



NATIONAL OPEN UNIVERSITY OF NIGERIA

14/16, Ahmadu Bello Way, Victoria Island, Lagos

SCHOOL OF SCIENCE AND TECHNOLOGY
ENVIRONMENTAL SCIENCE AND RESOURCES MANAGEMENT

OCTOBER, 2013 EXAMINATION

COURSE CODE: - ESM 341
CREDITS

COURSE UNIT: 2

COURSE TITLE: - INTRODUCTION TO INSTRUMENTATION, MEASUREMENT AND FIELD
METHODS IN
ENVIRONMENTAL SCIENCE

TIME ALLOWED: 2HRS

INSTRUCTION: - ATTEMPT ANY FOUR (4) QUESTIONS

Q1.

List 5 examples of field and laboratory equipment's that use remote sensing technique. (17.5 marks)

Q2

**(a.) Describe the technique of remote sensing.
(5 marks)**

(b.) List and describe 3 remote sensing equipment's used for environmental investigations. (12.5 marks)

Q3

(a).State 2 differences between grab sampling and integrated sampling procedures air study. (8 marks)

**(b.)List 3 features of the grab samples.
(1.5 marks)**

**(c)Mention 4 instruments for grab sampling of the air.
(8 marks)**

Q4.

**Outline and describe different error sources in researches.
(17.5 marks)**

Q5.

**Mention 5 items that you should take to the field.
(17.5 marks)**

Q6.Describe 5 instruments for measuring noise and sound.



(17.5 marks)