

Economics 2010 Sec 300 Second Midterm Fall 2009 – Version A

There are 56 questions on Version A

The test bank questions and the questions we created are mixed together.

Name: _____ Date: _____

Some explanations added.

1. Basic consumer theory, as we learned in class, assumes that individual rank goods not bundles.
 - A) True
 - B) **False** Basic consumer theory assumes that individuals rank bundles, not goods. One ranks goods in the context of bundles. If I approach you on the street and offer you a candy bar or a carrot you will decide between them in the by comparing your current bundle with a carrot added to your current bundle with a candy bar added. You cannot rank individual goods without knowledge of the other stuff in the bundle.

2. Suppose the state of Oklahoma decides to produce only two goods—oil and football helmets. As oil production increases, the production of football helmets will:
 - A) **not sure.**
 - B) decrease at a decreasing rate.
 - C) decrease.
 - D) increase.

3. Along a given supply curve, an increase in the price of a good will:
 - A) decrease producer surplus and increase consumer surplus.
 - B) increase consumer surplus.
 - C) increase producer surplus.
 - D) decrease producer surplus.

4. Ceteris paribus, a decrease in the price of a good will **always** increase an individual's consumer's surplus.
 - A) True
 - B) **False** A decrease in a price will never decrease consumer's surplus, but it might not increase it. For example if the original price is so high you buy zero and then the price is lowered but you still buy zero, consumer's surplus does not increase (zero before and after the price decrease)

5. The _____ is the maximum amount of Good X a consumer would be willing to give up in order to obtain an additional unit of Good Y:
- A) marginal rate of exchange.
 - B) average rate of substitution.
 - C) **marginal rate of substitution.**
 - D) marginal rate of utility exchange.
6. Which of the following policies is **most** likely to reduce traffic congestion in a large metropolitan area?
- A) an increase in the price of subway and bus fare to and from the city
 - B) asking citizens to carpool
 - C) **a toll road that requires each car to pay a fee to enter the city center**
 - D) a limited number of free “early bird” parking passes given only to those who arrive prior to 6 A.M.
7. Empirically, an increase in the number of doctors (an increase in the supply of treatment) typically increases the amount of treatment but does not decrease the cost of treatment. What might explain this?
- A) Demand for medical treatment is without limit
 - B) Demand is perfectly inelastic with respect to price
 - C) **The presence of a doctor tends to increase the demand for treatments** As per our discussion in class of the evidence and how doctors increase the demand for treatment.
 - D) None of the above.
8. Which of the following goods is likely to have the most inelastic price elasticity.
- A) **Beer, in general** Particular products in a product category (like Heineken and Coors) have more substitutes than does the category in general.
 - B) All three are likely to have the same price elasticity of demand
 - C) Heineken
 - D) Coors
9. Economists make predictions about individual behavior based on the assumption that people exploit opportunities to make themselves better off. The fact that different individuals make different choices when confronted with the same situation implies that this assumption is often violated.
- A) True
 - B) **False** Two people, both optimizing, who face the same constraints, typically make different choices because they have different preferences.

10. Pooh spends all his income on honey and maple syrup. Because he views honey and maple syrup as perfect substitutes, he is willing to substitute honey for maple syrup at the constant rate of one teaspoon of honey to two teaspoons of maple syrup. If the relative price of honey in terms of maple syrup is 2.2, Pooh's optimal consumption bundle will consist entirely of maple syrup.
- A) **True**
 B) False

Use the following to answer question 11:

Table: Consumer Equilibrium

Units of Good X	Marginal Utility Good X
1	20
2	16
3	12
4	8
5	4
6	0

Units of Good Y	Marginal Utility Good Y
1	12
2	10
3	8
4	6
5	4
6	2

11. (Table: Consumer Equilibrium) Assume that the price of Good X is \$2 per unit, the price of Good Y is \$1 per unit, and you have \$10 of income to spend on both goods. To maximize utility, you would consume _____ units of X and _____ units of Y.
- A) 5; 0
 B) **3; 4**
 C) 2; 3
 D) 2; 6

Use the following to answer question 12:

Table: Denise's Consumption of Coffee and Gasoline

Assume Denise's spending on coffee and gasoline is \$200 each month and that each of the consumption bundles in the table are on her budget line.

