



(Knowledge for development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

SPECIAL/SUPPLEMENTARY EXAMINATION

THIRD YEAR SECOND SEMESTER

FOR THE DEGREE OF BACHELOR OF EDUCATION ARTS

COURSE CODE: GEO 321

COURSE TITLE: GEOGRAPHIC INFORMATION SYSTEMS

DATE: 25th November 2022

TIME: 11:00-13:00PM

INSTRUCTIONS TO CANDIDATES

1. Answer Question ONE (Q1) Compulsory
2. Answer any other TWO (2) Questions
3. Use illustration where appropriate

This paper consists of 3 printed pages. Please Turn Over.

QUESTION 1 (COMPULSORY)

- a. State the advantages of using GIS Map over paper map in geographic research
(10 Marks)
- b. Describe the procedure of adding marginal information on a map to be used in a word document
(10 Marks)
- c. Describe the process of creating a digital elevation model
(10 Marks)

QUESTION 2

You are provided with a Kenyan shapefile and a shapefile on Kenyan national parks Using ArcGIS 10.5, describe the procedure of creating multiple buffers on Lake Victoria as a mechanism of conserving the water body.
(20 Marks)

QUESTION 3

Using Arc GIS 10.5, describe the procedure of carrying out a supervised classification on landsat imageries using ArcGIS 10.5
(20 Marks)

QUESTION 4

Citing relevant examples, discuss the role of Remote Sensing and GIS in the growth of Kenyan Economy
(20 Marks)

QUESTION 5

Distinguish between Raster and vector as used in GIS
(10 Marks)

Discuss the challenges facing the use of Remote Sensing in mineral sector in Kenya
(10 Marks)