

Read these instructions carefully

This exam has 47 questions. Make sure you have 47 questions, and answer all 47 questions.

The exam has four questions in it about the structure of the course. For each of these questions you answer, you will be marked correct, no matter how you answer. This gives you 4 correct answers out of 47 for free.

When answering a true/false question ignore the words “true” and “false” on the bubble sheets. That is, sometimes “true” will be bubble A and sometimes “true” will be bubble B.

Make sure we have given you the correct colored bubble sheet for Version B.

Note that many of the questions on this exam are modifications of questions you have seen on the Aplia quizzes or on the old exams. So, if a question looks familiar it might not be identical to a previous question. Read the questions carefully.

1. Society consists of only George and Mabel. George sneaks up behind Mabel and kisses her, making himself better off and Mabel worse off. If he had to, George would have paid \$5 for the opportunity to sneak up and kiss Mabel. Mabel hates George but would have let him kiss her for \$10. The kiss is
 - A) Efficiency increasing
 - B) Efficiency decreasing
 - C) Not enough information to tell.

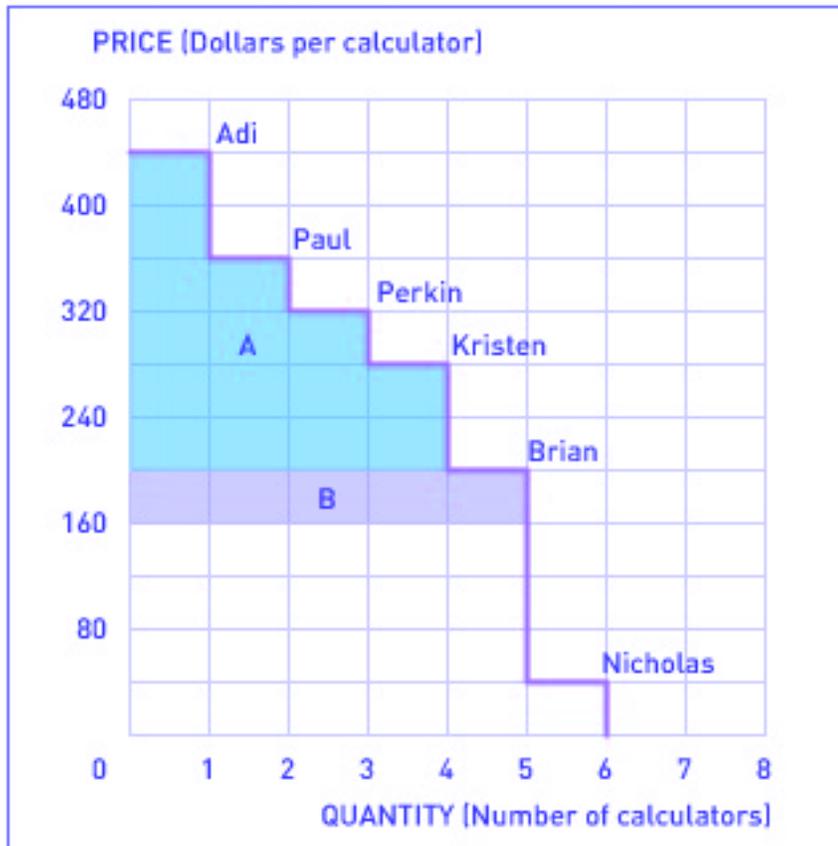
2. For me, another ice-cream cone is always a good thing. They only cost a nickel so I consume a lot of them. Consider the amount of money that I would have to be paid to voluntarily forego the consumption of five-cent ice-cream cones. From my perspective this amount is a
 - A) WTP
 - B) WTA
 - C) Neither

3. Alison has a linear production possibility frontier in the production of bracelets and necklaces. In one hour, she can produce 5 bracelets or 10 necklaces. What is the opportunity cost for her to make one necklace?
 - A) 5 bracelets
 - B) 1/2 a bracelet
 - C) 2 necklaces
 - D) 10 necklaces

