

MASTER OF ARTS EXAMINATION 2017
2nd Year, 4th Semester
ECONOMICS
Environmental Economics

Time: Two Hours

Full Marks: 30

Use Separate answer scripts for each group
Answer any two questions only from each group
Mention the Group at the top of the top sheet of each answer script

Group A

1. What are the essential features of a Pigovian tax? Describe how the optimal level of such a tax can be calculated in a general equilibrium framework where technology is Leontieff type and labour is the only input. (2+8)
2. Consider an Utility function: $U = Z_1^{1/2} Z_2^{1/2}$ where Z_1 and Z_2 are household goods. The Household Production function is Leontieff type where inputs are a market good X and household time T. Derive the demand function for the two household goods Z_1 and Z_2 . (10)
3. Consequent upon the passage of the Forest Rights Act 2006 allowing tribal communities to live in reserve forest land, a debate arose as to whether such communities will be able to sustainably extract and manage forest resources or will this decision lead to the destruction of the forest itself. Describe a field experiment that investigates this problem and discuss the results. (10)

Group B

1. Explain how the Coase Theorem will lose its significance in the presence of substantial wealth effects. (5)
2. "Improvement in emission control technologies might have no effect on the socially optimal level of emissions". Comment on and explain this statement.(5)
3. Explain the impact of trade liberalization on the environment through a change in the emission intensity of global output as well as scale and composition effects brought about by such liberalization. (5)