

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA  
SCHOOL OF SCIENCE AND SCIENCE EDUCATION  
DEPARTMENT OF GEOGRAPHY

FIRST SEMESTER 2010/2011 SESSION UNDERGRADUATE EXAMINATION

**COURSE CODE:** REM 311(2 units)

**COURSE TITLE:** Development and principles of remote sensing

**INSTRUCTIONS:** Answer any four (4) questions of your choice. Credit will be given for the use of specific examples and appropriate diagrams.

**TIME ALLOWED:** 2 Hours

1. Discuss the effects of the atmosphere on radio waves.
2. Explain how matter and energy interact in the in the optical and microwave region of the electromagnetic spectrum.
3. Discuss any two (2) of the following:
  - I. Radio propagation
  - II. Problem of power scattering
  - III. Concept of radiometry
4. With the aid of a well labeled diagram, define the electromagnetic spectrum.
5. Discuss the development of remote sensing.
6. Explain the statement that the electromagnetic radiation has a nature and source.