

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

SECOND SEMESTER 2010/2011 SESSION UNDERGRADUATE EXAMINATION

COURSE CODE: REM 520

COURSE TITLE: Advanced Topics on RADAR

INSTRUCTIONS: Answer question one and any other three (3) questions

TIME ALLOWED: 2½ Hours

1. Compare and contrast the operational principles of real aperture radar and the synthetic aperture radar system in the tropics.
2. Identify and describe the effect of radar geometry on the radar backscatter coefficient
3. Using a specific radar system, describe its applications on hydrologic resource monitoring
4. Explain the major types of Synthetic Aperture Radar Interferometry and identify its relevance in remote sensing
5. Describe the fundamental application of radar polarimetry in forest resource monitoring and conservation
6. Discuss the unique features and limitations of radar grammetry in remote sensing applications