1. <u>BASIC CONCEPTS AND TERMINOLOGY</u>

1.1 Explain in a short paragraph how GIS can be applied in any field of study to assist you in decision making.

(3)

1.2 Name the four basic functions that GIS software must be able to perform to process.

(4)

2. <u>BUILDING A GIS MODEL</u>

2.1 Research Question: Where is the best location for a new museum?
   The best location for a new museum is where the following conditions apply:
   - It must be within a distance of 400m from any other museum
   - It must be on a property that is for sale
   - The value of the property must not be more than R5 000 000
   - It must be within a distance 200m from a bus route.

Make a list of spatial data and their associated attribute data needed for the project

(8)

3. <u>DESIGNING THE GIS MODEL OF REALITY</u>

3.1 Explain what a map scale is.

(1)

3.2 Name, discuss and illustrate the projection mostly used in South Africa.

(6)

3.3 Name the different scales of measurement that can be used for the measurement of attribute data.

(4)

3.4 Name the basic spatial feature type that will be used to represent the following real world entities on computer:

   1. Trees (Scale 1:50 000)
   2. Trees (Scale 1:500)
   3. Cities (Scale 1:5 000)
   4. Cities (Scale 1:5 000 000)
   5. Rivers (Scale 1: 500)
   6. Rivers (Scale 1:50 000)

(6)

3.5 Illustrate the difference between raster and vector data models. Name the advantages and disadvantages of each model

(12)

3.6 Name the model that is mostly used in GIS to build an attribute data model. Explain how this model works by means of an example.

(6)

TOTAL 50