

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF ARTS IN  
GEOGRAPHY**

**GEOG 435: GEOGRAPHIC INFORMATION SYSTEMS**

**STREAMS: BA GEOGRAPHY**

**TIME: 2 HOURS**

**DAY/DATE: FRIDAY 17/04/2020**

**11.30 A.M. – 1.30 P.M.**

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**INSTRUCTIONS:**

- **Answer question ONE and any other TWO. Maps, sketches and diagrams should be used wherever they serve to illustrate an answer.**
1. (a) Spatial features can be represented in three ways on a map. Identify and explain the three representations. (6 marks)
  - (b) As GIS student, you are tasked to design a map of Chuka University. Using your knowledge from 1 (a) above, identify the various campus spatial features you would like to show in the map. (14 marks)
  - (c) Make a rough sketch map of Chuka University. (10 marks)
  2. (a) Differentiate between raster and vector geospatial data formats. (10 marks)
  - (b) What is metadata and why is it important? (4 marks)
  - (c) Discuss information contained in metadata? (6 marks)
  3. (a) Briefly examine the historical development of GIS as a key sub discipline of geography. (12 marks)
  - (b) Discuss the limitations of GIS use in developing economies. (8 marks)
  4. Discuss any five (5) applications of GIS. (20 marks)
  5. Discuss the various components of a GIS. (20 marks)
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