35-39	27,000	1 485
40-44	24,000	456
45-49	22,000	159
50-54	20,000	10

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.

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QUESTION 2   (4+6+6+4 marks)

    a.   Outline four limitations of a population register.

    b.   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+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+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.