

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 150 points (to be scaled up to 210 points) and is scheduled to take 75 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I can give some extra time.

1) (14 points) Answer EITHER Part A OR Part B.

A) In this course and in Environmental Economics classes, ANS is talked about. What is it? Why don't any Macroeconomics textbook that I am aware of discuss ANS? Explain your logic.

B) What is meant by *natural capital*? Why is that important for a country?

2) (14 points) Answer EITHER Part A OR Part B.

A) What has happened to the ratio of M2/GDP in the past four decades for most countries? Is that good or bad? Explain your logic.

B) Does M1, M2, or M3 do a better job at storing wealth? Explain your logic.

3) (14 points) In developing countries, state-owned enterprises (SOEs) and subsidies play important roles in the budget of the government. For ONE of them, explain why it is important and whether or not it is good if a country has it as a large part of their budget.

4) (14 points) Answer EITHER Part A OR Part B.

A) What are *common pool resources*? Explain why they are a particular problem in economics.

B) State the Coase Theorem. Explain how it would work by giving an example.

5) (14 points) Answer EITHER Part A OR Part B.

A) The biggest four parts of the budget of the USA's government are national defense, Social Security, Medicare, and Medicaid. We had two general categories of expenditures. Which do these fit in? Why are that type of expenditure a problem for the government? Explain your logic.

B) President Biden has proposed \$2,000,000,000,000 (\$2 Trillion) worth of infrastructure improvements over 8 years. Would our book say that is a good thing to do or a bad thing? Explain your logic.

6) (18 points) Answer EITHER Part A OR Part B.

A) What are the two costs of inflation? Explain how inflation causes them. If there is hyper-inflation, then one of those costs disappears. Which one? Why?

B) Suppose a country has acute inflation, how can the central bank use open market operations and the discount rate to fight the inflation. Explain how they would reduce the inflation.

7) (20 points) Answer EITHER Part A OR Part B.

A) Governor Jim Justice of West Virginia, has proposed cutting (and eventually eliminating) the state income tax. He would replace the missing funds by adjusting other taxes. The biggest changes are to increase the sales tax and the excise taxes on alcohol and tobacco. If we consider West Virginia to be a developing country, does his proposal make sense? Explain your logic referencing TWO of the criteria we use for determining if a tax is a good one.

B) We have several criteria for evaluating a tax to see if it is a good tax or a bad tax. What are TWO of the criteria? Explain why that is important. In your explanations, give an example of a bad tax and explain why it is bad.

8) (20 points) Answer EITHER Part A OR Part B.

A) Rank the following methods of reducing pollution from the most likely to give the optimal result to the least likely to give the desired result in both the long and short-run. Explain your logic. Taxing the pollution, non-tradable permits, tradable permits.

B) Draw the SMC/PMC/D diagram. Explain the reason you drew the shape and distance between the two MC curves. Use your diagram to prove that the market will not produce the optimal quantity.

9) (22 points) Answer EITHER Part A OR Part B on the back.

- A) Draw the MEC/MAC diagram the way I drew it in class. Use it to prove that *cap and trade* will give less cost for the same pollution than our current method of telling each company the maximum pollution they can create.
- B) Draw the MEC/MAC diagram the way I drew it in class. Explain why each of the curves takes its shape. Prove that the point where the two curves cross is the optimal point.