**

**NATIONAL OPEN UNIVERSITY OF NIGERIA**

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

**Faculty of Sciences**

**JANUARY/FEBRUARY, 2018 EXAMINATIONS**

**COURSE CODE: ESM 343 TIME ALLOWED:** 2 HOURS

**COURSE TITLE: CLIMATE CHANGE AND THE ENVIRONMENT CREDIT UNIT:** 2

**Instruction:** Attempt question number one (1) and any other three (3).

**1.** Write short notes on the following:

**i.** Ocean Current **(5marks)**

**ii.** Climate Change **(5marks)**

iii. Climatic Variables **(5marks)**

iv. Greenhouse Gases **(5marks)**

v. Global Warming **(5marks)**

**2**. Discuss the essential characteristics of the varied layers of the atmosphere. **(15marks)**

**3.** With five relevant examples, explain how the history of past climate can be reconstructed using proxy data. **(15marks)**

**4**. Explain the climatic influence of ocean currents on the adjacent land masses. **(15marks)**

**5.** Justify the facts that emissions of sulfur dioxide are responsible for 60-70% of acid deposition that occurs globally **(15marks)**