

# **UNIVERSITY OF SWAZILAND**

## **FINAL EXAMINATION PAPER**

**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) What are content and coverage errors [6 points]
- b) In the evaluation of demographic data and error detection both Direct and Indirect methods can be used. Explain fully the statement using examples [14 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 [12 points]
- b) What are Post Enumeration Surveys and how are they employed to help detect errors in data. [8 points]

Question 3

What are internal, vertical, horizontal and diagonal consistency checks when detecting errors in population data. Use examples to illustrate your answer. [20 points]

Question 4

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 5

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]