



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF ECONOMICS AND FINANCE

BACHELOR OF ECONOMICS

EAE 410: DEMOGRAPHIC ECONOMICS

DATE: 10/12/2019

TIME: 8.30-10.30 AM

INSTRUCTIONS:

QUESTION ONE (30 MARKS)

- a) The following table shows Demographic statistics of a certain year, study it and answer the questions that follow

Age group	Population		Total no. of births
	Male	Female	
15-19	411381	410920	56403
20-24	334705	378689	97166
25-29	348866	377535	93415
30-34	302073	297211	57694
35-39	256454	236022	34478
40-44	196729	190591	13078
45-49	167982	148746	9004
50-54	147735	143904	4546
55-59	96717	80870	1200
60-64	98455	90731	0
64+	205003	159101	0

NOTE: 1/3 of the children born were females

Required;

- Gross reproductive rate (6 marks)
- General fertility rate (4 marks)
- Draw a population pyramid based on absolute numbers from the above population structure and discuss its form. (10 marks)

- b) “Optimum population is that population which gives the maximum income per head”.
Critically discuss this statement in the context of Dalton theory. (10 marks)

QUESTION TWO (20MARKS)

- a) Discuss four secondary sources of demographic data. (8 marks)
- b) Differentiate between these demographic terms.
- i. Infant Mortality rate and crude death rate. (3 marks)
 - ii. Net reproduction rate and corrected birth rate (3 marks)
 - iii. Goss and Net migration (2 marks)
- c) Describe two types of non-sampling errors found in census and surveys. (4 marks)

QUESTION THREE (20 MARKS)

- a) Describe three main sources for measuring the net internal migration (6 marks)
- b) Given the following data from a utopian country.
- Number of populations according to previous census; 34, 086,000
- Number of populations according to post census; 41,310,000
- Number of births in that area during time period of two census; 15,130,000
- Number of deaths in the same area during time period of two census; 8,810,000

Required:

- Calculate the net migration (4 marks)
- c) Discuss measures that can be put in place to reduce the brain drain from developing countries. (10 marks)

QUESTION FOUR (20 MARKS)

Population projections have become very important in recent times in every field of the Economy.
Critically discuss this statement in context of: t

- a) The types
- b) Methods
- c) Importance and limitations of population projections. (20 marks)

QUESTION FIVE (20 MARKS)

- a) Discuss the theory of Demographic transition in relation to various stages of Economic development (10 marks)
- b) Mortality rates have declined considerably in developing countries in recent years, explain the reasons why? (10 marks)