



FACULTY	Agriculture, Engineering and Natural Sciences		
DEPARTMENT	ENVIRONMENTAL SCIENCE		
SUBJECT	GIS & LOCAL PLANNING		
SUBJECT CODE	HGSO 3860		
DATE	OCTOBER/NOVEMBER 2021		
DURATION	3 HOURS	MARKS	100

REGULAR EXAMINATION

Examiner: **R. Mtuleni**

External Moderator: **Dr. Z.E. Mashimbye**

Instructions

1. Work in an orderly manner and present your work as neatly as possible.
2. While most of the marks will be awarded for content, candidates must bear in mind the importance of presentation, i.e. insight and critical thinking.
3. Number your questions correctly and clearly.
4. This paper consists of two (2) pages (excluding this front page).
5. Answer all questions in Sections A and B.

SECTION A**Answer All Questions****(40)**

1. Outline five (5) ways in which GIS technology provides support to development of public policy. (5)
2. What is the importance of creating a base map in the process of carrying out a spatial/GIS project? (5)
3. Adopting a local Enterprise GIS Network creates a unified information platform to provide easy access to geospatial data and application services. Outline the Revenue Generation benefits of having an Enterprise GIS Network in a local government institution. (5)
4. Outline some of the areas where a GIS may serve as a supporting tool to enhance the operations of a financial/economic development institution. (5)
5. Assess the value of adopting a GIS system in the field of urban and regional Planning. (10)
6. Elaborate on the concept of Shared Data and Data Warehousing as a strategy for achieving a cost-effective and value-added GIS system. (10)

SECTION B**Answer All Questions****(60)**

1. You have been appointed as a GIS consultant through an urban development project to assist with integration of data and information on infrastructure, property evaluation and cost, design and development timeframes. Outline and explain in order, the steps you would take to create an integrated system for this project. (25)

2. Write an article to 'The Namibian' Newspaper, with the main objective of creating awareness, particularly to the safety and security department, about the relevance and importance of adopting geo-information technology for crime analysis and safety-related decision making. (20)

3. During the Lectures on GIS for Local Government, we discussed that at a Local Government level, the availability of GIS as a tool for decision making has profound implications in three major areas. Discuss, the implications of having GIS as a decision making tool in these three areas. (15)