

THE OPEN UNIVERSITY OF SRI LANKA
M. Sc. IN ENVIRONMENTAL SCIENCE
LEVEL 9



FINAL EXAMINATIONS-2017/18
NEP1208/DSP9502 - ENVIRONMENTAL ECONOMICS AND MANAGEMENT

DURATION-THREE (03) HOURS

Date: 24.11.2018

Time: 1.30pm-4.30pm

Answer five (05) questions. Each question carries 20 marks

1. (i) "Although growth is a favourable outcome, there are long-term environmental implications, as the materials balance model suggests". Explain (10 marks)
(ii) How can governments correct the problem with open access property, like over fishing? Explain with a suitable diagram. (10 marks)
2. (i) Examine the market failure using neoclassical economics model. (08 marks)
(ii) Distinguish the Malthusian economic approach from the Ricardian economic approach. (04 marks)
(iii) "According to Arthur Pigou, Market intervention would be justified whenever market failure exists". Explain. (08 marks)
3. (i) What causes externality? (05marks)
(ii) How does Coase theorem seek to solve negative externalities? (10marks)
(iii) What are the problems with Coasian solutions? (05 marks)
4. (i) What are command-and-control regulations (CAC)? (05 marks)
(ii) What kind of problems can occur with command and control regulations? (05 marks)
(iii) What are the advantages of using Market based instruments (MBIs) in solid waste management? (10marks)
5. (i) "Assimilative capacity is the ability of the biophysical world to absorb the waste products generated by economic activity" Explain. (10 marks)
(ii) "One of the tools we can use to analyze the tradeoff between economic output and environmental protection is a production possibility frontier (PPF)" Explain. (10 marks)
6. (i) "Environmental valuation is largely based on the assumption that individuals are willing to pay (WTP) for environmental gains and, conversely, are willing to accept (WTA) compensation for some environmental losses". Explain with examples. (10 marks)
(ii) Explain the Contingent Valuation Method (CVM) and its inherent problems. (10 marks)

7. Explain the following statements with a suitable example for each
- (i) "A deposit–refund system is essentially the combination of a tax and a subsidy"
(10 Marks)
 - (ii) "Pollution permit trading systems create a market price for pollution and therefore can be traded between firms".
(10 marks)
8. (i) Discuss the various steps in Cost Benefit Analysis (CBA) with an example.
(15 marks)
- (iii) What are the major shortcomings of CBA?
(05 marks)
9. (i) What are the shortcomings in the present System of National Accounting (SNA)?
(05 marks)
- (ii) Explain the green accounting procedure and possible problems in environmental accounting.
(15 marks)

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