FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF GEOGRAPHY

FIRST SEMESTER 2013/2014 SESSION UNDERGRADUATE EXAMINATION

COURSE CODE: REM 511 (3 Units)
COURSE TITLE: Marine and Coastal Environments
INSTRUCTIONS: Answer any 4 questions

TIME ALLOWED: 2½ Hours

1. Discuss the sensor characteristics and uses of Nimbus-7 satellite data in both cloud cover and coastal area algal bloom detection.

2. Describe and discuss how turbidity and coastal marine flora concentrations affect volume reflectance.

3. Discuss how scatterometers are used in collecting and extracting information on wind speed and direction over the oceans.

4. Using Specific examples, Discuss the use of sea surface temperature data (from satellite platforms) used in the study of El Niño episode.

5. Discuss how SAR data could be used in monitoring oil pollution in the Niger Delta of Nigeria.

6. Winter season in the Northern Hemisphere hinders ocean navigation. Discuss how satellite remote sensing could help in finding safe, navigable areas in the Northern Hemisphere winter season.