THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF ENGINEERING TECHNOLOGY
BACHELOR OF INDUSTRIAL STUDIES (INDUSTRIAL MANAGEMENT)
SUSTAINABLE INDUSTRIAL DEVELOPMENT – MEI 6350
FINAL EXAMINATION 2010/2011

DATE : 27 MARCH 2011
TIME : 1400 Hrs -1700 Hrs
DURATION : THREE HOURS

ANSWER FIVE QUESTIONS ONLY. ALL QUESTIONS CARRY EQUAL MARKS

(1) (i) "The Industrial Revolution was a turning point in the history of the world." Discuss this statement in detail with your arguments in favour or against.

(10 marks)

(ii) "The world would have been better off today in terms of long term sustainability of human civilisation if coal and petroleum had never been discovered." State your views on this controversial statement and support them with suitable arguments.

(10 marks)

(2) (i) Give a brief history of global initiatives in the area of environmental responsibility.

(10 marks)

(ii) The Kyoto Protocol has been criticised for "not going far enough." Discuss.

(10 marks)

(3) (i) Many countries are now moving away from the use of nuclear power stations to generate electricity. What are the reasons for this and what are your views?

(10 marks)

(ii) Discuss whether nuclear energy is a suitable option for meeting the future energy needs of Sri Lanka.

(10 marks)

(4) (i) Explain the concept of "Eco Design" in detail.

(10 marks)

(ii) What is "Life Cycle Assessment?" Describe this concept in detail.

(10 marks)

(5) (i) Sri Lankan Government has been exploring the possibility of obtaining a significant proportion of our energy needs from renewable sources. Of the available options, what type or types of renewable sources would you recommend? Justify your recommendations.

(10 marks)

(ii) Is it correct to state that "ultimately, all energy is derived from the sun?" Discuss.

(10 marks)

(6) (i) Discuss the weaknesses of the National Environmental Act (NEA) of 1980.

(10 marks)

(ii) In your opinion, what additional environmental legislation is required in Sri Lanka to keep pace with recent developments?

(10 marks)

(7) (i) Describe the terms (a) Green Marketing (b) Green Consumerism (c) Eco-Labelling

(10 marks)

(ii) What is Pollution Prevention (P2)? Briefly describe the benefits of waste minimisation.

(10 marks)

(8) (i) What is Nanotechnology? Describe in detail the different areas of production to which it may be applied.

(10 marks)

(ii) It has been proposed at high policy making levels that we should commence nanotechnology research in Sri Lanka. What are your views on this proposal? Discuss in detail your arguments in favour or against.

(10 marks)

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