

**UNIVERSITY OF SWAZILAND
DEPARTMENT OF STATISTICS & DEMOGRAPHY
FINAL EXAMINATION, 2011
BASS**

TITLE OF PAPER: POPULATION ESTIMATES AND PROJECTIONS

COURSE CODE: DEM 301

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY THREE (3) QUESTIONS

MARKS ALLOCATION: ALL QUESTIONS CARRY 20 MARKS

SPECIAL REQUIREMENTS: NONE

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

DEM 301 FINAL EXAMINATION 2011

Question 1

- a) Mathematical methods of projection tend to be linked to past trends through functional relationships. Discuss [6]
- b) How does the logistic curve fundamentally differ from the geometric curves? [10]
- c) Why is the logistic curve less applicable to human populations? [4]

Question 2

Discuss the Census Cohort-Change Method and its underlying assumptions using appropriate examples.

[20]

Question 3

Discuss fully the computational procedure in the calculation of projected medium births when using the Period Fertility Method.

[20]

Question: 4

- a) What is the difference between projections and estimates, and how do they differ in terms of their use in development planning [10]
- b) Time is of crucial importance in projections in terms of the validity of the projection for development planning. Discuss [10]

Question: 5

Explain fully how mathematical projection methods differ from Component methods in population projections [20]