



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2014/2015

DIGITAL SCHOOL OF VIRTUAL AND OPEN LEARNING

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS

AGE 317: GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

DATE: Thursday 30th April 2015

TIME: 4.30p.m - 6.30p.m

INSTRUCTIONS: Answer QUESTION ONE and any other TWO questions. Use illustrations where appropriate.

Question one

- a) Explain the difference between Geographical Information Science and Geographical Information Systems. [5marks]
- b) Discuss any three processes of data capture in a GIS. [15marks]
- c) By giving examples, briefly examine **FIVE** main components of a GIS. [10marks]

Question two

Examine the difference between raster-based and vector-based representations of geographic phenomena. [20marks]

Question three

Explain the three main methods of creating and storing vector data in a GIS. [20marks]

Question four

- a) Define map projection. [2marks]
- b) Describe **THREE** different classes of map projections. [18marks]

Question five

Explain the meaning of the following terminologies.

- a) Models and modelling. [10marks]
- b) Database Management Systems. [10marks]