

## NATIONAL OPEN UNIVERSITY OF NIGERIA FACULTY OF SCIENCES

## DEPARTMENT OF ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja JANUARY, 2020\_2 EXAMINATIONS

**COURSE CODE: ESM343** 

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.

1a. succinctly discuss 5 factors threatening the environment in the 21<sup>st</sup> century? (10marks)

- 1b. identify 5 main climatic influences on the ocean waters (5 marks)
- 1c. identify 5 effects of climate change on a global scale. (5 marks)
- 1d. State the factors that influences temperature distribution on earth's surface (5marks)
- 2a. State and discuss the process by which the earth surface is heated (5marks)
- 2b. Discuss the two types of albedo you know (6marks)
- 2c. Explain the formation of acid precipitation (4marks)
- 3a. explain factors responsible for most of the past episodes of climate change on the Earth (5marks)
- 3b. Explain how greenhouse effects works (5marks)
- 3c. Explain the processes of energy formation by plants (5marks)
- 4a. explain 5 types of green houses gases (5marks)
- 4b. Explain primary productivity of a community (5marks)
- 4c. Explain the concept of climax community (5marks)
- 5a. state the causes of ocean current and identify two types of ocean (7marks)
- 5b. make a clear description of Global Efforts to Protect the Environment (3marks)
- 5c. identify 5 common examples of proxy data (5marks)