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

SECOND SEMESTER 2009/2010 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. Using a specific radar system, describe its applications in any of the following;
   a. Forestry
   b. Hydrology
   c. Landuse/landcover
   d. Geology
   e. Agriculture

2. Compare and contrast the operational principles of real aperture radar and the synthetic aperture radar in the tropics.

3. Give an explanatory account of synthetic aperture radar interferometry in mapping subtle deformation of the earth crust.

4. Discuss the fundamental principles of a polarimetric radar system

5. With illustrations and examples, differentiate between spaceborne and airborne radar systems.

6. Explain the contributions of the parameters controlling radar energy/ target interaction.