

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE  
OF BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE**

**NARE 352: REMOTE SENSING**

**STREAMS: BSC (ENSC) Y3S2**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 06/04/2020**

**8.30 A.M. – 10.30 A.M.**

**INSTRUCTIONS:**

- Answer ALL questions in section A and any TWO questions in section B
- Do not write anything on the question paper

**SECTION A (30 MARKS)**

- Q1. Define the following terms as used in remote sensing
- |                                |          |
|--------------------------------|----------|
| (a) Sensor                     | [1 mark] |
| (b) Platforms                  | [1 mark] |
| (c) Ground truthing            | [1 mark] |
| (d) Incident light             | [1 mark] |
| (e) Photogrammetry             | [1 mark] |
| (f) Electromagnetic radiations | [1 mark] |
- Q2. Discuss various application of remote sensing technology [5 marks]
- Q3. Explain the principle of remote sensing [6 marks]
- Q4. Discuss two classifications of remote sensing [3 marks]
- Q5. List various platforms used in remote sensing [5 marks]
- Q6. Discuss various types of remote images and their characteristics [5 marks]

**SECTION B (40 MARKS)**

- Q7. (a) Discuss the energy interactions with the atmosphere [10 marks]
- (b) Explain various types of remote sensing resolutions [10 marks]

**NARE 352**

- Q8. (a) Discuss an ideal remote sensing system [10 marks]  
(b) Explain the advantages and disadvantages of remote sensing technology [10 marks]
- Q9. (a) Using a diagram discuss the main stages of remote sensing [10 marks]  
(b) Discuss various atmospheric corrections in remote sensing [10 marks]
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