UGANDAMARTYRS UNIVERSITY
NKOZI

UNIVERSITY EXAMINATIONS
SPECIAL/SUPP. EXAMINATIONS
August 2015

FACULTY OF SCIENCE

DEPARTMENT OF MATHEMATICS & STATISTICS

Demography & Social Statistics
STAT3202

DATE: 10th August 2015

TIME: 2:00 Pm

DURATION: 3HRS

Instructions:

1. *Carefully read through ALL the questions before attempting*
2. *__ANSWER FOUR (4) QuestionsONLY__. (Each question carries equal marks)*
3. *No names should be written anywhere on the examination book.*
4. *Ensure that your ID number is indicated on all pages of the examination answer booklet.*
5. *Ensure your work is clear and readable. Untidy work shall be penalized*
6. *Any type of examination Malpractice will lead to automatic disqualification*
7. *Do not write anything on the questions paper.*

QUESTION 1

(a) List down and explain all types of migration you know.(08 Marks)

(b) List down all sources of migration data(05 marks)

© Distinguish between population dynamics and population projection(02 Marks)

(d) Given that in a country Z in 2014, with total population of 22944510 with immigrants of 53890 and emigrants of 458328. Calculate ER, IR, NMR and GMR of a country and interpret your results. (10 Marks)

QUESTION 2

(a) List and describe the basic migration rates(08 Marks)

(b) Describe the causes and effects of migration in Uganda (08 Marks)

© In population dynamics in any country, three processes can cause the change,

(i) List these changes/ processes(03 marks)

(ii) In October 2009, there are 25.3 millions of people in Uganda's population. In September 2011, the population had reached 30.5 millions of people. Find the change in Uganda's population from 2009 to 2011 and comment on that change.(06 Marks)

QUESTION 3

(a) List different measures of fertility(05 Marks)

(b) In a country X with the total birth of 53766.

If the country has the total population of 820000 in 2012. Calculate the crude birth rate for that country.(04 Marks)

© List all measures of mortality.(06 Marks)

(d) In a given country the total number of death is 610,520 and the mid-year population is 23,857,506. Estimate the crude death rate and interpret your findings(05 Marks)

(e)   Distinguish the difference between complete and bridged life
       table and show how each can be used.**(05 Marks)**

QUESTION 4
a) List the sources of data on mortality and morbidity

(05 Marks)

   (b) What determines the quality of health services in Uganda?**(05
Marks)**

   (c) Describe all the categories of diseases.**(04 Marks)**

(d) Explain how to measure efficiency of health services.

(03 Marks)

       (e)   According to the country Z Housing and Census 2008, there
             were 23.4 million people, growing at a rate of 3.6%. If
             this rate is assumed to remain constant and assuming the
             exponential model,

       (i)   Estimate the time it will take this population to
             equalize with that of South Africa which was estimated to
             78 million people by then.**(05 Marks)**

How long will it take country X population to triple in size?**(03 Marks**
QUESTION 5
(a) Define the following terms.

   (ii) Demography

   (iii) Social statistics

   (iv) Live birth

   (v)   Migration

   (vi) Mortality   05 Marks (1 mark @)

   b (i) Why do we study demography?**(04 Marks)**

         (ii) List all sources of demographic data.**(04 Marks)**

        © Define the terms Age specific fertility rate (ASFR) and Total
fertility rate (TFR).**(02 Marks)**

   d) Use the information given in the table below to calculate ASFR
   and TFR for the country Y in 2011. **(10 Marks)**

Age group (years)	Female population	Birth
15-19	9312000	305413
20-24	9845000	97490
25-29	1749000	9979260
30-34	11166005	895269
35-39	10617000	374644
40-44	8518000	595045
45-45	872060	21652

QUESTION 6

(a) List all the sources on education Data in Uganda(**05 Marks**)

(b) Why has the quality of USE (Universal Secondary education) in Uganda not improved?(**05 Marks**)

© Describe the education cycle in Uganda(**05 Marks**)

(d) What are the determinants of quality of education in Uganda?(**05 Marks**)

(e) What determines the demand for services in Education?
(**05 Marks**)

END