

THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
POPULATION STUDIES DEPARTMENT

DEM 2110: SOURCES AND MEASURES OF DEMOGRAPHIC DATA END OF YEAR EXAMINATION
INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A AND B AND TWO QUESTIONS IN SECTION C
(SECTION A IS COMPULSORY)
TIME ALLOWED: THREE HOURS

SECTION A (ANSWER ALL QUESTIONS) (6 MARKS)

1. Static data comes from population registration system True False (1 MARK)
2. Flow data comes from population census True False (1 MARK)
3. If a population of 1000 people contained 300 women who were of child bearing age and ten of them a baby in a particular year, the crude birth rate, would be (1 MARK)
 - a) 10 births per 1000 population
 - b) 100 births per 1000 population
 - c) 30 births per 1000 population
 - d) None of the above
4. When did Household registration begin in Japan? (1 MARK)
5. Data used for measuring fertility usually comes from (1 MARK)
 - a) Census
 - b) Vital statistics system
 - c) Sample surveys
 - d) All of the above
6. Crude birth rate has many weaknesses, including the following: (1 MARK)
 - a) It can mask significant differences in actual reproductive behaviour between two populations
 - b) Crude birth rates do not allow comparison in space (region countries)
 - c) It ignores the age structure of the population
 - d) All the above

SECTION B (ANSWER ALL QUESTIONS) (75 MARKS)

*1. Anders Kiaer (1838-1919) started the process that ended in the development of modern survey sampling theory and methods. What are the **THREE** important principles in Kiaer's approach? (6 MARKS)

2. In line with early developments of survey sampling, write briefly on the **TWO** scholars below:

- a. John Graunt (1620-1674) (4 MARKS)
 b. Pierre Simon Laplace (1749-1827) (4 MARKS)

3. With examples explain briefly what the **THREE** types of surveys below are and what they intend to achieve?

- a) Specialized surveys (2 MARKS)
 b) Multi-phase surveys (2 MARKS)
 c) Multi-subject surveys (2 MARKS)

This is where you use many procedures and instruments
Errors associated of selection of sample instead of population

4. With examples, clearly outline the advantages of Sample Surveys compared to Censuses. (2 MARKS)

5. Differentiate between Sampling errors and Non - Sampling errors? (2 MARKS)

6. What value must the period NRR have if period TFR is at replacement? Why? (4 MARKS)

*7. Life expectancy is usually a better summary of mortality than Crude death rates. Can you think of a situation when it makes no difference which one you use? (4 MARKS)

*8. With examples, briefly explain the difference between a Refugee and an Asylee? (4 MARKS)

9. In the period 2014 - 2015, the Population Studies Department had a Net Migration of - 5.1. What does this mean? (2 MARKS)

in-out

10. With examples, briefly explain the following sources of sampling and non-sampling errors

- a. Margin of error (1 MARK)
 b. Coverage/frame error (1 MARK) - measuring
 c. Specification error (1 MARK)
 d. Non response error (1 MARK) - absentees
 e. Processing error (1 MARK) - coding, editing, processing, data entry

11. With examples, explain the difference between Stock data and Flow data. (3 MARKS)

eg. case - 16. state
pop. register
characteristic

*12. What is the link between theory and policy? (4 MARKS)

13. Briefly state the two (2) ways in which the General Fertility Rate (GFR) is a better measure of fertility levels than the Crude Birth Rate (CBR). (2 MARKS)

- it only takes into account women in 15-45
- it does not include people not at risk of having a child.

14. Name two (2) limitations to using the Gross Reproduction Rate (GRR). (2 MARKS)

15. State the three types of piloting involved in a census (3 MARKS)

*16. With examples, explain the difference between Analytic surveys and Descriptive surveys? (4 MARKS)

17. Write short notes on the following:

i. SEA (4 MARKS)

84/52

ii. CSA

(4 MARKS)

iii. Populations registers

(4 MARKS)

(4)

SECTION C: (ANSWER Q1 AND ANY OTHER QUESTION) (50 MARKS)

1. The following table shows the population of country A. Using this table, calculate the following:

Table 1.0 (Population of Country A in 2010) (30 MARKS)

Age group	Women in Age group (Mid year population)	Live births to women in Age group
10-14	9387020	9462
15-19	9493761	484895
20-24	8678024	965122
25-29	9341226	1083010
30-34	10179403	889365
35-39	11369766	424890
40-44	11049377	81027
45-49	9607011	3624

69 718,568

dist value

79 105 588

3 941 395

- The general Fertility rate (5 MARKS)
- Age specific fertility rate (5 MARKS)
- Total fertility rate (5 MARKS)
- At which age group is fertility lowest, what is the probable reason? (3 MARKS)
- According to the census of population A in 2010, 52% of the births in this population were female and children 0-4 enumerated were 100,000 what is GRR? (5 MARKS)
- What is the child woman ratio of this population? (4 MARKS)
- What is this country likely to be? Comment on the fertility of this population (3 MARKS)

30

*2. Describe in detail the principles for the collection and compilation of Vital Statistics. What needs to be done in Zambia to improve the collection of Vital Statistics? (20 MARKS)

3. What determines what topics should be included in the census? To what extent does Zambia adhere to this? (20 MARKS)

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DEM 2110 TEST 1(2015)

Time: One hour

Instructions: Attempt all questions

Mubanga Kenneth

1. What was affirmed in the following declarations;
 - i. November 1959 Declaration of the Rights of the Child
 - ii. International Covenant on Civil and Political Rights of 1996
2. Demography has many sources of data, among them Population Censuses, Household Surveys and Vital Registration Systems.
 - i. The subject of combining information from different data sources has gained considerable attention in recent years; give two reasons why you feel it is necessary to combine information from the above data sources
 - ii. Can you provide four ways in which the above data sources complement each other, put much emphasis on Censuses and Household Surveys
 - iii. Mention four types of Household Surveys that can be conducted to collect data on social and demographic statistics?
 - iv. Give brief definitions of the answers you have provided in (iii)
3. Topics to be covered in a census should be based upon certain considerations, name and briefly explain 5 of them
4. Name four major uses of Census data
5. Define the following:
 - i) Live birth
 - ii) Foetal death
 - iii) Civil registration
 - iv) Vital registration system
6. Explain the following uses of Vital Registration System
 - Preparing population estimates and projections;
 - Cohort and period studies;
 - Construction of life tables;
7. List the five components of the non-sampling errors

End

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DEM 2110 TEST 2 (2015)

Time: One hour

Instructions: Attempt all questions

1. Clearly explain the difference between analytic and descriptive surveys and give examples of each.
2. Briefly explain how information is collected in a multi-phase survey.
3. Name at least (4) common personal elements found both in the population register and civil registration systems.
4. What are demographic surveillance systems and when are they used?
5. Name and explain 3 uses of vital registration systems.
6. How can administrative records be used as a benchmark to improve the efficiency of sample surveys?
7. Which source of demographic data can be used as a source of longitudinal information and why?
8. Name and explain 5 disadvantages of a population register.
9. Briefly state three (3) factors that increase a woman's risk of death when she becomes pregnant.
10. Briefly state the two (2) ways in which the General Fertility Rate (GRR) is a better measure of fertility levels than the Crude Birth Rate (CBR).

End