



NATIONAL OPEN UNIVERSITY OF NIGERIA

University Village, Plot 91 Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi - Abuja.

FACULTY OF SCIENCES

ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT

JANUARY/FEBRUARY 2018 EXAMINATIONS

COURSE CODE: ESM 392

CREDIT UNITS: 2

COURSE TITLE: PRINCIPLES OF REMOTE SENSING

TIME ALLOWED: 2 HOURS.

Instruction: Attempt question number one (1) and any other three (3).

1. a. Discuss any two platforms of remote sensing **(5marks)**
b. Discuss LANDSAT and NIGERSAT as examples of onboard space-borne platforms. **(5marks)**
c. Discuss any two procedures for Digital Image Enhancement. **(5marks)**
d. Explain the term aerial photography? **(5marks)**
e. Briefly state any four areas of the applications of Remote Sensing in Urban and Regional Planning **(5marks)**
2. Discuss supervised classification' and 'unsupervised classification' of digital image photographs. **(15marks)**
3. Discuss the various imaging systems of the remote sensing techniques **(15 marks)**
4. Write a short notes on the following:
 - a. Electromagnetic Radiation **(3marks)**
 - b. Wavelength and Frequency **(3marks)**
 - c. Electromagnetic Spectrum **(3marks)**
 - d. Visible Spectrum **(3marks)**
 - e. Radiation Principle **(3marks)** **(15marks)**
5. Discuss the history of aerial photography in Nigeria **(15marks)**