



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

**THIRD YEAR SECOND SEMESTER EXAMINATIONS FOR THE  
DEGREE OF BACHELOR OF ARTS IN URBAN & REGIONAL  
PLANNING WITH INFORMATION TECHNOLOGY  
(CITY CAMPUS – DAY)**

**PUR 323: APPLICATION GIS**

Date: 16<sup>th</sup> 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 as deemed necessary.



1. Mau forest has been facing serious encroachment and destruction problem. How can GIS help in monitoring spatial temporal changes resulting from these problems? [20 marks ]
2. You have been hired as a GIS specialist to help the county government of Homabay in formulating the County Spatial Plan. Explain how you can apply GIS in this task. [20 marks ]
3. Solid waste management is a big challenge in Kisumu City. Explain how you can use GIS in finding an optimal site for waste disposal. [20 marks ]
4. Land fragmentation is a major problem facing Kakamega County. Discuss how physical planners can use GIS in addressing this challenge. [20 marks ]
5. Most cities in Kenya face serious urban sprawl challenges especially slum proliferation. Using Nairobi as a case city, explain the steps you can use GIS to address this. [20 marks ]
6. GIS is still not widely used in Kenya's urban planning domain, discuss five challenges that has led to this. [20 marks ]