

# **UNIVERSITY OF SWAZILAND**

## **SUPPLEMENTARY EXAMINATION PAPER YEAR 07/2016**

**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

In the adjustment of age and sex data the UN three point/five point smoothing formulae or Newton's Halving formula (Quadratic Interpolation) may be used. Discuss fully the two methods

[20 points]

### Question 2

a) Write the Balancing Equation. What is the main shortcoming of the equation with respect to assessment of errors in census data

[8 points]

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

[12 points]

### Question 3

In the calculation of Age Ratios, the UN, Zelnik and Ramachandran methods may be used. Discuss fully these methods emphasizing the rationale for their formulation

[20 points]

### Question 4

a) Why is population data presented preferably in age groups rather than in single years?

[6 points]

b) When detecting errors in data, internal consistency checks can be used, then vertical and horizontal consistency checks employed. Explain the meaning of the statement

[14 points]

### Question 5

a) List six limitations of a census

[6 points]

b) What are the four objectives of Demographic surveys

[4 points]

c) What are content and coverage errors

[6 points]

d) In the evaluation of data and error detection both Direct and Indirect methods can be used. Explain briefly

[4 points]