



NATIONAL OPEN UNIVERSITY OF NIGERIA

14/16, Ahmadu Bello Way, Victoria Island

SCHOOL OF SCIENCE AND TECHNOLOGY

October, 2013 Examination

Course Code: ESM 311

Time Allowed: 2 Hours

Course Title: NOISE AND AIR POLLUTION

Instruction: Answer any four questions

1(a). The Delta-Bayelsa region is the highest contributor to air pollution in Nigeria. Explain briefly the possible sources of air pollution in this region of the country. (8 marks)

(b) Explain briefly the classification of air pollutants. (10 marks)

2.(a) Discuss the possible effects of air pollution on human health (8 marks)

(b) Describe the specific effects of the following pollutants on human and the environment: (10 marks)

(i) ozone (ii) SO₂ (iii) nitrogen oxides (iv) CO (v) aerosols

3.(a) Discuss the effects of air pollution on weather, climate and atmospheric processes (8 marks)

(b) Outline the functions of the Federal Environmental Protection Agency (FEPA) as spelt out by the decree (10 marks)

4. (a) Distinguish between 'sound' and 'noise' (6½ marks)

(b) (i) How is sound measured? (3 marks)

(ii) Mention any 4 activities and the associated sound levels (8 marks)

5. (a) What is noise pollution? (3 marks)

(b) Describe 5 types of noise pollution (10 marks)

(c) What are the effects of noise pollution on human health? (5 marks)

6. (a) Enumerate the occupational strategies for the prevention of Noise-Induced Hearing Loss (NIHL) (10 marks)

(b) Enumerate 5 approaches to motor vehicle noise control. (7½ marks)