Consumption Bundle	Quantity of Coffee in Consumption Bundle	Total Utility from Coffee Consumption	Quantity of Gasoline in Consumption Bundle	Total Utility from Gasoline in Consumption Bundle
A	200	140 utils	0	0 utils
B	150	120 utils	25	40 utils
C	100	90 utils	50	55 utils
D	50	50 utils	75	65 utils
E	0	0 utils	100	70 utils

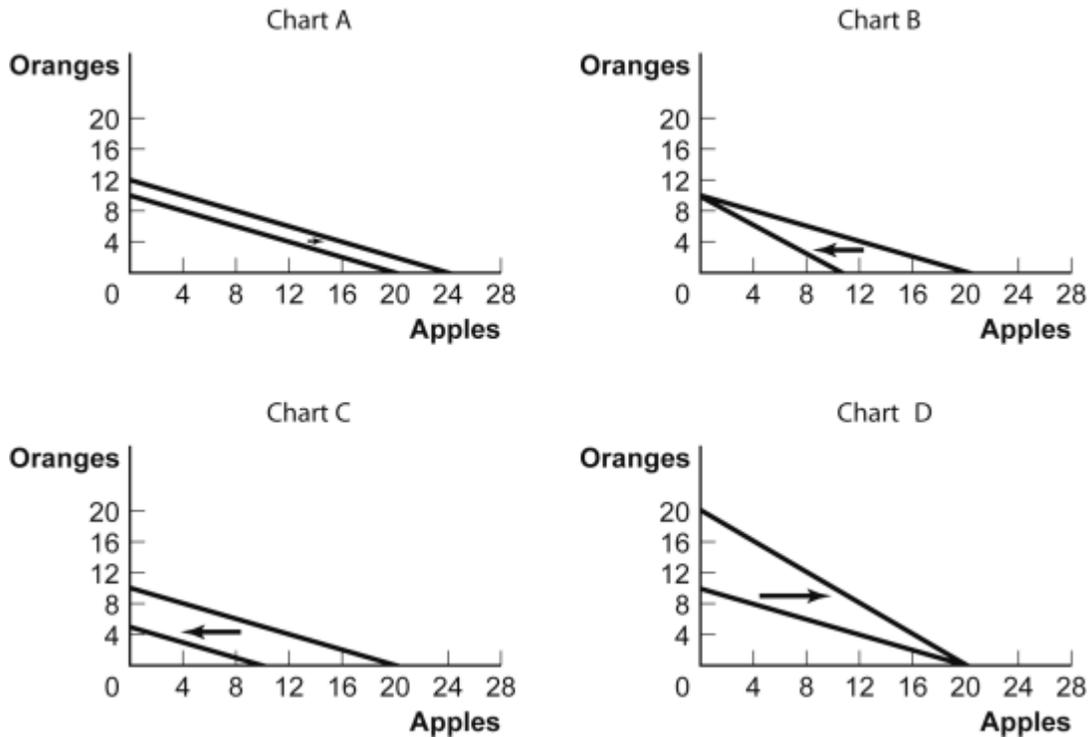
12. (Table: Denise's Consumption of Coffee and Gasoline) Denise will maximize her utility by consuming bundle:
- A) C.
 - B) D.
 - C) **B.**
 - D) A.
13. Consider Fred, the skier from the lecture. Which statement best describe why Fred's production of ski miles was not very responsive to the amount she was paid to ski each mile.
- A) She values her time highly and her marginal product of labor, while positive, is increasing.
 - B) She puts little value on her time her and her marginal product of labor, while positive, declines rapidly.
 - C) **She values her time highly and her marginal product of labor, while positive, declines rapidly.**
 - D) She puts little value on her time and her marginal product of labor, while positive, is increasing.

