FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

SCHOOL OF SCIENCE AND SCIENCE EDUCATION

DEPARTMENT OF GEOGRAPHY

<u>**FIRST SEMESTER 2010/2011 SESSION UNDERGRADUATE EXAMINATION**</u>

COURSE CODE: REM 411

COURSE TITLE: Satellite meteorology

INSTRUCTIONS: Answer any three questions of your choice. Credit will be given for the use of specific examples and appropriate diagrams.

TIME ALLOWED: 2 hours.

1. Discuss with specific reference to Nigeria the relevance of satellite technology to national development.
2. a. Describe briefly the types of meteorological satellites you know.
   b. distinguish between active and passive sensors
   c. give three examples for each sensor you mentioned in [b] above.
3. Prepare a short explanatory notes on any four of the following:
   a. visible imagery
   b. ITCZ
   c. infra red imagery
   d. albedo
   e. satellite payload -
   f. monsoon circulation
4. Describe how the following cloud features on satellite imagery are helpful for weather forecasting:
   a. brightness
   b. pattern
   c. structure
   d. texture
   e. shape.
5. Explain the role of NARSDA in achieving sustainable development using satellite technology in Nigeria.