

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

**SECOND SEMESTER 2013/2014 SESSION UNDERGRADUATE EXAMINATION**

Course Title: Advance Topics on RADAR

Course code: REM520

Instructions: Answer any four questions. Credit will be given for relevant illustrations and examples

1. Give a detailed description of the operational principles of Side Airborne Radar System (SLAR) and explain its unique functions in data acquisition
2. Explain the major types of Synthetic Aperture RADAR Interferometry and identify its relevance in remote sensing application.
3. Give an account of radar polarimetry and explain its relevance to natural resource monitoring and management.
4. Identify and describe the fundamental procedures for digital radar image processing and describe the role of each in radar image interpretation.
5. Discuss the distinguishing features between space and airborne system.
6. Using a specific radar system describe its applications in overcoming the challenges of resource management in Nigeria.