

## PRACTICE EXAM 2: Professor Walker - S201 - Fall 2009

### I. (3 Points Each) Multiple Choice

1. Assume farmers in Indiana can grow either corn or soy beans. *Ceteris paribus*, an increase in the profitability of growing corn would be expected to
  - A. cause an upward movement along the market supply curve for corn.
  - B.\* decrease the market supply of soy beans.
  - C. increase both the market demand and market supply for corn.
  - D. decrease the demand for soy beans.
  
2. Assume the imposition of a binding import quota on European cars imported into the U.S. The impact on the market for cars made in the U.S. would be
  - A. an increase in demand and increase in supply.
  - B.\* an increase in demand and increase quantity supplied.
  - C. a movement up the demand curve and the supply curve.
  - D. a movement up the demand curve and down the supply curve.
  
3. Which of the following statements regarding the expected effects of a price control in a competitive market is **true**?
  - A. A price floor above the equilibrium price will generate a shortage.
  - B. A price floor below the equilibrium price will generate a quantity exchanged that is greater than the equilibrium quantity.
  - C. A price ceiling below the equilibrium price will generate a decrease in supply and an increase in demand.
  - D.\* A price floor above the equilibrium price will generate a quantity exchanged that is less than the equilibrium quantity.
  
4. Suppose that an **increase in the supply** of blank CDs causes an 8% decrease in the price of blank CDs, and a 2% increase in the quantity of blank CDs purchased. It follows that
  - A. the elasticity of supply of blank CDs is 4.00.
  - B. the elasticity of supply of blank CDs is 0.25.
  - C. the elasticity of demand of blank CDs is 4.00.
  - D.\* the elasticity of demand of blank CDs is 0.25.
  
5. The price elasticity of demand for life insurance has been estimated to be 1.45. This implies, acting as a group insurance companies could increase their revenues by
  - A.\* lowering rates on insurance policies.
  - B. imposing price floors on the policies they sell.
  - C. decreasing the supply of insurance policies.
  - D. all of the above.

6. Joe buys 1 Coke each day, even though the price has increased by over 20%. Which of the following statements is correct about Joe? His price elasticity of demand for coke equals
- A.\* 0.
  - B. 1.
  - C. 20.
  - D. infinity.
7. Which of the following statements about price elasticity of demand is **true**?
- A. If there is an increase in demand, the quantity supplied will not change if price elasticity of supply is 1.
  - B. The shorter the time period considered, the higher the price elasticity of demand is expected to be.
  - C. The price elasticity of demand for cigarettes is likely to be higher than the price elasticity of demand for Camel cigarettes.
  - D.\* Goods that comprise a large percentage of a household's total expenditures tend to have a relatively higher price elasticity of demand.
8. A downward sloping straight-line (constant-slope) demand curve has an elasticity that
- A. remains constant along its length.
  - B. increases for lower and lower prices.
  - C.\* decreases for lower and lower prices.
  - D. at first increases, then decreases for lower and lower prices.
  - E. None of the above are true.
9. Assume the government decides to increase excise taxes on cigarettes, partly to increase revenues and partly to reduce cigarette consumption. If the price elasticity of demand for cigarettes is  $E_d = .5$ , by how much would the price of cigarettes have to increase in order to generate a 10% decrease in the quantity of cigarettes demanded?
- A. 5%
  - B. 10%
  - C.\* 20%
  - D. 50%
10. The imposition of a binding quota on imported sugar would have the **smallest** impact on sugar prices if:
- A. the demand for sugar is highly inelastic.
  - B.\* the demand for sugar is highly elastic.
  - C. the supply of sugar with no quota is highly elastic.
  - D. the supply of sugar with no quota is highly inelastic.

11. Suppose that the price of candles increases by 10% and the **total revenues** earned by the producers of candles increases by 2%. It follows that:
- A. the demand for candles is elastic.
  - B.\* the demand for candles is inelastic.
  - C. the supply of candles is elastic.
  - D. the supply of candles is inelastic.
12. Ceteris paribus, an excise tax will have the **largest** burden on the consumer (in terms of higher prices) if a tax is placed on which of the following products?
- A.\* food
  - B. meat
  - C. chicken
  - D. steak
13. Suppose there is an increase in binding rent ceilings on apartments in New York City from \$2,000 per month to \$2,700 per month. Which of the following would result in the greatest increase in the number of apartments rented?
- A.\* relatively elastic supply
  - B. relatively inelastic supply
  - C. relatively elastic demand
  - D. relatively inelastic demand
14. Suppose the government decides to enforce a minimum support price for milk at \$2.00/gallon when the market equilibrium price is \$1.70/gallon. Government officials pledge in the event of a surplus of milk they will purchase the surplus. Economic theory predicts that government purchases will be larger:
- A. the higher the elasticity of supply and the lower the elasticity of demand for milk.
  - B. the lower the elasticity of supply and the higher the elasticity of demand for milk.
  - C.\* the higher the elasticity of supply and the higher the elasticity of demand for milk.
  - D. the lower the elasticity of supply and the lower the elasticity of demand for milk.
15. Suppose government officials impose an additional excise tax on cigarettes. All other things equal, which of the following statements is **TRUE**?
- I. The annual tax revenue generated by this tax will tend to **decrease** in future years.
  - II. The excise tax will decrease the demand for cigarettes and decrease the supply of cigarettes.
- A.\* I only
  - B. II only
  - C. Both I and II are true.
  - D. Neither I nor II is true.

