



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja  
**FACULTY OF SCIENCES**  
**DEPARTMENT OF ENVIRONMENTAL SCIENCE**  
**NOVEMBER, EXAMINATION, 2021\_2**

**COURSE CODE: ESM311**

**TIME: ALLOWED: 2HRS**

**COURSE TITLE: NOISE AND AIR POLLUTION**

**CREDIT UNIT: 2**

**Instructions:** Attempt question Number one (1) and any other two. Question number 1 is compulsory and carries 30 marks, while the other questions carry equal marks of (20mks) each. Present all your points in coherent and orderly manner

**1. With relevant examples, discuss the states of atmospheric pollution in each of the six Geo-Political Zones in Nigeria (30 marks)**

1a. Explain the term air pollution (5marks)

1b. Attempt a classification of air pollution using suitable examples (15 marks).

1c. Identify evidences of Nigeria's experience with atmospheric pollution (10 marks)

2a. What are air pollutants (4marks).

2b. List 5 forms in which air pollutants can exist (2marks)

**2c. Distinguish between the followings:**

i. Primary and Secondary pollutants (5marks)

ii. Natural and Anthropogenic pollutants (5marks)

2d. List any 2 chemicals in the air and any 1 chemical reaction that take place in the air (4marks).

3a. Based on various criteria, attempt a classification of air pollutants (10marks).

3b. Distinguish between the 2 sources of air pollution with examples (5mark)

3c. Identify any of the natural and anthropogenic sources of major carbon-containing compounds (5marks)

4a. Discuss briefly the 2 main global problems caused by air pollution. (6marks)

4b. in which ways are the following affected by air pollution (12marks)

i. Sense of smell

ii. Vegetation

iii. Materials and cultural properties

4c. Name 2 effects of chlorofluorocarbons (2marks).

5a. Decree 58 of 1988 provides for the statutory responsibilities for FEPA. What are they (5marks)

5b. Examine any 10 National Coordinating bodies in environmental protection and conservation of national resources that have been put in place in Nigeria (10marks).

5c. A number of legislations and regulations have been put in place in Nigeria towards integrating environmental concerns into development. Make a list of them (5marks).