

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

SECOND SEMESTER 2009/2010 SESSION UNDERGRADUATE EXAMINATION

COURSE CODE: REM 320

COURSE TITLE: SYSTEM II - RADAR

INSTRUCTIONS: Answer any four (4) questions

TIME ALLOWED: 2½ Hours

1. Using specific examples, describe the principles and components of an imaging radar system.
2. Identify and describe the major advancements in the historical development of radar system.
3. Give a detail description of a radar viewing geometry in relation to its spatial resolution.
4. Explain the operational principles of a real aperture radar system and examine its advantages over optical systems.
5. Discuss the physical characteristics of the target that influence the backscatter coefficients.
6. Describe the following fundamental radar parameters
 - a. Wavelength
 - b. Polarization
 - c. Speckles