



**MASENO UNIVERSITY**  
**UNIVERSITY EXAMINATIONS 2013/2014**

FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR THE  
DEGREE OF MASTER OF ARTS IN PROJECT PLANNING &  
MANAGEMENT  
(HOMA BAY CAMPUS)

**APP 808/PPM 833: INTRODUCTUION TO GEOGRAPHIC  
INFORMATION SYSTEMS**

*Date: 7<sup>th</sup> December, 2013*

*Time: 11.00 a.m. - 2.00 p.m.*

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**INSTRUCTIONS:**

- Answer ANY FOUR questions.
- Sketch maps and diagrams should be used as deemed necessary.

1.
  - a. Explain the difference between raster and vector data models used to represent maps in a GIS. [10 marks]
  - b. How does spatial data differ from other types of data? [10 marks]
2. With the aid of diagrams, describe three (3) ways a GIS system represents geographic information. [15 marks]
3. Discuss key marginal information a well-designed GIS map should contain [15 marks]
4. Using relevant examples, discuss how GIS can be applied in project planning and management. [15 marks]
5. Describe five (5) spatial data analysis functions you can perform using GIS. [15 marks]
6.
  - a. Differentiate between spatial and aspatial data [5 marks]
  - b. Discuss five sources of GIS data [10 marks]