

UGANDA MARTYRS UNIVERSITY

UNIVERSITY EXAMINATIONS

FACULTY OF SCIENCE

DEPARTMENT OF MATHEMATICS

YEAR TWO SEMESTER ONE 2023/2024 FINAL ASSESMENT

COURSE CODE : STA 3202

COURSE UNIT : DEMOGRAPHY AND SOCIAL STATISTICS

PROGRAM : BSC ECON & STAT II

DATE: Monday 11/12/23

TIME: 9.30-12.30 pm

DURATION: 3 Hours

Instructions:

1. This examination consists of **SIX** questions.
2. Attempt any **FOUR** questions. Each question carries 25 marks.
3. Do not write anything on the questions paper.
4. Carefully read through **ALL** the questions before attempting.
5. No **names** should be written anywhere on the examination booklet.
6. Ensure your work is **clear** and **readable**. Untidy work shall be penalized.
7. Any type of examination Malpractice will lead to automatic disqualification.
8. Ensure that your **Registration number** is indicated on all pages of the examination answer booklet.
9. Remember to indicate the question numbers you have attempted.

QUESTION ONE

- (a) Explain the different uses of housing statistics in Uganda. (10 marks)
- (b) Discuss the different problems of housing in Uganda today. (15 marks)

QUESTION TWO

- (a) Define the term demography according to Van de walle, Etiene (1982) (1 mark)
- (b) Explain any **four** reasons why we need to study demography in Uganda. (8 marks)
- (c) Discuss the traditional sources of demographic data in Uganda. (6 marks)
- (d) The census of population provides information on the age and sex distribution, in addition to household composition and size, all of which are vital in determining the needs of different segments of the population. Discuss any **five** disadvantages of population censuses in Uganda. (10 marks)

QUESTION THREE

- (a) Give reasons why there is a high rate of international migration from Uganda to developed countries. (6 marks)
- (b) State Ravenstein's laws of migration (4 marks)
- (c) Distinguish between net migration and gross migration. (4 marks)
- (d) Consider the matrix for the place of birth and place of enumeration below

Place of enumeration	Place of birth			
	1	2	3	Total
1	100	40	5	145
2	30	95	49	174
3	10	15	101	126
Total	140	150	155	445

Use the information provided in the table above to compute the following migration rates for region 1;

- (a) In-migration rate (4 marks)
- (b) Out-migration rate (4 marks)
- (c) Gross migration rate (3 marks)

QUESTION FOUR

- (a) Differentiate between fertility and infertility. (2 marks)
- (b) What are the sources of data on fertility in Uganda? (3 marks)
- (c) Write short notes on the following types of fertility.
- (i) Natural fertility (2 marks)
 - (ii) Current fertility (2 marks)
 - (iii) Cohort fertility (2 marks)
 - (iv) Desired fertility (2 marks)
- (d) The information in the table below is for a country X

Age group	Women	Children ever born (CEB)	Live Births
15-19	2048	491	274
20-24	1629	2606	510
25-29	1569	5240	457
30-34	1086	5397	251
35-39	1026	6433	176
40-44	729	5197	54
45-49	587	4320	14
TOTAL	8674		1743

- Total population, 44250
- Sex ratio at birth, 107
- Female survival rate, 0.966

Use the information in the table below to calculate the;

- (i) Crude Birth Rate (CBR) (2 marks)
- (ii) General Fertility Rate (GFR) (2 marks)
- (iii) Age Specific Fertility Rate (ASFR) (2 marks)
- (iv) Total Fertility Rate (TFR) (2 marks)
- (v) Gross Reproductive Rate (GRR) (2 marks)
- (vi) Net Reproductive Rate (NRR) (2 marks)

QUESTION FIVE

- (a) What is meant by the term mortality? (1 mark)
- (b) Discuss the most common causes of death in Uganda and how they can be minimized. (8 marks)
- (c) Mortality in a population can be monitored through a variety of measures. Discuss the common measures of mortality in Uganda. (16 marks)

QUESTION SIX

- (a) Differentiate between incidence rate and prevalence rate. (2 marks)
- (b) Give the different sources of health data (5 marks)
- (c) Write short notes on the following health services output data giving the formula for each.
 - (i) Hospital admissions (2 marks)
 - (ii) Average length of stay (2 marks)
 - (iii) Occupancy rate (2 marks)
 - (iv) Turnover rate (2 marks)
- (d) Discuss the limitations of health data in Uganda. (10 marks)

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