MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2013/2014

FIRST YEAR SECOND SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF ARTS IN URBAN & REGIONAL PLANNING WITH INFORMATION TECHNOLOGY

(CITY CAMPUS - DAY)

PUR 125: COMPUTER AIDED CARTOGRAPHY

Date: 23rd July, 2014

Time: 2.00 - 4.00 p.m.

INSTRUCTIONS:

- Answer Question ONE and any other TWO questions.
- Sketch maps and diagrams should be used wherever they serve the purpose.

PUR 125: COMPUTER AIDED CARTOGRAPHY

Answer question ONE and any other TWO

Sketch maps and diagrams should be used wherever they serve the purpose

1. a) Using diagrams illustrate the surfaces that transform a globe to a flat surface **9 marks**

   b) Illustrate the transformations on a flat surface **9 marks**

   c) Explain why it is necessary to keep the geo-reference accuracy at 1 or less than 1 **2 marks**

   d) Explain three visual variables used in representing quantitative information **6 marks**

   e) A map at a scale 1:50 000 is compared to a map 1:10000000 describe any two differences because of the difference in scale **4 marks**

	Area A	Area B	Area C	Area D
Population	100000	2000000	400000	20000
Area in sq Kms	150	400	600	240

2. a) Using the Information given above construct a population distribution map using point symbol to show population densities of the given areas **16 marks**

   b) Giving two reasons explain why we classify data in mapping **4marks**
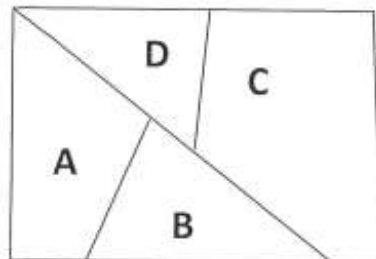
3. a) A digital map was constructed for school going children in primary school in ILLWIS showing changes in vegetation cover in Kisumu country

   b) Describe the sources of data used in constructing the map **5 marks**

   c) Explain the process of designing the map   **15 marks**

4. a) Explain dasymetric and Choropleth mapping   **6 marks**

   b) Describe Isoline mapping   **4 marks**

   c) Compare qualitative and quantitative maps in communicating information   **10 marks**

5. a) Discuss the methods used in achieving clarity and legibility in digital maps when the scale of a map is reduced to a scale of 1:10000000
                                                                   20 marks

6. b) Explain the merits and demerits of using GPS and remote sensing data for creating digital maps   **20 marks**