14. When markets fail:
- A) the market realizes the maximum possible gains from trade given the available resources.
 - B) no goods and services are produced.
 - C) **government intervention may help.** Market failure, by definition, means the equilibrium market allocation of resources is inefficient (excluding A and D). Even if the allocation is inefficient, something will be produced. Note that government intervention will not necessarily make things more efficient. E.g. most would agree that we do not have an efficient allocation of medical treatments in the U.S. but not all that think the market is failing believe that government intervention will make things more efficient (many believe that gov. intervention will make things more inefficient).
 - D) there may still be an efficient allocation of resources.
15. All I care about is publishing research papers and going skiing: I like doing both. CU pays me \$100 a week (my income). Skiing costs \$15 a trip, and journals charge \$10 to publish my papers - they always accept them. It takes me 8 hours to do a ski trip and 4 hours to write a paper. I have 40 hours a week to allocate to writing and skiing, and can spend my whole \$100 on these two activities. Which of the following statements is both correct and most informative?
- A) **I might ski 3 times**
 - B) I might ski 3 times and write 6 papers.
 - C) I might ski 6 times
 - D) I might ski 3 times and write 11 papers.
16. If the price of a good is increased by 20% and the quantity demanded changes by 15%, then the price elasticity of demand is equal to:
- A) 1.
 - B) approximately 1.33.
 - C) **0.75.**
 - D) approximately 0.33.
17. The relationship between an individual's consumption bundle and his or her utility is called a:
- A) utility function.
 - B) demand function.
 - C) production function.
 - D) consumption function.

18. George has a weekly income (I) of \$50 which he uses to purchase donuts (D) and coffee (C). The price of a donut is \$1 and the price of coffee is \$2.50. Suppose George experiences a decrease in his income to \$25 while the prices of donuts and coffee each fall by one-half their initial prices. One would expect that George's budget line would:
- A) not change.
 - B) shift to the right.
 - C) shift to the left.
 - D) rotate around one of the axes, but one cannot tell which one.
19. Countries A and B have the same levels of pollution, but country B is much richer in terms of goods. Which statement is more likely to be correct?
- A) Willingness-to-pay for pollution reduction is higher in country A
 - B) **The marginal-rate-of-substitution of pollution reduction for goods in country B is greater than the marginal-rate-of-substitution of pollution reduction for goods in country A** WTA pollution is higher in B, not lower. WTP for pollution reduction is higher in B: said differently, MRS of pollution reduction for goods is higher in B.
 - C) Willingness-to-accept the pollution is lower in country B
 - D) The marginal-rate-of-substitution of pollution reduction for goods in country A is greater than the marginal-rate-of-substitution of pollution reduction for goods in country B
20. Consumers who maximize utility are said to be:
- A) comfortable.
 - B) inferior.
 - C) **rational.**
 - D) demand constrained.

Use the following to answer question 21:

Figure: Budget Lines for Oranges and Apples



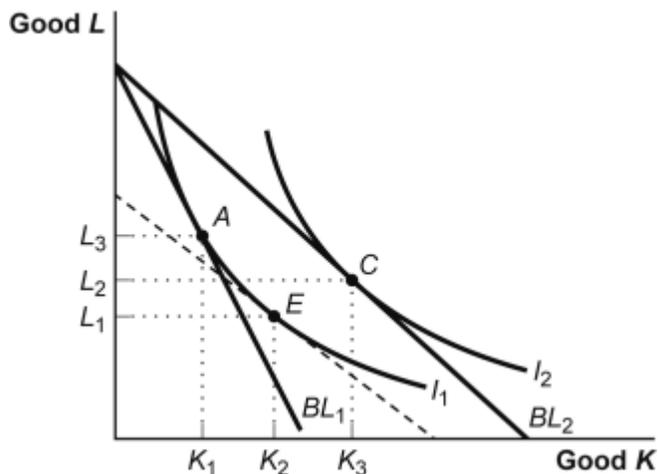
21. (Figure: Budget Lines for Oranges and Apples) For some time, Sylvester has had \$5 per month to spend on oranges and apples. The price of an orange is \$0.50 and the price of an apple is \$0.25. Which of the charts shows what will happen to his budget line if the price of an orange falls to \$0.25?
- A) Chart B
 B) Chart C
 C) **Chart D**
 D) Chart A
22. A choice made _____ is a choice whether to do a little more or a little less of something.
- A) **at the margin**
 B) *ceteris paribus*
 C) in the beginning
 D) at the front end

