

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF ENVIRONMENTAL TECHNOLOGY
DEPARTMENT OF SURVEYING AND GEOINFORMATICS

1ST SEMESTER EXAMINATION 2017/2018 SESSION

SVG 316: REMOTE SENSING

ANSWER ANY FOUR QUESTIONS. TIME ALLOWED: 2 ½ HOURS

1. a) What is the Electromagnetic Spectrum?
b) Explain how incident energy can interact with an object.
c) Explain (i) Layer Creation (ii) Georeferencing.
2. a) What is GPS?
b) How can you use the GPS to determine positions?
3. a) Explain the purpose of each of the following as relates to remote sensing:
(i) Image Enhancement (ii) Image Transformation (iii) Image Filtering
(iv) Image Classification (v) Geometric Correction.
b) What is a Digital Image?
4. a) Explain the advantages and disadvantages of the two main remote sensing platforms.
b) Distinguish between Polar orbiting and Geostationary Satellites.
c) What are the advantages of digital images, if any?
5. a) Write briefly on Nigeria's first Satellite.
b) What is Scanning and why is it necessary?
6. a) Define Remote Sensing.
b) What is image resolution?
c) Give five correct sensors and their resolutions.