



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2009/2010

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN ENVIRONMENTAL HEALTH

HEH 305: HUMAN POPULATION STUDIES AND HEALTH

DATE: Wednesday, 23rd December, 2009

TIME: 11.00 a.m. – 1.00 p.m.

INSTRUCTIONS:

SECTION A: Answer **ALL** questions in this section.

Q.1 Table 1.1 shows approximate population data for central province for the calendar year 1999 (all figures are in thousands)

Population beginning of	1999	225631
Pop end of	1999	327,348
Births during	1999	4768
Deaths during	1999	3552

Use the following table, compute the following:

- i) Growth increase during 1999 (2 marks)
- ii) Natural increase during 1999 (2 marks)
- iii) Net migration (2 marks)
- iv) Estimates mid year population 1999 (2 marks)
- v) Crude rate of natural increase 1999 (2 marks)
- vi) Crude growth rate % 1999 (2 marks)

Q.2 Describe the strengths and limitation of vital statistics as a source of demographic data (8 marks)

SECTION B: Answer question **ONE** and any other **TWO** questions.

- Q.1 a) Using the data presented on table 1.2, calculate the following
- i) the age specific fertility rate (7 marks)
 - ii) the total fertility rate (3 marks)

Table 1.2 showing total number of live births for different age-groups of women in Machakos, 1979

Age group	No. of women	No. of live births
15-19	412000	53200
20-24	313000	91200
25-29	321000	93400
30-34	242000	54100
35-39	145000	28400
40-44	171000	12300
45-49	134000	4200

- b) Describe the relevance of age data in environmental health research (10 marks)
- Q.2 Discuss the relevance of the Davis and Blake model of the proximate determinants of fertility in explaining the fertility patterns in Kenya (15 marks)
- Q.3 Discuss the major underlying factors that predispose women to the risks of high maternal morbidity and mortality in Kenya (15 marks)
- Q.4 Discuss the relevance of the Malthusian theory in population dynamics of Kenya (15 marks)