KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER

MAIN EXAMINATION – REGULAR
FOR THE DEGREE OF BACHELOR OF EDUCATION ARTS

COURSE CODE: GEO 121
COURSE TITLE: INTRODUCTION TO CARTOGRAPHY, PHOTOGRAMMETRY AND MAP ANALYSIS
DATE: JULY 22, 2021   TIME: 9 – 11 AM
TIME: 2 HOURS

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 2 printed pages.   Please Turn Over.

Question 1

You are provided by the map of Homabay

    a. Describe the relief of the area covered by the map   (8Marks)

    b. Describe the settlement of the area covered by the map   (8Marks).

    c. Describe the drainage of the area covered by the map   (8 Marks)

    d. State the marginal information on the map   (6 Marks)

Question 2

a) Using examples describe the various ways of representing data on maps   (12 Marks)

b) Distinguish between the term clipping and buffering as used in GIS   (8 Marks)

Question 3

The table below shows the size of land owned by farmers under maize in Bungoma county

Class	Frequency
31 - 40	8
41-50	4
51-60	3
61-70	9
71-80	8

    a. Compute the Mean (3 Marks)

    b. Compute the Mode (4 Marks)

    c. Compute the median (4 Marks)

    d. Compute the standard deviation (4Marks)

    e. Compute the Interquartile Range (5Marks)

Question 4

a) Distinguish between land use and Land Cover   (6 Marks)

c) State the advantages of using GIS Map over paper map in geographic research   (6 Marks)

c. Discuss the various characteristics of contours   (8 Marks)

Question 5

You are provided with data on forests available in Kenya and the data on Kenyan counties.

    a. Describe the process involved in identifying the water bodies in Kisumu county

    (10 Marks)

    b. Efforts of conserving the forest may involve creating multiple buffers on the forest ecosystem. Describe the process of creating the required buffer using Arc GIS desktop.

    (10 Marks)