



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS**  
**SCHOOL OF SCIENCE AND TECHNOLOGY**  
**JUNE/JULY EXAMINATION**

**COURSE CODE: ESM343**

**COURSE TITLE: CLIMATE CHANGE**

**TIME ALLOWED: 2 HOURS**

**INSTRUCTION: Answer any four (4) questions only**

Q1. The atmosphere is made up of different gases of various compositions.

Discuss.

Q2. Ozone layer shield the earth surface from harmful radiation, explain.

Q3. With the aid of diagram, explain the processes that modify the incoming solar radiation.

Q4. Explain the following terms;

(a) lapse rate

(b) environment lapse rate

(c) dry adiabatic lapse rate. (d) Isotherm.

Q5. The effects of acid deposition on environment can not be over emphasized. Discuss.

Q6. a. What did you understand by the word climate change?

b. Differentiate between greenhouse gasses and greenhouse effects.

c. What are the factors responsible for climate change?