

## **MAASAI MARA UNIVERSITY**

## REGULAR UNIVERSITY EXAMINATIONS 2018/2019 ACADEMIC YEAR SECOND YEAR FIRST SEMESTER

# SCHOOL OF TOURISM AND NATURAL RESOURCE MANAGEMENT BACHELOR OF ARTS IN GEOGRAPHY

**COURSE CODE: GEO 2113** 

**COURSE TITLE: GEOGRAPHIC INFORMATION** 

**SYSTEMS** 

DATE: 13<sup>TH</sup> DECEMBER, 2018 TIME: 0830 - 1030 HRS

### **INSTRUCTIONS TO CANDIDATES**

Answer ALL questions in section A and any other THREE in section B.

This paper consists of 2 printed pages. Please turn over

#### **SECTION A (25 MARKS)**

- 1. Explain why it is usually said that 80 % of information is geographic in nature (4 marks)
- 2. What do you understand by a computerised map? Explain how it is different from a paper map. (5 marks)
- 3. Briefly explain any three general sources of spatial data (6 marks)
- 4. Explain two data storage strategies in geo-information systems

(4 marks)

- 5. Explain two (2) reasons why managers would need geoinformation (4 marks)
- 6. Briefly explain what a spatial data policy is and why it is important **(2 marks)**

#### **SECTION B (45 MARKS)**

- 7. Explain five factors to consider when choosing storage formats and platforms for geo-information (15 marks)
- 8. (i) Imagine that there has been a sudden outbreak of a water-borne disease like cholera. List and explain at least five (5) GIS layers that can be created on a map. What are the three (3) things that you can do with the map

  (8 marks)
  - (ii) You have been requested by your organisation to assess the needs of resource managers for GIS information. By conducting a survey, drafts a set of questions that you would ask to achieve the objective **(7 marks)**
- 9. (i) Explain the following terms with an example (10 marks)
  - a. Geospatial web
  - b. Geovisualization
  - c. Digital globes
  - d. Volunteered Geographic Information
  - e. Open Street Map (OSM)
  - (ii) Explain how the lack of a GIS data policy would affect the East African community's freedom and copyright for geoinformation

(5 marks)

10. (i)Discuss different potential users of GIS data (6 marks) (ii)Discuss the trends in GIS data sharing (9 marks)