

THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF POPULATION STUDIES
END OF YEAR EXAMINATIONS-2016/17
AUGUST 2017

DEM 2110: SOURCES AND MEASURES OF DEMOGRAPHIC DATA

TIME: THREE HOURS

INSTRUCTIONS: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS.

Q1. Table 1 below contains information about the age distributions of women reproductive ages in three districts (X, Y & Z) in Zambia during the 2010 census.

Table 1: Number of women by age and district in Zambia, 2010.

Age group	District		
	X	Y	Z
15-19	153	194	141
20-24	318	267	277
25-29	323	294	269
30-34	289	272	232
35-39	225	226	175
40-44	115	129	183
45-49	117	159	130

Total

- a) Using the probability proportional to size principle (PPS), allocate a combined age-specific sample of 1,000 for a sample survey to be conducted among women in the reproductive ages from all the three districts. Use a frequency distribution table to present your samples per district. **[10 marks]**
- b) Use a pie chart to present sample distributions by district. **[Do not show age-groups in your pie chart-just show the total by district]. [10 marks]**
- c) If the sex ratio for District Z was 102, what was the size of the population aged 15-49 for this district in 2010? **[10 marks]**
- d) If we assume that all your sampled 1,000 women of reproductive ages take part in your survey, what would be the median age group for your sample. **[10 marks]**

Q2. Compare and contrast the main sources of demographic data by completing the table below. In this table, you are supposed to indicate the level of strength of each source in providing data needed to estimate net migration according to each criterion. Use the following scale: **strong, moderate, weak**.

Table 2.

Criteria	Data collection method(s)		
	Census	Vital statistics registration system	Population register
Topical detail (richness and diversity of subject matter)			
Accuracy			
Precision (absence of sampling errors)			
Timeliness of data			
Geographical detail			
Obtaining information on population at risk			
Ease of organization in a developing country			

[30 marks]

Q3a What are the five criticisms of a sample survey? [15 marks]

- b) Compare and contrast the following:
- (i) modern and classic censuses [5 marks]
 - (ii) journal and book [5 marks]
 - (iii) conventional and non-conventional sources of data [5 marks]

4(a) Explain any five characteristics of a census [15 marks]

- b) Discuss the three approaches to the undertaking of an active vital registration system. [15 marks]

END OF EXAMINATION