

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER YEAR 2010

**COURSE TITLE: COLLECTION AND
ASSESSMENT OF
DEMOGRAPHIC DATA**

COURSE NUMBER: DEM 203

TIME ALLOWED: 2 (TWO) HOURS

**INSTRUCTIONS: ANSWER QUESTION 1 AND
ANY OTHER TWO
QUESTIONS**

SPECIAL REQUIREMENTS: NONE

Question 1

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 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

- 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]

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 check can be used, then vertical and horizontal consistency checks employed. Explain the meaning of the statement [14 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]