16. Suppose as part of a new health care reform plan, President Bush is considering the imposition of binding price ceilings on prescription drugs. Assuming that both the demand and supply of drugs are highly inelastic, this policy will likely cause
- A. A relatively large shortage in the market for prescription drugs.
  - B.\* A relatively small shortage in the market for prescription drugs.
  - C. A relatively large surplus in the market for prescription drugs.
  - D. A relatively small surplus in the market for prescription drugs.
17. Ceteris paribus, government revenues from an excise tax will
- A. be greater if demand is highly inelastic
  - B. be smaller if demand is highly elastic
  - C. be greater if supply is highly inelastic
  - \*D. all of the above are true
18. If marginal utility is falling then
- A. total utility must be falling.
  - B. marginal utility per dollar spent must be increasing.
  - C. the consumer cannot be maximizing satisfaction.
  - D.\* None of the above are true.
19. If total utility increases by smaller and smaller amounts as more units of a product are consumed, then marginal utility is
- A. decreasing and is a negative amount.
  - B.\* decreasing and is a positive amount.
  - C. zero.
  - D. increasing and is a negative amount.
  - E. increasing and is a positive amount.
20. In buying goods and services with equal prices, a utility maximizing consumer should
- A. spend the same amount on each good or service.
  - B. purchase equal units of each good or service.
  - C.\* buy enough of these goods or services so (at the margin) the marginal utilities are the same.
  - D. buy enough of these goods or services so (at the margin) the total utilities are the same.

**II. Short Answer (be brief, complete, concise). Use only the space allotted.**

1. (8 points) Using one market for teenagers and a different market for senior citizens, describe the situations that would *provide support* for the statement given below. Support your answer with graphs and clear/precise supporting statements. Use only the space provided. Note: Teenagers and “senior citizens” can be seen as substitutes, but not perfect substitutes.

Lowering a binding minimum wage paid to teenagers to \$4.00 per hour would significantly increase the number of jobs for teenagers, **but** have very little effect on the number of jobs for senior citizens who would still receive the binding minimum wage of \$5.15 per hour. Assume \$4.00 is also a binding minimum wage for teenagers.

2. Suppose the federal government imposes a \$1 per pack excise tax on cigarettes, where cigarettes are currently being sold at an equilibrium price and quantity of \$3 per pack and 25 million packs per day. Assume prior to the \$1 tax, there is no other tax.

A. (5 points) Graphically show the impact on the cigarette market for a case where the burden of the additional tax on consumers is \$.80 per pack and the new equilibrium quantity is 23 million packs per day. Very briefly explain your graph. **You do not need to discuss the details of the movement from one equilibrium to another, but your graph should show the process using “arrows”**

B. (5 points) Compute the following measures for the case above. Show your computation.

Calculate the Tax Revenue to the Government following the tax:

Using the mid-point formula, calculate the elasticity of demand for cigarettes:

3. (4 Points) Assume there are many sellers of “zigice” and the supply of “zigice” is perfectly inelastic on a hot summer day in Bloomington. Further assume the Bloomington mayor places a \$1 excise tax on zigice.

How would the tax impact the market equilibrium for zigice? Show graphically and briefly describe the rationale behind your graph.

( 6 Points) The impact of an increase in a binding minimum wage on the number of workers hired does not depend on the elasticity of supply of minimum wage workers. However, the unemployment level for these workers does depend on both elasticity of supply and demand.

Use an appropriate graph or graphs and brief explanation to support this statement.

4. (12 Points) **True or False** - Briefly explain the bases for your answer.

Ceteris paribus, the elasticity of supply of word processing services is low if the elasticity of supply of individuals with word processing skills is high.

Ceteris paribus, the elasticity of demand for milk is lower for low income families.

If supply were perfectly elastic for good A, a subsidy paid to buyers of good A would have no impact on the market equilibrium for good A.

If the elasticity of demand is equal to one for tires, a \$5 increase in the excise tax on tires will increase the price of tires by \$5.