

**Bago University**  
**Department of Geography**  
**First Semester Examination, March 2019**

**Second Year (B.A)**  
**(Geography Specialization)**

**Geog. 2104**  
**Fundamentals of Remote Sensing**  
**Time allowed: (3) hours**

**Answer the All questions. Illustrate your answer with sketch maps and diagrams wherever necessary.**

1. Fill in the blanks with correct words.
    - a. Remote sensing is the image acquiring process by which the interaction between \_\_\_\_\_ and \_\_\_\_\_ is recorded.
    - b. A matter which has equal emissivity and absorptance is called \_\_\_\_\_.
    - c. Clear water primarily reflects EM energy in \_\_\_\_\_ wavelengths.
    - d. The abbreviation of picture element is \_\_\_\_\_.
    - e. \_\_\_\_\_ is the number of rows and columns in a scene.
    - f. The quality of image data depends on the characteristics of the \_\_\_\_\_ system.
    - g. \_\_\_\_\_ band images are normally displayed with grey scale.
    - h. The operator has to compare the classified image to the \_\_\_\_\_ in order to assess the quality of it.
    - i. If the knowledge of the area is not available sufficiently, \_\_\_\_\_ process can be applied in the image classification.
    - j. If the photographs are taken straight down, they are called \_\_\_\_\_.
  2. Give any definition of remote sensing and illustrate the element of remote sensing.
  3. Analyze the spectral response of vegetation.
  4. What is a passive sensor? Mention the types of passive sensors and describe any three in detail.
  5. Examine the unsupervised image classification.
  6. Write any two short notes on the followings.
    - a. RGB colour space
    - b. Rader altimeter
    - c. Characteristics of image data
    - d. Sources of EM energy
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