

Cork Institute of Technology
Bachelor of Science in Applied Biosciences – Stage 2
(SBIOS_7_Y2)
Summer 2008
Environmental Science
(Time: 2 Hours)

Instructions
Answer **FOUR** questions.

Examiners: Mr. B. Walsh
Prof. G. Walsh

- Q1. (a) The global environment is threatened by environmentally unsustainable practices. What are they? (8 marks)
- (b) What is an ecological footprint? (4 marks)
- (c) What are the major ecosystems? (10 marks)
- (d) What was the goal of the M.E.A? (3 marks)
- Q2. (a) What was the Kyoto Protocol? (4 marks)
- (b) What are the risks of losing biodiversity? (12 marks)
- (c) Write brief notes on global atmospheric changes? (9 marks)
- Q3. (a) Define “sustainable”. (5 marks)
- (b) What is a sustainable ecosystem? (5 marks)
- (c) What are the processes involved in sustainable development? (5 marks)
- (d) What must be achieved to attain a sustainable future? (10 marks)
- Q4. (a) In terms of environmental health, define a hazard. (5 marks)
- (b) Explain the difference between morbidity and mortality. (2 marks)
- (c) Write brief notes on:
1. Cultural hazards (3 marks)
 2. Biological hazards (3 marks)
- (d) Briefly describe 2 infectious diseases with which you are familiar. (6 marks)
- (e) Write concise notes on physical hazards. (6 marks)

- Q5. (a) What is the Earth's atmosphere? (6 marks)
- (b) Write concise notes on outdoor air pollution. (8 marks)
- (c) List 6 types of indoor air pollution. (6 marks)
- (d) What is required to reduce indoor air pollution? (5 marks)
- Q6. (a) Describe the phenomenon known as the "greenhouse effect". (10 marks)
- (b) What are the predicted scenarios if the World climate may be getting warmer? (5 marks)
- (c) What effect will global warming have on biological systems? (5 marks)
- (d) What effect would global warming have on marine ecosystems? (5 marks)
- Q7. (a) List the energy sources currently used. (6 marks)
- (b) Write short notes on fossil fuels. (4 marks)
- (c) What is the impact of fossil fuel use. (5 marks)
- (d) Compare and contrast the different types of renewable energy sources. (10 marks)
- Q8. (a) Define "waste". (2 marks)
- (b) List the main categories of waste. (4 marks)
- (c) What are the reasons for managing waste? (2 marks)
- (d) How is waste managed? (6 marks)
- (e) What is recycling? (5 marks)
- (f) What are the criteria used for defining hazardous waste? (6 marks)