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

FIRST SEMESTER 2010/2011 SESSION UNDERGRADUATE EXAMINATION

COURSE CODE: REM 511 (2 Units)
COURSE TITLE: Marine and Coastal Environments
INSTRUCTIONS: Answer any 4 questions

TIME ALLOWED: 2½ Hours

1. Write on the sensor characteristics of any there (3) of the following satellites

   (i)   Meteosat.

   (ii)   American SeaStar/OrbView-2.

   (iii)   Marine Observation Satellite (MOS).

   (iv)   Chinese Feng Yun.

2. Describe and discuss the nature of transmittance and volume reflectance in water bodies to electromagnetic radiation.

3. Discuss how turbidity affects spatial reflectance near the water line around the coast.

4. Explain the relevance of remote sensing data in sea surface temperature studies for environmental applications.

5. Using SAR and meteorological data, explain how the profile of the ocean bottom can be obtained near the coast.

6. Discuss how remotely-sensed data could be used for monitoring ice on sea surfaces.