23. The price elasticity of demand for skiing lessons in New Hampshire is over 1.00. This means that the demand is _____ in New Hampshire.
- A) price inelastic
 - B) price unit-elastic.
 - C) perfectly price elastic
 - D) **price elastic**
24. Mildred is a simple girl: her preferences can be represented by the utility function $U = C \times D$ where C is the amount of Coco Puffs breakfast cereal she consumes and D is the number of Diet Cokes she drinks, and she doesn't like Diet Cokes. This information about Mildred makes sense
- A) True
 - B) **False** The utility function says that both commodities are goods, but Diet Cokes are asserted to be a bad.
25. A men's tie store sold an average of 30 ties per day when the price was \$5 per tie. The same store sold 60 of the same ties per day when the price was \$3 per tie. In this case, the absolute value of the price elasticity of demand, using the midpoint method, is:
- A) equal to 1.
 - B) greater than 3.
 - C) greater than zero but less than 1.
 - D) **greater than 1 but less than 3.**
26. If the price of a good is increased by 15% and the quantity demanded changes by 20%, then the absolute value of the price elasticity of demand is equal to:
- A) **approximately 1.33.**
 - B) 0.75.
 - C) 1.
 - D) approximately 0.33
27. An individual's long-run price elasticity of demand for gasoline is likely to be greater, in absolute terms, than her short-run price elasticity of demand for gasoline because (choose the best answer).
- A) the government will require that cars in the future are more fuel efficient.
 - B) **more time gives her more time to adjust to the price change** It takes time to adjust to a price change. Economists do not assume that a price increase changes ones preferences such that you like the good less after its price has increased.
 - C) her indifference curves become flatter over time
 - D) her preferences will change over time.

28. If the price of Good X equals the price of Good Y, then the utility-maximizing consumer will always buy equal amounts of X and Y.
- A) True
 B) **False**
29. Lot of people exercise to lose weight, or not gain weight. These people will be more successful in achieving their weight goals if their
- A) weight elasticity of exercise is inelastic
 B) weight elasticity of exercise is elastic.
 C) **exercise elasticity of weight is elastic** This is the percentage change in weight divided by the percentage change in exercise. One hopes this is a negative number. The larger its absolute value, the more exercise will lead to weight reduction. You need to understand the basic concept of elasticity. I will ask another question like this on the final.
 D) exercise elasticity of weight is inelastic

Use the following to answer question 30:

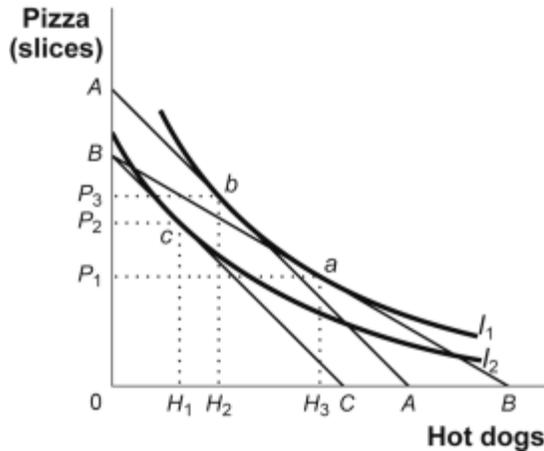
Figure: Income and Substitution Effects



30. (Figure: Income and Substitution Effects) The consumer is originally consuming his or her optimal consumption bundle at point A in the figure when the price of Good K falls. As the consumer moves to his or her new optimal consumption bundle, we can observe that Good K:
- A) and Good L are complements.
 B) is not an ordinary good.
 C) **is a normal good.** Look at the income effect (E to C)
 D) is an inferior good.

