

UNIVERSITY OF SWAZILAND
DEPARTMENT OF STATISTICS & DEMOGRAPHY
FINAL EXAMINATION, 2010
BASS

TITLE OF PAPER: **POPULATION ESTIMATES AND PROJECTIONS**

COURSE CODE: **DEM 301**

TIME ALLOWED: **TWO (2) HOURS**

INSTRUCTIONS: **1. ANSWER ANY THREE (3) QUESTIONS**

MARKS ALLOCATION: **ALL QUESTIONS CARRY 25 MARKS**

SPECIAL REQUIREMENTS: NONE

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

DEM- 301 SUPPLEMENTARY EXAMINATION 2010

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

What are the underlying assumptions of the Census Cohort-Change Method? [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

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