



**COLLEGE OF HEALTH, AGRICULTURE AND NATURAL  
SCIENCES**

**NANR304: GEOGRAPHICAL INFORMATION SYSTEMS**

**END OF SECOND SEMESTER FINAL EXAMINATIONS**

**APRIL 2022**

**LECTURER: MS. B. BOLO**

**DURATION: 3 HOURS**

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**INSTRUCTIONS**

Do NOT write your name on the answer sheet.

Answer (fully) questions.

Begin your answer for each question on a new page.

Credit is given for neat, well-written and lucid work.

Answer ALL Questions in Section A

Answer ANY TWO Questions in Section B

## SECTION A [COMPULSARY]

### Section A: [50 MARKS]

1. What are the differences between spatial data and attribute data? (4)
2. List five (5) elements of a Map layout and discuss their importance. (10)
3. Discuss the advantages of vector GIS data compared to raster data. (6)
4. What is a Geographical Information System? (5)
5. Describe a typical application of GIS in an area of your choice. In your description, include a statement of the problem, how the data would be collected, analyzed, and how the results are best presented. (25)

6. Describe a typical application of GIS in an area of your choice. In your description, include a statement of the problem, how the data would be collected, spatially modelled, analysed, and how the results are best presented.

9. Describe a typical application of GIS in an area of your choice. In your description,
10. include a statement of the problem, how the data would be collected, spatially
11. modelled, analysed, and how the results are best presented.

## **SECTION B [CHOOSE TWO QUESTIONS]**

### **Section B: [50 MARKS]**

1. Describe in details four (4) GIS Systems. **(25)**
2. All maps must have map scales to represent the ratio of an object on the ground and on paper. Explain in details three types of map scales with example. **(25)**
3. Information technologies and systems are important to the society, discuss the future of GIS technologies and systems to the society. **(25)**

4. Give an overview of what GIS is, paying particular attention to: GIS definition, components of geographic data, feature spatial relationships, data organization, and GIS capabilities. (25)

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End of Examination Paper