

**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS**

**SCHOOL OF SCIENCE AND TECHNOLOGY**

**JUNE/JULY EXAMINATION**

**COURSE CODE: ESM341**

**COURSE TITLE: Introduction to instrumentation measurements and field methods in environmental science (2units)**

**TIME ALLOWED: 2HRS 30 MINS**

**INSTRUCTION: ATTEMPT ANY FOUR QUESTIONS**

1. Make an explanation on the classification of laboratory equipment

(7 1/2 marks)

1. Describe remote sensing technique/process from the beginning to the end

(7 1/2 marks)

1. Provide examples of investigations and suitable satellite sensor’s needed for remote sensing imageries (7 1/2 marks)
2. Discuss the protocols and concerns for PH and EC measurements

(7 1/2 marks)

1. Explain the sources of bias and errors in sampling (7 1/2 marks)
2. Describe 4 meteorological observation instruments and the corresponding variables they measure (7 1/2 marks)