



# **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  
1.00PM**

**TIME: 11.00AM -**

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**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)**
2. 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**