

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

COURSE CODE: ESM 311

COURSE TITLE: NOISE AND AIR POLLUTION

TIME ALLOWED:2 Hours

INSTRUCTION: Answer any four questions

Q1

- (a) Discuss the effects of air pollution on weather, climate and atmospheric processes
- (b) Outline the functions of the Federal Environmental Protection Agency (FEPA) as spelt out by the decree (10 marks)

$\mathbf{Q}\mathbf{2}$

- (a) What is noise pollution?(3 marks)
- (b) Describe 5 types of noise pollution (10 marks)
- (c) What are the effects on noise pollution on human health?(5 marks)

$\mathbf{Q}\mathbf{3}$

- (a) The Delta-Bayelsa region is the highest contributor 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)

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

Q5

- (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:
 - (i) ozone
- (ii) SO₂
- (iii) nitrogen oxides
- (iv) CO
- (v) aerosols(10 marks)

Q6

- (a) Distinguish between 'sound' and 'noise' $(6\frac{1}{2} \text{ marks})$
- (b) (i) How is sound measured? (3 marks)
 - (ii) Mention any 4 activities and the associated sound levels(8 marks)
- (b) Enumerate 5 approaches to motor vehicle noise control. (7½ marks)