

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

SECOND YEAR EXAMINATION FOR THE AWARD OF DEGREE
OF BACHELORS OF EDUCATION (ARTS)

GEOG 233: CARTOGRAPHY AND SURVEYING

STREAMS: BED (ARTS)

TIME: 2 HOURS

DAY/DATE: FRIDAY 14/12/2018

11.30 A.M - 1.30 P.M.

INSTRUCTIONS:

- Answer question **ONE (COMPULSORY)** and **TWO** other questions
- Do not write anything on the question paper

SECTION I: COMPULSORY

QUESTION ONE: [30 MARKS]

(a) Define the following terms;

- (i) Geological structure [2 Marks]
- (ii) Geological cross section [2 Marks]
- (iii) Geological beds [2 Marks]
- (iv) Map [2 Marks]
- (v) Climatology [2 Marks]

(b) Distinguish between;

- (i) Remote sensing and photogrammetry [5 Marks]
- (ii) Cartography and surveying [5 Marks]
- (iii) Geological structure and geological cross section [5 Marks]

(c) Describe three types of soil maps

[5 Marks]

SECTION II: ANSWER ANY TWO QUESTIONS

QUESTION TWO: [20 MARKS]

- (a) Discuss types of maps based on scale and function. [7 Marks]
- (b) Describe various methods used in the preparation of various types of maps. [7 Marks]
- (c) Explain two types of geological structures. [5 Marks]

QUESTION THREE: [20 MARKS]

- (a) What is a map projection? [2 Marks]
- (b) What are map projection parameters? [3 Marks]
- (c) Describe methods used to represent discrete quantitative and qualitative data. [7 Marks]
- (d) Describe while giving examples modern mapping technologies. [7 Marks]

QUESTION FOUR: [20 MARKS]

- (a) Using a diagram explain the angular and linear measurements in surveying. [10 Marks]
- (b) How to determine the zone(s) of the UTM for a certain country? [5 Marks]
- (c) Distinguish between vertical and horizontal control survey. [5 Marks]

QUESTION FIVE: [20 MARKS]

- (a) List and describe 5 methods of sampling plants. [10 Marks]
 - (b) Describe while giving examples types of errors in surveying. [10 Marks]
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