4. Suppose a car Workers' Union accepts a pay cut. This causes a _____ the supply curve for cars because the pay cut makes cars _____.
- A) rightward shift of; more expensive to build
 - B) leftward shift of; more expensive to build
 - C) rightward shift of; less expensive to build
 - D) leftward shift of; less expensive to build
5. Consider the book chapters, the Aplia quizzes, Edward's lectures, and the old exams. Which one has been the least effective in terms of your learning the material. (If you answer the question it will be marked correct.)
- A) The book chapters
 - B) Edward's lectures
 - C) The old exams.
 - D) The Aplia quizzes
6. Why do some people shave their armpits? (Choose the answer answer that is both correct and most informative.)
- A) Some people prefer to have shaved armpits
 - B) Social norms constrain most women to shave their armpits and constrain most men to not shave their armpits
 - C) Some people feel constrained by social norms to shave their armpits. Some people simply prefer to shave their armpits.
7. The production possibility frontier is useful because it illustrates how much of one good an economy must give up to get more of another good when the economy has efficiency in production. Does the frontier also tell us how much of one good an economy must give up to get more of another good starting from a position of inefficient production.
- A) No
 - B) Not enough information to determine the answer.
 - C) Yes
8. (Owen) You live at home. You choose to go to the University of Colorado, and do not have a car. C.U. tuition is \$40K, but mom pays it. If you had not gone to C.U. you would have worked as an electrician for 50K a year (you have already graduated from electrician school), lived at home and purchased a car for \$20K. Your opportunity cost of going to C.U. for a year is
- A) \$30K in spending money, the experience of being an electrician, and having a car
 - B) \$70K in spending money (The 50K salary, minus 20 K for the car, plus the 40K tuition), the experience of being an electrician, and having a car.
 - C) \$30K in spending money

9. Because a type of fish is on the verge of extinction, the government imposes rules that prohibit fishing in the publicly owned spawning grounds. At first, owners of fishing boats complain about the restriction on where they can fish, but soon they notice that the number of adult fish swimming outside the protected area is much higher than it was before. With the restriction, each fishing boat ends up catching more fish than it did before the restriction was in place. Which of the following principles of economic interaction best describes this scenario?
- A) When markets do not achieve efficiency, government intervention can improve overall welfare.
 - B) There is a tradeoff between equity and efficiency.
 - C) Markets move toward equilibrium.
 - D) Markets usually lead to efficiency.
10. Consider in a typical summer the aggregate demand curve and supply curve for ice-cream cones. (Dollars on the vertical axis and cones on the horizontal axis.) But this is not a typical summer: it is cold, and Obama has increased the minimum wage, causing the wage rate in all ice-cream cone retailers to increase. Compared to previous warm summers, in this summer, the number of cones purchased and consumed will be _____. The price of cones _____
- A) fewer; will be higher
 - B) fewer; will be lower
 - C) fewer; could increase, decrease or stay the same.
 - D) higher; could increase, decrease or stay the same.

11. The following graph shows the demand curve for a group of students in the market for a graphing calculator. Each student wants only one calculator. Assume that if an individual has a willingness to pay just equal to the market price, he or she will make the purchase.



Area A represents total consumer surplus when the market price is \$200, while Area B represents which of the following? (A is the area under the step line above \$200, and B is the area under the step line between \$160 and \$200)

- A) The change in total consumer surplus when the market price changes from \$200 to \$160.
 - B) Total consumer surplus when the market price is \$160.
 - C) The change in total consumer surplus when the market price changes from \$120 to \$160.
 - D) Total consumer surplus when the market price is \$200.
12. Suppose that the price of a subway ride rises from \$2.00 to \$2.50. Because driving a car and taking the subway are _____, an increase in the price of a subway ride shifts the demand for cars to the _____.
- A) complimentary; left
 - B) substitutes; right
 - C) normal goods; right
 - D) substitutes; left

13. From my personal perspective. Edward's examples in class (not the examples from the book): (Choose the answer that applies to you. If you answer your answer will be marked correct.)
- A) Help me to understand the material but sometimes I am personally offended by them.
 - B) Sometimes offend me and typically they do not help me understand the material.
 - C) Are fine with me, and less boring than the book examples about butter and whatever, and they help me to better understand the material.
 - D) Are fine with me, and less boring than the book examples about butter and whatever, but sometimes I cannot figure out how they relate to the economic concept under discussion.
14. You and I are both members of society. If action A makes you better off and me worse off, before action A is undertaken the allocation is (asked on the Aplia quiz on consumer's surplus)
- A) Efficient
 - B) Inefficient
 - C) There is not enough information to tell whether the allocation is efficient before (A) is undertaken.
15. If all of the opportunities to make someone better off (without making someone else worse off) have been exploited, an economy is
- A) efficient.
 - B) equitable.
 - C) marginally optimal.
 - D) inefficient.
16. When an individual is doing the best she can given her constraints
- A) she is in equilibrium
 - B) she will still want to change her behavior
 - C) if one of her constraints change, what she previously chose might no longer be an equilibrium
 - D) at least two of the other answers are correct

