

**CHUKA**

**UNIVERSITY**



**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF ARTS  
(GEOGRAPHY)**

**GEOG 233: CARTOGRAPHY AND SURVEYING**

**STREAMS: B.A**

**TIME: 2 HOURS**

**DAY/DATE: TUESDAY 19/12/2023**

**8.30 A.M. – 10.30 A.M.**

**INSTRUCTIONS**

- **Answer question one and any other two questions**
  - **Illustrations, diagram and example should be used when needs be.**
1. a) Discuss SIX factors to consider when constructing a map. (18 marks)  
b) With an aid of a flow chart state and explain the FOUR procedures of making a Map. (12 marks)
  2. a) Describe the FOUR scales of measurement for geographic phenomena. (8 marks)  
b) Explain SIX visual variables for cartographic symbols. (12 marks)
  3. Discuss EIGHT types of surveying commonly used in Geography mapping. (20 marks)
  4. a) Distinguish between three categories of geographic surveying. (6 marks)  
b) Explain FIVE principles that guide survey works. (10 marks)  
c) Calculate the area of a parcel of hand, where the perpendicular offsets were taken at a baseline or 20 meters as 14.56m, 20.20m, 18.40m and 22.42m. (4 marks)
  5. a) Describe FOUR classes or surveys in practice. (8 marks)  
b) Explain the procedure for carrying out surveying. (12 marks)