

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

**SECOND SEMESTER 2012/2013 SESSION UNDERGRADUATE  
EXAMINATION**

Course code: REM 320

Course Title: System II - RADAR

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

**Time allowed: 2 1/2 hours**

1. With illustrations and examples, give an explanatory account of the principles and components of an imaging radar systems
2. Discuss the fundamental advancement in the historical development of imaging radar system
3. Compare and contrast the unique features of Real Aperture Radar and Synthetic Aperture Radar system
4. Describe the radar viewing geometry and explain its effects on radar images
5. Explain the effects of target interaction on a radar image and describe the factors that control radar energy / target interaction
6. Describe the following radar parameters:
  - i Resolution
  - ii Polarization
  - iii Incidence angle