Use the following to answer question 31:

Figure: Indifference Curves and Consumption Bundles



31. (Figure: Indifference Curves and Consumption Bundles) In the figure, the lines AA and BC are parallel. The optimal consumption point could shift from *b* to *c* as a result of all of the following *except*:
- A) a decrease in income with prices constant.
 - B) an equal percentage increase in the prices of both hot dogs and pizza, while income is unchanged or as a result of a decrease in income with prices constant.
 - C) an equal percentage increase in the prices of both hot dogs and pizza, while income is unchanged.
 - D) **a change in tastes.** The above graph represent a given set of preferences.
32. Which of the following is *not* a factor in determining the price elasticity of demand?
- A) the proportion of the budget spent on the item
 - B) **the slope of the supply curve**
 - C) the time period involved
 - D) the number of available substitutes
33. Which of the following is *not* one of the four principles of individual choice?
- A) **Unpaid volunteer work is irrational since economic rationality dictates that individuals should only engage in work they are paid for.** Volunteer work, if you enjoy it enough, is rational
 - B) The real cost of something is its opportunity cost.
 - C) People usually take advantage of opportunities to make themselves better off.
 - D) Resources are scarce.

34. A major determinant of the price elasticity of demand is the availability of substitutes.
- A) **True**
 - B) False
35. When individuals act in their own self-interest:
- A) **society may be worse off, in some cases.** Correct. For example, there might be unregulated external costs or benefits.
 - B) all opportunities have been taken to make some people better off without making other people worse off.
 - C) equity is always achieved. NOPE
 - D) efficiency is always achieved. NOPE
36. T'Pol, a coldly rational Vulcan, buys a warm soda and one slice of cold pizza. The marginal utility from a soda is 40, and the price of the soda is \$1. The marginal utility from a slice of pizza is 80. Since T'Pol always chooses the utility-maximizing choice, we know the price of a slice of pizza must be:
- A) \$1.
 - B) \$20.
 - C) \$0.50.
 - D) **\$2.** $40/1=80/2$
37. You are addicted to cocaine whereas I am a more a *take it or leave it* kind of guy. My price elasticity of demand for cocaine is likely to be higher, in absolute terms, than yours.
- A) **True** I can substitute away from it more easily than you.
 - B) False
38. Assuming goods are normal goods and pollution reduction is superior good, is the following statement correct? "Everything else constant, efficiency dictates that pollution-intensive industries be located in poor, rather than rich, communities.
- A) **True** but not necc. fair
 - B) False
39. If a 20% price increase generates a 20% decrease in quantity demanded, then this is a(n) _____ response.
- A) **unit-elastic**
 - B) perfectly elastic
 - C) Elastic
 - D) Inelastic

40. A woman in class, Mabel?, indicated that she would prefer a bundle with more dog shit in it than a bundle with less dog shit in it.
- A) **True** One, and only one woman in class, her name is immaterial, was asked if she would prefer a bundle with more dog shit. She said yes if the paper had sufficiently more chocolate, milk chocolate. This is an important point. We accept bad shit if it is more than compensated for with additional good shit.
 - B) False
41. When individuals take external costs and benefits into account:
- A) the market will not reach an efficient solution.
 - B) the government needs to intervene in the market.
 - C) there are no external costs.
 - D) **the market will not fail because of these external effects** Some external costs remain but the producer of these external effects is taking their external effects into account. (The externality has been internalized.) While the market still might be failing, but it is not because of these effects.
42. Production is efficient if it is:
- A) producing at a combination of goods that lies between the production possibilities curve and the origin.
 - B) **not possible to produce more of one good without producing less of another good.**
 - C) possible to produce more of all goods and services.
 - D) possible to produce more of one good without producing less of another.
43. Assuming everything is a good, greater levels of utility are achieved:
- A) by moving up to the left on the same indifference curve.
 - B) **on indifference curves that are further from the origin.**
 - C) by moving down to the right on the same indifference curve.
 - D) on indifference curves that are closer to the origin.

