# UNIVERSITY OF SWAZILAND

## FINAL EXAMINATION PAPER **YEAR 2015**

**COURSE TITLE:** 

COLLECTION AND ASSESSMENT OF

DEMOGRAPHIC DATA

COURSE NUMBER: DEM 203

TIME ALLOWED:

2 (TWO) HOURS

**INSTRUCTIONS:** 

**ANSWER ANY 3 (THREE)** 

**QUESTIONS** 

SPECIAL REQUIREMENTS:

**NONE** 

#### Question 1

a) Given accurate Births (B), Deaths (D), Immigrants (I), Emigrants (E) and Population initial (P1) show how you can use the Balancing Equation to estimate the accuracy of a census count at a later date (P2)

[15 points]

b) What are Post Enumeration Surveys and how are they employed to help detect errors in data. [5 points]

#### Question 2

Collapsing and then splitting age returns of age groups may help smooth data that is heavily influenced by age misreporting. Show how using the appropriate formulae. [20 points]

#### Question 3

a) How do content and coverage errors overlap?

[4 points]

b) Pre-coding may lead to errors. Using an example show how.

[4 points]

c) Using any one method explain what are moving average methods.

[12 points]

### **Question 4**

Discuss fully what is the UN Joint Score Index and how does it detect errors in data. [20 points]

#### Question 5

In the adjustment of age and sex data, the UN three point/five point smoothing formulae may be used. Discuss the assumptions associated with this method.

[20 points]