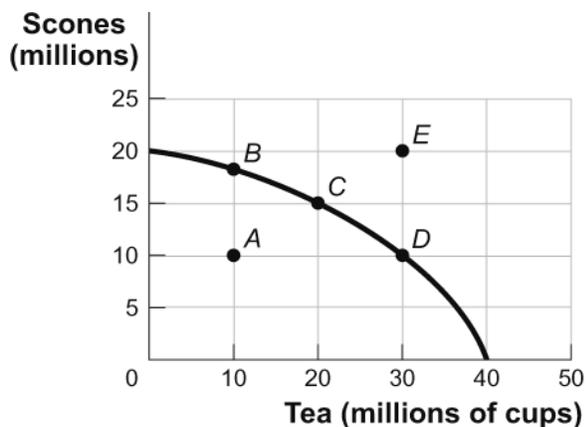
17. Jorge, the famous Argentinian economist, builds a model/theory to only predict the probability that an individual has a significant other who is a male. He makes assumptions that imply this probability is a function of only hair color and body mass index. The exogenous variable(s) in his model are ____ and the endogenous variable(s) in his model are ____.
- A) body mass index and hair color | the probability of having a significant other who is male
 - B) the probability of having a significant other who is male | body mass index and hair color
 - C) the probability of having a significant other who is male | body mass index, hair color, and gender
 - D) body mass index, hair color, and gender | the probability of having a significant other who is male
18. The model/theory generated the prediction that *George knows calculus but is not God*. Note that God's name is "God." Which set of the following assumptions mostly likely generated this prediction?
- A) Assume God does not go by the name of George. Assume God knows calculus
 - B) Assume God is not a man. Assume everyone whose name starts with "G" knows calculus
 - C) Assume George wears green pants. Assume God never wears green pants. Assume that only people who wear green pants have the ability to learn calculus.
 - D) Assume God never wears green pants. Assume George always wears green pants. Assume everyone whose name starts with "G" knows calculus
19. This exam was a fairly even mix of (1) the standard Aplia quiz questions, (2) the "Edward-type questions that were added to the Aplia quizzes, and other questions created by Edward and the T.A.s. (If you answer this question it will be marked correct.)
- A) No
 - B) Not sure.
 - C) Yes

20. (Libby) Consider the following assumptions: (1) The only kind of snozzleberries I am willing to eat are the ripe ones. (2) The stores have ripe snozzleberries every day of the the year. (3) There are ripe red snozzleberries in the stores only at Christmas. (4) I never shop in December. (5) If I eat snozzleberries, I have to buy them at a store. Which of the following statements is both correct and most informative.
- A) The assumptions collectively predict that I will buy and eat some snozzleberries
 - B) The assumptions collectively predict that I will buy and eat some snozzleberries, and they predicts I will not eat any red snozzleberries.
 - C) The assumptions collectively do not predict whether I will buy snozzleberries
 - D) The assumptions do not collectively predict whether I will buy snozzleberries but do predict that I will not eat any red snozzleberries.
21. If a market is currently not in equilibrium:
- A) it must be because the government has intervened in the market, resulting in the market's failure to reach equilibrium.
 - B) there will be opportunities available to people to make themselves better off.
 - C) no individual will be better off doing something different.
 - D) the disequilibrium will always continue unless there is government intervention.
22. Which of these two statements is incorrect?
- A) The opportunity cost of activity A is always expressed in units of activity A
 - B) The opportunity cost of activity A in terms of activity B is the inverse (reciprocal) of the opportunity cost of activity B in terms of activity A.
- A) Only A is incorrect
 - B) Only B is incorrect
 - C) Both A and B are incorrect
 - D) Neither A nor B are incorrect
23. When individuals act in their own self-interest:
- A) equity is always achieved.
 - B) all opportunities have been taken to make some people better off without making other people worse off.
 - C) society may be worse off in some cases.
 - D) efficiency is always achieved.
24. A two-dimensional scatter diagram shows
- A) individual points of data showing both variable values.
 - B) the intercept of a curve.
 - C) the slope of a line.
 - D) how far apart dependent variables are.

