

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

DEPARTMENT OF GEOGRAPHY

SCHOOL OF PHYSICAL SCIENCES

FIRST SEMESTER EXAMINATION, 2015/ 2016 SESSION

COURSE: REM 313 (OPTICAL SYSTEMS)

Instructions: Answer any four question only

Time: 2:30 hrs

- 1) a. Define optical sensor and give an example of optical sensor
b) Explain how photographic sensor records its data/information
- 2) With the aid of diagram, distinguish between push broom and whisk broom mode of image acquisition
- 3) a. Give two reasons why you think camera cannot be divorced from remote sensing
b. Briefly explain any three of the following
 - i. Lens
 - ii. Filter
 - iii. Shutter
 - iv. Apperture
- 4) Discuss the advantages of multispectral scanners over photographic sensor
- 5) Explain the function of these current trends in remote sensing development
 - i. LIDAR
 - ii. Hyper Spectral Sensor
- 6) Explain in details the use of stereoscope in remote sensing