
UNIVERSITI SAINS MALAYSIA

Second Semester Examination
Academic Session 2001/2002

February/March 2002

KEN 200 - Environmental Quality Management

Time : 3 hours

Answer any **FIVE** questions.

All questions are of equal value (20 marks for each questions).

This paper contains **SEVEN** questions (3 pages).

- (1) Managing the environment is critical in order to sustain the development of man kind. *Describe in detail* and use a flow chart to illustrate how the human ecosystem, technological and engineering control, and legal controls play an important role in environment management. (20 marks)
- (2) (a) Give three causes of deforestation. (6 marks)
- (b) Illustrate the interrelationships of deforestation to other environmental events using a flow chart. (No explanation is required). (7 marks)
- (c) Give three international efforts to control deforestation. (7 marks)
- (3) (a) Describe the implications of Section 34A (in the Environmental Quality Act 1974) on the physical development and the conservation of the environment in Malaysia. (10 marks)

- (b) How does the implementation of the ENVIRONMENTAL MANAGEMENT PLAN (EMP) complements the findings and recommendations in the Environmental Impact Assessment (EIA) Report?
(10 marks)
- (4) (a) Outline the pertinent steps in the preparation of both the *Preliminary* and *Detailed* Environmental Impact Assessment (EIA) Study by a project proponent.
(10 marks)
- (b) (i) What is meant by Ecologically Sensitive Areas (ESAs) in the context of EIA considerations? Give two examples to support your answer.
(ii) Land clearing activity is invariably one of the important steps in a development process. Give specific precautionary steps in order to minimize the “cascade effect” during the land clearing activity.
(10 marks)
- (5) (a) List five examples of environmental indicators. What difficulties are involved in attempting to combine these five indicators into an overall index?
(7 marks)
- (b) Discuss the difference between a source-related pollutant and an environmental quality pollutant.
(6 marks)
- (c) Discuss the strengths and weaknesses of the Malaysian water quality index.
(7 marks)
6. (a) Explain what is meant by a one in a million risk.
(6 marks)
- (b) Explain the difference between a hazard index and cancer risk.
(6 marks)
- (c) Describe some of the problems encountered in communicating risk from hazardous waste activities to the public.
(8 marks)

7. (a) Explain in detail the requirement for Clause (4.3.2) in ISO 14001, which is 'Legal and other requirements'.
(10 marks)
- b) Define the terms 'environmental aspect' and 'environmental impact' as stated in ISO 14001.
(10 marks)

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