

**NATIONAL OPEN UNIVERSITY OF NIGERIA**

Plot 91, Cadastral Zone, NnamdiAzikwe Expressway, Jabi, Abuja

**FACULTY OF SCIENCES**

**JULY EXAMINATION2017**

**COURSE CODE: ESM392 TIME: ALLOWED: 2:30mins**

**COURSE TITLE: REMOTE SENSING CREDIT UNIT: 2**

**Instructions: 1. Attempt question Number one (1) and any other three (3).**

**2. Question number 1 is compulsory and carries 25 marks, while the other questions carry equal marks (15) each**

 **3. Present all your points in coherent and orderly manner**

**1a.** As a student of environmental science, what do you understand by the term “Remote Sensing”**(10 marks)**

**b.** State the components of remote sensing **(7 marks)**

c. Briefly explain the areas of applications of remote sensing (8 marks**)**

**2**. Discuss the essentials of the following terminologies in remote sensing:

**a**. Electromagnetic radiation **(3 marks)**

**b**. Wavelength and Frequency **(3 marks)**

**c.** Electromagnetic Spectrum **(3 marks)**

**d**. Visible Spectrum **(3 marks)**

**e**. Radiation Principle **(3 marks) (15 marks)**

**3a.** Differentiate between the remote sensing sensor and sensing sensorplatforms **(5 marks)**

**3b**. Discuss the three classifications of remote sensing platforms. **(10 marks)**

**4.** With examples, discuss the various imaging systems in the remote sensing techniques **(15 marks)**

**5a**. Explain the term **‘**Aerial Photography’ **(5 marks)**

**5b.** Give an explanatory account onAerial Photography **(10 marks)**