

UNIVERSITY OF ESWATINI



MAIN EXAMINATION PAPER 2018/2019

TITLE OF PAPER : POPULATION DYNAMICS I

COURSE CODE : DEM 215

TIME ALLOWED : TWO (2) HOURS

INSTRUCTIONS : ANSWER ALL QUESTIONS

REQUIREMENTS : SCIENTIFIC CALCULATOR

Question 1

- a. Population dynamics is the study of _____ [2]
- b. Two major factors contribute to the demographic changes of any country. [2]
These are _____ and _____
- c. Natural population increase (growth) refers to _____ [3]
- d. The mathematical formula for expressing the relationship among key demographic variables can be summarised as _____ [5]
- e. Describe the two major types of demographic study designs [10]
- f. Health and demographic surveillance system refer to _____ [3]
- g. Briefly describe each of the following: [10]
- | | |
|---------------------------|----------------------------|
| i. Proportions | iv. Population pyramids |
| ii. Age dependency ratio | v. Migration Effectiveness |
| iii. Population structure | |
- [35 marks]

Question 2

Why should we care about the population age and sex composition of a country? [10 marks]

Question 3

Differentiate between each of the following

- a. Infant mortality rate and child mortality rate
- b. Maternal mortality rate and Maternal mortality ratio
- c. General fertility rate and gross reproduction rate
- d. Prevalence and incidence
- e. Cause-specific mortality rate and age specific death rate.

[20 marks]

Question 4

- a. Using the data presented below, calculate and interpret for each region:
- The in-migration rate [5]
 - The out-migration rate [5]
 - Net migration rate [5]
 - Gross migration rate [5]

Region		In-Migrants			
		Hhohho	Manzini	Lubombo	Shiselweni
Out-Migrants	Hhohho	253,694	3,209	2,485	3,204
	Manzini	5,284	270,806	3,536	4,271
	Lubombo	14,488	26,728	194,630	6,671
	Shiselweni	9,268	18,787	7,803	193,585

- b. Discuss the implications of the observed patterns of migration for the demography and economic development of Swaziland (5- points). [5]

[25 marks]

Question 5

With the rapid increase in technological advancements, there are new data sources and approaches to studying population dynamics in many developed countries. What are some of these data sources and how can they be utilized to understand population distribution, and dynamics in Africa

[10 marks]