

**UNIVERSITY OF SWAZILAND**  
**FINAL EXAMINATION PAPER 2012**

**TITLE OF PAPER: INTRODUCTION TO DEMOGRAPHY**

**COURSE CODE: DEM 101**

**TIME ALLOWED: TWO (2) HOURS**

**INSTRUCTIONS: ANSWER THREE QUESTIONS. QUESTIONS 1  
AND 2 ARE COMPULSORY.**

**REQUIREMENTS: CALCULATOR**

**THIS PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS  
BEEN GRANTED BY THE INVIGILATOR**

**Question 1 (COMPULSORY) [25 marks]**

Please read the following paragraph carefully:

Country A has a land area of 2,941,526 square kilometres. In mid-1981 it had a population of 10,508,186 persons which increased to 11,550,462 persons by middle of 1986. About 22.65% of the 1981-1986 increase was due to net migration. Between 1 January and 31 December 1986, a total of 222,626 babies were born, of whom 50.98% were male babies. Around 6.74% of the 1986 population consisted of females in the age group 20 to 29 years who had borne 61.58% of the babies born during 1986. In the same year 102,703 persons died of whom 2,394 died due to tuberculosis.

Using the above data on country A, calculate the following:

- i. Crude birth rate in 1986;
- ii. Crude death rate in 1986;
- iii. Population density in 1986;
- iv. Sex ratio in 1986;
- v. The increase in population between 1981 and 1986 due to net migration;
- vi. The proportion of deaths which occurred in 1986 which were due to tuberculosis;
- vii. The age specific birth rate for women aged 20-29 years in 1986; and
- viii. The average annual population growth rate between 1981 and 1986, using the exponential growth model.

**Question 2 (COMPULSORY) [8 + 3 + 8+ 6 marks]**

- a. Contrast between an explicit and implicit population policy. Illustrate your answer by giving an example designed for a population policy.
- b. What are the major reasons which stimulate governments to formulate population policies?
- c. What are the objectives of the national population policy of a developing country such as Swaziland?
- d. Briefly explain three cultural factors that can mitigate population control efforts in developing countries. Your answer should apply to one of the components of population change.

**Question 3 [4+2+2+2+4+4+2+2+3 marks]**

- a. Describe the essential characteristics of the following sources of demographic data:
  - i. Censuses;
  - ii. Surveys;
  - iii. Vital statistics systems; and
  - iv. Population registers.
  
- b. Explain why vital registration is deficient in developing countries.
  
- c. State four problems in collecting cause of death data in developing countries.
  
- d. Distinguish between the following:
  - i. Content error and coverage error;
  - ii. De-facto and de-jure population count; and
  - iii. Demographic survey and census.

**Question 4 [2+2+2+2+8+9 marks]**

- a. Distinguish between the following concepts:
  - i. Fecundity and fecundability;
  - ii. Prevalence and incidence;
  - iii. Rates and probabilities in demography; and
  - iv. Emigration and immigration.
  
- b. Explain why unlike fertility and mortality, migration is much more complex to define and measure.
  
- c. Give a precise brief discussion on the following current mortality differentials in developing countries:
  - i. Gender;
  - ii. Rural-urban residence; and
  - iii. Marital status.