

THE UNIVERSITY *of York*

**Degree Examination 2007**

**ENVIRONMENT DEPARTMENT**

**BSc in Environmental Science & BSc in Environment, Economics and Ecology**  
**Part 1b**

**ENVIRONMENTAL MANAGEMENT**

Time allowed: **one and a half hours**

Answer **ALL** of the short answer questions and **ONE** of the long-answer questions.

Calculators will be provided

*Pay adequate attention to spelling, punctuation and grammar, so that your answers can be readily understood*

**Short answer questions (total 50%)**

1. Name four approaches that corporations might use for environmental management. (2)
2. In European Law, what is the difference between a Regulation and a Directive? Give an example of an environmental Regulation and an environmental Directive. (4)
3.
  - a. List four pollutants that arise from coal combustion. (4)
  - b. For each of these, what is the likely impact on the environment? (4)
  - c. What remediation measures are available for controlling these emissions? (4)
4.
  - a. List four forms of renewable energy (2)
  - b. For each, provide two major negative environmental impacts (4)
  - c. What environmental assessment tool would you use to compare the impact of different energy options? (2)
  - d. What aspects would you consider in this comparative assessment? (4)
5.
  - a. Balance the following equation: (2)
$$\{CH_2O\} \rightarrow CH_3CH_2COOH + CO_2 + H_2$$
  - b. What process does this equation describe and name an example of a situation in which it might occur. (3)
  - c. If you have 1 mole of CH<sub>2</sub>O, how much (in g) carbon dioxide will be produced from the reaction? (4)
6. What is the definition of 'ecological footprint'? (2)
7.
  - a. What are the likely consequences of climate change on i) forests, ii) deserts, iii) the cryosphere, iv) mountain regions, and v) coastal regions? (5)
  - b. Provide four approaches to address climate change. (4)

**Long answer questions – answer one of the two questions (Total 50%)**

1. Under EU Directive 97/11/EC, certain projects require an environmental impact assessment.
  - a. Give four examples of projects requiring an EIA. (2)
  - b. Describe the different stages in the EIA process and for one of your chosen example projects, identify the potential impacts. (38)
  - c. What are the main limitations of EIA and what environmental management tool could you use to address these limitations? (10)
2.
  - a. What was the London smog and what were the impacts of this on human health? You should use chemical equations to support your answer. What remediation measures were employed to address the smog? (25)
  - b. Describe the sources, effects and potential control measures for the main atmospheric pollutants threatening human health today? (25)