



THE OPEN UNIVERSITY OF SRI LANKA
POSTGRADUATE DIPLOMA/MASTER IN ENVIRONMENTAL SCIENCES
LEVEL 6
NEP 1302/1206 – ENVIRONMENT, SOCIETY AND DEVELOPMENT
FINAL EXAMINATION – 2011/2012 (OPEN BOOK EXAMINATION)
DURATION: THREE HOURS

Date: 02 April 2012

Time: 09.30 a.m. – 12.30 p.m. (3hrs)

ANSWER ANY FOUR (04) QUESTIONS ONLY

PLEASE ENSURE THAT ANSWERS FOR EACH QUESTION SHOULD BE GIVEN IN SEPARATE BOOKS

1. State whether the need for (a) mobile phones, and (b) electric lighting could be identified under the category of legitimate material needs or not. Justify your answer.
2. Use the model, "Open System", to describe how life processes of an individual human being as well as processes of industrial production do not violate the second law of thermodynamics. What are the similarities and differences of both processes?
3. Predict how the world will look like in 2050 by taking into account the main trends in the global energy sector.
 - a) Do you think that the Asiatic Mode of Production could be a model to face the current global challenges? (50 marks)
 - b) Analyze why the Asiatic Mode of Production has failed in many Asian countries (50 marks)

4. a). Why the health of the working population is important?
 - b). Discuss the existing governmental policy on safety and health of the workers and its implementations.

5. "Cadmium and Arsenic poisoning was seen as a cause for renal failure among farmers".
 - a). What is the main source of these heavy metals found in the soil and water bodies?
 - b). What preventive action could be taken to minimize the incidence of poisoning?
 - c). Discuss these measures in relation to acceptability and short- and long-term effects on the livelihoods of the farmers.

6. a). "Integrated pest management is given as a solution and protective clothing is also recommended". How could these be implemented and what controls are needed to ensure worker safety?
 - b). "Traditional varieties are considered to be less prone to pest attack therefore use of pesticides and insecticides could be lessened". Discuss the possibility of introducing such varieties and how this would affect farmers' net income.