MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2015/2016

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

CITY CAMPUS - REGULAR

PUR 215: INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEM (GIS)

Date: 7th December, 2015　　　　　　　　　Time:　2.00 - 4.00 pm

INSTRUCTIONS:

- Answer THREE questions. Question ONE is COMPULSORY.

PUR 215: INTRODUCTION TO GEOGRAHIC INFORMATION SYSTEM (GIS)

Answer **three** questions. Question **ONE** is Compulsory
Maps and should be used whenever appropriate

1. The county government of Kisumu in evaluating the coverage of green spaces in Kisumu city with an intention of increasing the spaces. Use this information to answer the following questions
   a) Illustrate three raster overlay functions they used in this analysis

   12 marks
   b) Describe three advantages of using remote sensing as data for identifying green spaces   6 marks
   c) Explain how the green spaces will be differentiated in the final output map   12 marks

2. a) Discuss four ways in which scale influences the final outcome in GIS

   8 marks
   b) Explain the types of data measurement scales used in GIS   8 marks
   c)   Describe scales used in representing information on maps   4 marks

3. Explain the elements used in visual interpretation of remote sensing images

   20 marks

4. Planning students identified accident hot spots in Kisumu using GIS. Use this information to answer the following questions
   a) Discuss the layers they developed to identify the hot spots   10 marks
   b) Discuss five challenges they experience in this exercise   10 marks

5. Discuss the merits and demerits in using GIS for informed decision making

   20 marks

6. a)   Explain the relevance of geo-referencing and creating a coordinate system in a map   6marks

   b)   Describe the steps in geo-referencing a map   4marks

   c)   Explain the process of creating a coordinate system   10marks