DEPARTMENT OF GEOGRAPHY
SCHOOL OF SCIENCE AND SCIENCE EDUCATION
FEDERAL UNIVERSITY OF TEHNOLOGY, MINNA
SECOND SEMESTER EXAMINATION 2011/2012

COURSE CODE: REM322
COURSE TITTLE: SYSTEM (III); OTHER MICROWAVE SENSORS.
INSTRUCTIONS: ANSWER QUESTION NUMBER ONE AND ANY OTHER THREE.

TIME ALLOWED: 2 HOURS.

1. Explain the differences between PASSIVE and ACTIVE micro wave sensor using specific sensor for each.
2. Using specific microwave sensor, discuss the remote sensing application in settlement studies.
3. (a). Explain in details the uses of micro-wave Radiometer.
   (b). Define micro-wave scatterometer and describe the two main types.
4. (a). What is micro-wave altimeter (Radar altimeter)?
   (b). (i) Calculate the mountain height when the distance between the surface and the sensor is 2850km and the distance between the sensor and the top of mountain is 2842km.
   (ii) Calculate the surface height when geoid height 85km and sea surface topography is 30km
5. Discuss the remote sensing application in Agriculture with the use of a specific micro wave sensor.
6. List the four resolution components that may be considered in selecting image data and explain any two of them.