

# **MAASAI MARA UNIVERSITY**

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

# SCHOOL OF TOURISM AND NATURAL RESOURCE MANAGEMENT BACHELOR OF SCIENCE IN WILDLIFE MANAGEMENT

# COURSE CODE: FEM 2203

### COURSE TITLE: GEOGRAPHIC INFORMATION SYSTEMS

DATE: 24<sup>TH</sup> APRIL, 2019 INSTRUCTIONS TO CANDIDATES TIME: 11.00AM – 1.00PM

### INSTRUCTIONS TO CANDIDATES

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

This paper consists of 2 printed pages. Please turn over

#### SECTION A: ANSWER ALL QUESTIONS (25 MARKS)

- 1. Discuss any two technologies that led to advancements in GIS. (4 marks)
- With examples, describe any three components a Geographic Information System integrates. (6 marks)
- 3. Give and explain an example to describe GIS overlay function. (2 marks)
- 4. Describe any two data sources used to create GIS data using examples.

(2 marks)

- 5. With an example, explain a method that can be used in abstraction of the real-world objects into GIS. (4 marks)
- 6. What is RDBMS and what is its use in GIS? (2 marks)
- 7. Differentiate between 'tablet digitizing' and 'heads-up' digitizing.(2 marks)
- 8. Discuss sources of error/uncertainty regarding spatial data capture in GIS.

(3 marks)

### **SECTION B: ANSWER ANY THREE QUESTIONS (45 MARKS)**

9. Discuss how Geographic Information Systems has developed to its current state. (15 marks)

- 10. "Better information leads to better decisions". Discuss this old saying as true for GIS using appropriate illustrations. **(15 marks)**
- 11. (i) Explain how the "human factor" enter into GIS development and Implementation. (5 marks)
  (ii) Discuss with examples the disciplines and applications that have had the greatest influence on the development of current GIS technologies. (10 marks)
- 12. Discuss GIS data for wildlife managers. In your discussion include type of data, data capture, management, analysis and presentation of information products. (15 marks)

//END