

THE NATIONAL UNIVERSITY OF LESOTHO

BSc. ENVIRONMENTAL HEALTH

SUPPLEMENTARY EXAM – AUGUST, 2023

ENVIRONMENTAL POLLUTION AND CONTROL - EHS 3204

DURATION: 3 HRS

MARKS: 100

INSTRUCTIONS: Answer **ALL** 4 Questions

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Question 1

Define the following terms as used in Environmental Health:

- a) Pollution
- b) Environmental media
- c) Conservative pollutants
- d) Air quality
- e) Photochemical smog
- f) Community Noise Equivalent Level (*CNEL*)
- g) High hazard wastes
- h) Point source pollution
- i) Acid Mine Drainage
- j) Dissolved Oxygen Sag

[40]

Question 2

a) Explain how the following instruments are used to control air pollution from stationary sources.

- i) Catalytic incinerators
- ii) Flares
- iii) Absorbers

[12]

b) Give the three toxins produced by freshwater BGA, and give one impact that each toxin has on human health. **[6]**

Question 3

a) State any three factors that determine toxicity of pollutants? **[6]**

b) Describe chemical reactions and formula showing how ground level ozone is formed. **[16]**

Question 4

a) Discuss the use of mass balance in pollution assessment. **[10]**

b) Briefly explain self purification of streams. **[10]**