44. The track meet is ready to start. Holly has already had 5 cans of Red Bull, her choice, but is sure a 6th can is a bad idea. That said, her wimpy coach, who has no control over her, wants Holly to drink a 6th can. Given how rights are apportioned, what is the appropriate measure of how much she is damaged, in dollar terms, if she drinks the 6th can?
- A) How much she would pay to not have to drink the 6th can
 - B) The amount the 6th can will decrease her utility
 - C) Two of the other three answers are equal, so both are correct
 - D) **How much she would have to be paid to voluntarily drink the 6th can.** Holly has the “right” to not drink it, so whether she drinks it is her call. If the coach had the “right” to force her to drink it, the answer would be A.
45. Economists assume that people have utility functions?
- A) True
 - B) **False** Economists believe that people can rank bundles. They do not believe they have some mathematical function in their heads to attaches number to bundles. Utility functions are just something economists invented to provide a way to visualize preferences in a mathematical way.
46. A market equilibrium will always be efficient even if it is not equitable.
- A) True
 - B) **False** If is efficient, unless it is not. When the market equilibrium is not efficient we call it market failure.
47. I care about only two things: scotch and Swiss chocolate bars. Consider my utility function and indifference curves. My utility function looks like a mountain such that my indifference curves are circles; consumption of both commodities is positive at the mountain's peak. Which of the following statements best represents my preferences?
- A) At low levels of consumption scotch and chocolate are both bad but at high levels they are both goods
 - B) **At low levels of consumption scotch and chocolate are both goods but at high levels of consumption they are both bads** As explained in detail in class, after the exam.
 - C) Scotch is a bad and chocolate switches from a bad to a good at high levels of consumption
 - D) None of the above statements are correct.

48. If a consumer purchases a combination of commodities A and B such that $MU_A/P_A = 50$ and $MU_B/P_B = 30$, to maximize utility, the consumer should buy:
- A) less of both A and B .
 - B) more of both A and B .
 - C) less of A and more of B .
 - D) **more of A and less of B .**
49. If Vanessa needed to find her optimal consumption bundle, she would need to be able to:
- A) choose her bundles in an irrational manner.
 - B) calculate her budget for each consumption bundle.
 - C) calculate the numerical value of the utility she receives from each specific consumption bundle.
 - D) **rank order consumption bundles based on the level of utility she receives from each consumption bundle.** Her optimal bundle is simply her highest ranked bundle. The ranking has nothing to do with her budget.
50. A consumer maximizes utility, given her income, when she chooses a consumption bundle where:
- A) the marginal utility of each good is highest.
 - B) the marginal utility of each good is equal.
 - C) **the highest indifference curve is tangent to the budget line.**
 - D) the marginal rate of substitution is highest.
51. An individual consumes Goods X and Y . As she consumes less X , she must be compensated with additional units of Y and her marginal rate of substitution of X for Y decreases as she consumes more Y . This means that Goods X and Y are:
- A) complements.
 - B) **normal goods.**
 - C) substitutes.
 - D) unique goods.
52. Chuck spends all his income on two goods: tacos and milkshakes. His income is \$100, the price of tacos is \$10, and the price of milkshakes is \$2. Put tacos on the horizontal axis and milkshakes on the vertical axis. The slope of Chuck's budget line is equal to:
- A) 5.
 - B) $-1/5$.
 - C) **-5.**
 - D) $1/5$.

53. The price elasticity of demand for crude oil is inelastic, so, to raise total revenues, OPEC should lower its price for crude oil
- A) True
 - B) **False**
54. Because the United States is a rich nation, free health care can be provided for all citizens without considering the issue of scarcity.
- A) True
 - B) **False** Even though we are a rich country, resources are scarce and there is an opportunity cost to providing more health care.
55. If funeral homes discover that the price elasticity of demand for caskets equals 0.55, to increase revenue the funeral homes should increase prices.
- A) **True**
 - B) False
56. Wanda prefers running off to Madrid with Juan to finishing Econ 2010, but is indifferent between finishing Econ. 2010 and running off to London with Juan. Wanda's preferences seem rational in the economic sense of the word.
- A) **True** There is nothing inconsistent about Wanda's preferences.
 - B) False

Answer Key

1. B
2. A
3. C
4. B
5. C
6. C
7. C
8. A
9. B
10. A
11. B
12. C
13. C
14. C
15. A
16. C
17. A
18. A
19. B
20. C
21. C
22. A
23. D
24. B
25. D
26. A
27. B
28. B
29. C
30. C
31. D
32. B
33. A
34. A
35. A
36. D
37. A
38. A
39. A
40. A
41. D
42. B
43. B
44. D

- 45. B
- 46. B
- 47. B
- 48. D
- 49. D
- 50. C
- 51. B
- 52. C
- 53. B
- 54. B
- 55. A
- 56. A