



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR DIPLOMA IN COMMUNITY HEALTH AND
DEVELOPMENT
2ND YEAR 2ND SEMESTER 2016/2017 ACADEMIC YEAR
MAIN CAMPUS**

COURSE CODE: HDC 2222

COURSE TITLE: DEMOGRAPHY AND POPULATION STUDIES

EXAM VENUE: STREAM: (Dip. Comm Health & Dev)

DATE: EXAM SESSION:

TIME:

Instructions:

- 1. Answer all the questions in Section A and ANY other 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A: Answer ALL questions in this section (30 marks)

1. Define demography. (2 marks)
2. Differentiate between defacto and de jure enumeration methods. (4 marks)
3. State the four traditional sources of demographic data. (2 marks)
4. State and explain the two main types of errors observed in census and sample surveys. (4 marks)
5. State two advantages and two disadvantages of single – round surveys. (4 mark)
6. State and explain the two major types of populations. (4 marks)
7. Define a population pyramid. (2 marks)
8. Define population density. (2 marks)
9. State the demographic balancing equation. (2 marks)
10. Differentiate between Net Increase and Net Decrease as used demography (4 marks)

SECTION B: Answer any 2 Questions in this section (15 marks each)

1. Given the following births and infant deaths recorded in Rift Valley and Western provinces in 1967 and 1968:

Year	Birth Cohort	Age (yrs)	Deaths	Births
1967	1967	0	2,893	142,471
1968	1967	0	481	--
1968	1968	0	2,603	138,214
1969	1968	0	302	--

- a) Calculate the conventional infant mortality rate for 1968. (5 marks)
 - b) Calculate the cohort probability of dying under age 1 for 1968. (5 marks)
 - c) Calculate the adjusted infant mortality rate for 1968 relating a death to the birth in the appropriate year. (5 marks)
2. Discuss the effects of migration on age structure, sex structure and vital rates (15 marks)
 3. Describe the effects of population growth on environment (15 marks)
 4. A survey was conducted in Migori township in October 2015. It revealed a total population of 389,000 (196,500 males and 192,500 females). Total number of children born alive during the previous year was 16,400. The survey has also recorded a total of 5,835 deaths (3,200 males and 2,635 females) during the same year. The survey also identified the following deaths among the population.
 - Children < 1 month = 370
 - Children 1 month - 11 months = 1,100
 - Children 1- 4 years = 1,865
 - Death of mothers during pregnancy and child birth = 130

Based on the above data, calculate the following measures of fertility and mortality.

- a.) Crude Birth Rate (2 marks)
- b.) Crude Death Rate (2 marks)
- c.) Infant Mortality Rate (2 marks)
- d.) Neonatal Mortality Rate (2 marks)
- e.) Under 5 Mortality Rate (2 marks)
- f.) Sex Ratio (1 mark)
- g.) Maternal Mortality Rate (2 marks)
- h.) Sex specific Mortality Rate for female (2 marks)