DEPARTMENT OF GEOGRAPHY, GEOINFORMATICS & METEOROLOGY
FACULTY OF SCIENCE
GGY 283 INTRODUCTORY GIS
SECOND SEMESTER TEST

TIME: 50 min

1. ACQUIRING DATA

Illustrate the data stream by means of a flow chart.

(16)

You need to capture geology data from two analogue maps for the use in a GIS project. You do not have a digitising tablet. The maps must fit on your existing data set and the edges must align perfectly when you are finished capturing the data set. Circle the path that you will follow on the data stream drawn in the previous answer.

(5)

Name and discuss the different sources of errors in a GIS

(10)

2. DATA ANALYSIS

Name and define the classification methods that can be used when classifying data into different categories.

(10)

A new road is to be built in an area. State the analysis method(s) that you will use to answer the following questions or criteria:
- (i) The new road must be 500m from the river
- (ii) The underlying geology must be shale
- (iii) Determine the value of the properties through which the new roads passes.
- (iv) How many houses are within a distance of 400m from the new road?

(5)

Name the boolean operator that will be used to answer the following questions:
- (i) In which conservation areas do elephants and cheetahs occur?
- (ii) In which conservation areas are there either elephants or cheetahs?
- (iii) In which conservation areas are there elephants but no cheetahs?
- (iv) In which conservation areas are there either elephants or cheetahs?

(4)
TOTAL (50)