

**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**FACULTY OF SCIENCES**

**DEPARTMENT OF ENVIRONMENTAL SCIENCE**

**Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja**

 **JULY 2018 EXAMINATIONS**

COURSE CODE: ESM 343

CREDIT UNIT: 2

COURSE TITLE: CLIMATE CHANGE AND THE ENVIRONMENT **TIME: 2 HOURS**

**Instruction:** Attempt question number ONE (1) and any other THREE (3) questions. Question number one (1) is compulsory and carries 25 marks, while other questions carry equal marks (15) each.

1a. What are proxy Data, give four examples that you know. 5mks.

1b. Identify four (4) gases found in the Earth’s atmosphere and their volumes. 4mks

1c. Explain the following Terms

1. Air Temperature 1.5mks
2. Precipitation 1.5mks
3. Humidity 1.5mks
4. Wind 1.5mks

1d. Define the term succession and explain its types. 10mks

2. Explain the term surface albedo and state its effects on incoming solar radiation. 15mks

3a. Explain the methods by which Air is heated. 5mks

3b. Air temperature decreases as height increases. Expatiate. 10mks

4. Temperature decreases gradually from the equator to the Polar Regions. Discuss. 15mks

5a. What are the major characteristics of the urban areas 10mks

5b. In what way do urban climate differs from rural climate. 5mks