



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE
PUBLIC & COMMUNITY HEALTH AND DEVELOPMENT
3RD YEAR 2ND SEMESTER 2023/2024 ACADEMIC YEAR
MAIN

COURSE CODE: HCB 2304

COURSE TITLE: DEMOGRAPHY AND HEALTH

EXAM VENUE: STREAM: (BSc. Env. Hlth Com Health and Dev)

DATE: EXAM SESSION:

TIME: 2.00 HOURS

Instructions:

- 1. Answer all the questions in Section A each contain 3 marks and ANY other two questions in Section B each contain 20 marks.**
- 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. What is a population dynamics?
(2 marks)
2. Why are transition theories in demography and health study?
(3marks)
4. Determine age-specific death rate if there are 1200 death among people aged 40-40 and their total population is 240,000.
(3 marks)
4. Explain the following -
 - a) Mortality rate
 - b) Fertility rate
 - c) Migration rate
(6 marks)
5. What are the limitations of graphical estimation of the population size?
(4 marks)
6. What is the difference between birth rate and fertility rate, and which one is preferable for population growth study?
(3 marks)
7. Explain how you would calculate the dependency ratio in a population
(4 marks)
8. How can you use arithmetic mean as an estimator of the population size and what are the limitations?
(4 marks)

SECTION B: Answer any 2 Questions in this section (40 marks each)

1. With specific example, explain epidemiology transition theory.
(20 marks)
2. Explain how demography studies are important for health service delivery?
(20 marks)
3. With the use of pyramid, explain the composition of a population with the following characteristics:-
 - a) More death of under five
 - b) Less youths and more aged population
 - c) Less aged population
(20 marks)
4. Explain FIVE factors that affect the life expectancy in sub-Saharan Africa
(20 marks)