

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

**FIRST SEMESTER 2013/2014 SESSION UNDERGRADUATE EXAMINATION**

**COURSE CODE: REM 411P**  
**COURSE TITLE: SATELLITE METEOROLOGY**  
**TIME: 2 Hours 30 Mins**  
**INSTRUCTION: ANSWER ANY (4) QUESTIONS OF YOUR CHOICE**

- 1)
  - a) What is Remote Sensing
  - b) Describe the Satellite Orbits.
  - c) Distinguish between Active and Passive Sensors
  
- 2)
  - a) Define Satellite Meteorology.
  - b) Using relevant illustrations, describe the Global Weather-observing Satellites.
  
- 3)
  - a) Explain the Principles of Atmospheric Radiation.
  - b) Describe how Electro-magnetic radiation interacts with matter by way of reflection, absorption, transmission and scattering.
  
- 4) Describe the General approach of estimating rainfall from remotely sensed data.
  
- 5) Discuss the usefulness of weather satellites in weather forecasting.
  
- 6) Prepare a treatise on METEOSAT Second Generation Satellite Missions.

**GOOD LUCK**