

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF DOCTOR OF PHILOSOPHY IN
GEOGRAPHY**

GEOG 943: GIS AND REMOTE SENSING

STREAMS: Ph.D (PART/TIME)

TIME: 3 HOURS

DAY/DATE: FRIDAY 08/08/2025

2.30 P.M. – 5.30 P.M.

INSTRUCTIONS:

- **Answer question one and any other three questions**

- 1 (a) Describe how remote sensing as an earth observation method works (9 marks)
(b) Distinguish FOUR resolutions used in selecting remote sensing products (6 marks)
2. Discuss the FIVE components that make up Geospatial Information Systems
(15 marks)
3. Compare between Raster spatial data model and Vector spatial data model (15 marks)
4. (a) Explain THREE characteristics of Data used in GIS (6 marks)
(b) Discuss SIX important factors to consider regarding data quality for spatial analysis
(9 marks)
5. Examine FIVE applications of GIS and remote sensing technologies in the
contemporaries. (15 marks)
6. Elaborate various processes by which incident Electro-Magnetic Energy interacts with
atmospheric and spatial features (15 marks)

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