

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

SECOND SEMESTER EXAMINATION 2010/2011

COURSE CODE: REM322

COURSE TITLE: SYSTEM (III); OTHER MICROWAVE SENSORS.

INSTRUCTIONS: ANSWER QUESTION NUMBER ONE AND ANY OTHER THREE.

TIME ALLOWED: 2 HOURS.

1. Using specific sensor for each, explain in details the differences between PASSIVE and ACTIVE sensor
2. List the four resolution components that may be considered in selecting image data and explain any two of them.
3. (a). Define micro-wave scatterometer and describe the two main types.
(b). Explain in details the uses of micro-wave Radiometer.
- 4.(a). What is micro-wave altimeter (Radar altimeter)?
(b) (i) Calculate H_a when the surface height is 50km and the altitude of the satellite is 10,150km.
(ii) What is sea surface topography when the surface height is 70km and the geoid's height is 40km?
5. Discuss in details, the remote sensing application in Agriculture with the use of a specific sensor.
6. With the use of a specific sensor, discuss settlement application.