



**National Open University of Nigeria**  
**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**  
**Faculty of Science**  
**2021 EXAMINATIONS**

**COURSE CODE: ESM 343**

**COURSE TITLE: Climate Change and Environment.**

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

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

1. (a) Define the following (i) Air pressure (ii) Wind (iii) Precipitation (6marks)  
(b) Describe the major evidences that exist to allow climatologists to reconstruct the earth's past climate (9marks)  
(c) With a suitable diagram describe the structure of the atmosphere (8marks)  
(d) state two specific kinds of albedo (2marks)
2. (a) Identify 5 effects of ozone layer depletion (5marks)  
(b) Describe the Energy Characteristics of Urban Areas (5marks)  
(c) Describe the instrument used in measuring Atmospheric Pressure (5marks)
3. (a) Describe the processes of Acid Deposition (6marks)  
(b) Identify 4 sources of Sulfur (4marks)  
(c) Identify 5 sources of Nitrogen Oxide (5marks)
4. (a) Identify 5 effects of Acid Precipitation on Vegetation (5marks)  
(b) identify 5 effects of Acid Precipitation on Man (5marks)  
(c) Identify 5 effects of Climate change on a global Scale (5marks)
5. (a) Describe the horizontal distribution of the air (3marks)  
(b) Identify 7 Factors threatening the environment (7marks)  
(c) Identify 5 climatic Influence on the Ocean (5marks)