

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

**FIRST SEMESTER 2011/2012 SESSION UNDERGRADUATE EXAMINATION**

**COURSE CODE:** REM 315: (3 Units)

**COURSE TITLE:** Digital Image processing 3UNITS

**INSTRUCTIONS:** Answer any 4 questions

**TIME ALLOWED:** 2½ Hours

1. Distinguish between the computer's requirement for digital image processing and word processing from a typical company secretary.  
10MKS
2. a. Explain the purpose for digital image processing. 5mks  
b. Distinguish between the following image storage formats:  
Bands inter leave by pixel BIP and Band Sequential BSQ. 5mks
3. Using a flow chart, describe the steps involved in analysing NigeriaSat imagery.  
10MKS
4. Distinguish Between the following:
  - a. Spectral and Multispectral enhancement Techniques. 5MKS
  - b. Greyscale and Colour Composite. 5MKS
5. Explain the Image processing technique that involves assigning target names to features in a digital image and highlight the major difference between the two examples of this technique.  
10MKS
6. a. What is a digital Image? 3MKS  
b. Discuss in details the elements of Image interpretation. 7MKS