

CHUKA



UNIVERSITY

IGEMBE CAMPUS

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

GEOG 433: REMOTE SENSING SB/PT

TIME: 2HOURS

Instructions: Answer question ONE and any other TWO.

1 a) Define the following terms:

- i. Remote sensing (2 Marks)
- ii. Radio astronomy (2 Marks)
- iii. Satellite (2 Marks)
- iv. Seismology (2 Marks)
- v. Acoustics (2 Marks)

b) Describe the types of remote sensing. (6 Marks)

c) Describe the advantages and disadvantages of photographic cameras and satellite (14 Marks)

2. a) Distinguish between the following: (6 Marks)

- i. Radiometric and Spectral resolution.
- ii. Active and Passive Remote Sensing.
- iii. Geostationary and Polar-Orbiting Satellites

b) Discuss the importance of remote sensing. (14 Marks)

3. Chronologically account for the development of remote sensing technology (20 Marks)

4.a) Define Electromagnetic Spectrum (3 Marks)

b) Discuss the Properties of Electromagnetic Spectrum in light of satellite imagery (8 Marks)

c. Discuss the effects of atmospheric constituents on radiation (9 Marks)

5. a) Discuss five major matter interactions (10 Marks)

b) Describe the factors that affect the detection and identification of subject/background contrast of satellite imagery (10 Marks)