

## Homework #5

1. An example of a good that is non-rival in consumption is:
  - A. a campsite at Yellowstone National Park.
  - B. a ticket to an Omnimax movie at the Smithsonian.
  - C. the Lincoln Memorial in Washington, D.C.
  - D. All of the above are non-rival in consumption.
  
2. When economists say that a good is non-excludable, they mean that:
  - A. everybody wants it.
  - B. there is no practical way to stop a person from enjoying the good.
  - C. more than one person can consume the good.
  - D. everybody is willing to pay for it.
  
3. When people try to benefit from a public good without paying for it we call it the:
  - A. free-rider problem.
  - B. duopolists' dilemma.
  - C. public goods problem.
  - D. taxation problem.
  
4. The demand for a public good is:
  - A. the horizontal sum of each individual's demand in the economy.
  - B. the vertical sum of each individual's demand in the economy.
  - C. the inverted sum of each individual's demand in the economy.
  - D. the integrated sum of each individual's demand in the economy.
  
5. Efficiency would dictate that with pure public good:
  - A. each person consumes the same quantity and pays a different price equal to their marginal benefit.
  - B. each person consumes a different quantity and pays the same price equal to their marginal benefit.
  - C. the private provision of the good must exceed that which would be provided by the government.
  - D. none of the above.
  
6. Public economics studies
  - A. optimal taxation.
  - B. public goods.
  - C. voting rules and behavior.
  - D. both (A) and (B).
  - E. all of the above.
  
7. Because pollution taxes raise the costs of production for firms, firms:
  - A. will lower prices to consumers.
  - B. must receive a higher price at every level of output.
  - C. will increase the quantity produced at every price.
  - D. will quit producing goods that generate pollution.

8. Tax measures on the ballot often fail in Oregon. Using the PPF frontier to articulate the voter's position, a logically reasonable (although not necessarily correct) rationale for voting no on a tax increase is:

- A. there is a tradeoff between public and private goods and the tax will not increase public provision of goods sufficiently to warrant the decrease in private goods that could be purchased with the taxed income.
- B. government is inefficient (i.e., inside the PPF) and thus the government can provide the current amount of service without additional funds.
- C. both (A) and (B).
- D. neither (A) or (B).

9. Suppose Johnson's Rubber Factory belches black smoke into the air over the city of Bellowsville. If the city of Bellowsville attempts to internalize the external costs associated with the production of rubber with a pollution tax, we can expect:

- A. the price of rubber not to change.
- B. the price of rubber to increase.
- C. the quantity of rubber demanded to increase.
- D. no change in the quantity of rubber demanded.

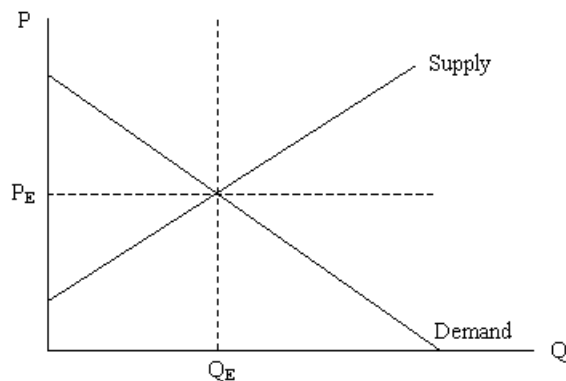


Figure 8.1

10. Consider Figure 8.1, which depicts the supply and demand for coal. Assume coal production creates external costs. If  $P_E$  and  $Q_E$  are the equilibrium price and quantity of coal without government regulation, a pollution tax on the production of coal would \_\_\_\_\_ the price of coal relative to  $P_E$  and \_\_\_\_\_ the quantity of coal relative to  $Q_E$ .

- A. increase; decrease
- B. increase; not change
- C. decrease; not change
- D. decrease; decrease

11. In a competitive private market, \_\_\_\_\_.
- A. consumers pay different prices depending on the value they place on the good.
  - B. consumers all consume the same quantity.
  - C. the market demand is the horizontal sum of the individual demands.
  - D. both (A) and (B).
  - E. both (B) and (C).
12. A spillover is:
- A. a less extreme case of a public good when the social marginal costs (benefits) do not equal the private costs (benefits).
  - B. a less extreme case of a private goods when good is rival in consumption but not excludable in consumption.
  - C. an extreme case of a public good when the good is rival and excludable in consumption.
  - D. none of the above.
13. If a firm is taxed for each unit of waste it produces, the firm will decrease the amount of waste produced until:
- A. there is no waste produced.
  - B. the marginal cost from decreasing waste is zero.
  - C. the marginal cost of decreasing waste is equal to the marginal benefit from decreasing waste.
  - D. the marginal benefit from decreasing waste is equal to zero.
14. The economic analysis of negative externalities predicts that:
- A. the optimal amount of pollution is zero.
  - B. in the absence of outside interference, markets are inefficient.
  - C. both (A) and (B).
  - D. neither (A) or (B).
15. Economic models of public choice predict that political parties will tend to try to appeal to the:
- A. mean voter.
  - B. modal voter.
  - C. median voter.
  - D. the voter with the least variance in preferences.
  - E. the voter with the maximum variance in preferences.
16. Factor markets.
- A. represent the bottom of the circular flow.
  - B. are represented by consumers as suppliers and firms as demanders.
  - C. help determine wages, employment, rent, interest, and profit.
  - D. all of the above.

17. Voting with your feet means:
- A. individuals protesting at the seat of government when the provision of public goods do not suit their preferences.
  - B. individuals sorting into communities based on their preference for local public goods.
  - C. politicians maximizing the number of votes by political stumping.
  - D. politicians choosing a location to run for government based on the political preferences of the electorate.
  - E. none of the above.

18. Economists predict that the Kyoto Protocol that is designed to limit each countries omission of greenhouse gasses is likely to fail because.
- A. the marginal cost of the policy exceed the marginal benefits.
  - B. the marginal benefits exceed the marginal costs.
  - C. the regulation by government is occurring at the national level, whereas the externality of greenhouse gasses occur at a global level.
  - D. both (A) and (C).
  - E. both (B) and (C).

19. Suppose three people are willing to pay \$200, \$60, and \$40, respectively, for a fireworks display and it costs \$240 to provide. We can say that:
- A. the costs of the fireworks display exceed the benefits of the fireworks display.
  - B. a majority-rule vote with an equal split of the costs will lead to the public provision of the fireworks display.
  - C. no single individual will be willing to provide the fireworks display on their own.
  - D. all of the above.
  - E. none of the above.

20. Suppose persons (1), (2), and (3) are willing to pay \$200, \$60, and \$40, respectively, for a fireworks display and it costs \$240 to provide. We can say that a division of the costs of \$180, \$40, and \$20 between persons 1-3, respectively, is:
- A. sufficient to cover the costs of the display.
  - B. will pass under a majority-rule vote.
  - C. both (A) and (B).
  - D. neither (A) or (B).