25. (from Joelle) Winnie and Eeyore are best friends. They have 3 hours each to collect as much honey as they can, and to find as many missing tails as they can. They decided that they should work together. Winnie can collect 3 jars of honey per hour and can find 8 tails per hour. Eeyore can collect 1.5 jars of honey per hour and find 4 tails per hour. Winnie know that he is the best so he decided he should devote all of his time to collecting honey and Eeyore should spend all of his time collecting tails. Eeyore is smarter than Winnie and thinks that since Winnie can find the most tails, Winnie should devote all his time to finding tails while he, himself, collects honey. Who is right and actually has a comparative advantage in collecting honey?
- A) Winnie
 B) Eeyore
 C) Neither of them

Use the following to answer question 26:

Figure: Production Possibility Frontier Curve for Tealand



26. (Figure: Production Possibility Frontier for Tealand) Look at the figure Production Possibility Frontier for Tealand. In the figure, if Tealand is producing 10 million scones and 10 million cups of tea (point A), we know that the economy:
- A) has found new resources.
 B) is using its resources efficiently.
 C) is fully employing its resources.
 D) is using its resources inefficiently.

27. You come home to find that your dog, Killer, is missing. Where he once sat is a ransom note: "\$500.00 or Killer dies." You have \$500.00 in savings earmarked for a new bike. You have two options: pay or not, and you do not pay. What is the opportunity cost of your decision? (Which alternative is both correct and most informative?)
- A) the bike
 - B) a dead Killer and the sadness that entails.
 - C) a live Killer
 - D) a live Killer and being bike-less.
28. Consider the famous line from an advertisement for Camel cigarettes, "I would walk a mile for a Camel." Choose the alternative that is both correct and most informative.
- A) The quote tells us nothing about the guy's willingness-to-pay for a cigarette.
 - B) The guy's willingness-to-pay for a cigarette is at least the time and effort of walking a mile.
 - C) The guy's willingness-to-accept a cigarette is more than a mile's walk.
 - D) The guy's willingness-to-pay for a cigarette is the time and effort of walking a mile.
29. Suppose that both Italy and the United States produce automobiles and washing machines. The table below shows the number of workers each country needs to produce a single unit of one of the goods in a day.

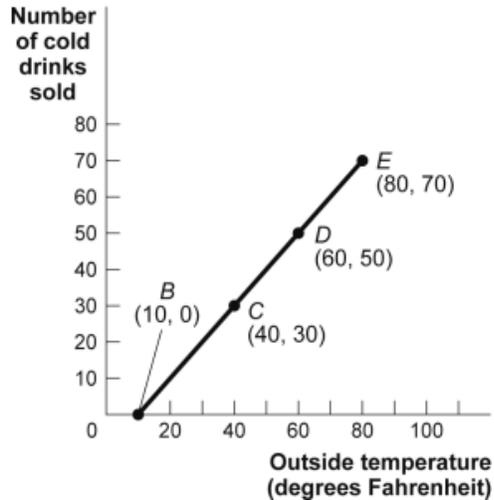
	Automobile	Washing machine
Italy	8 workers	3 workers
United States	6 workers	2 workers

- What pattern of specialization results in the greatest gains from trade between the two countries?
- A) The United States should specialize in automobiles and Italy should specialize in washing machines.
 - B) The United States should specialize in both washing machines and automobiles.
 - C) The United States should specialize in washing machines and Italy should specialize in automobiles.
 - D) Italy should specialize in both washing machines and automobiles.
30. Consider the book chapters, the Aplia quizzes, Edward's lectures, and the old exams. Which one has been the most effective in terms of your learning the material. (If you answer the question it will be marked correct.)
- A) The book chapters
 - B) The Aplia quizzes
 - C) Edward's lectures
 - D) The old exams.

31. On game days, homeowners near Middletown University's stadium used to rent parking spaces in their driveways to fans at a going rate of \$11. Assume a new town ordinance now sets a maximum parking fee of \$7. Some fans who used to carpool to the game now drive alone. This effect of the price ceiling does not correspond to which of the following?
- A) A shift in the demand curve
 - B) A lower price for parking spaces
 - C) A movement along the demand curve
 - D) An increase in quantity of parking spaces demanded
32. This is a modification of an Aplia quiz question. It was, I believe, flawed, so I have modified it. You work as an assistant coach on the university basketball team, earn \$12 per hour and enjoy your job. One day, you decide to skip the hour-long practice and go to the local carnival instead, which has an admission fee of \$7. What is the opportunity cost of skipping practice and going to the carnival? That is, what would you have experienced if you had not gone to the carnival?
- A) \$19 (the lost salary and having \$7 more in your pocket)
 - B) \$19 (the lost salary and having \$7 more in your pocket) and being at the practice.
 - C) \$12, the lost salary
33. Consider the demand and supply curves for low-skilled workers with the wage rate on the vertical axis. Now assume, as in most developed countries (including the U.S.) that the government has imposed a binding "minimum wage." Choose the statement about the effect of the minimum wage that is both correct and most informative.
- A) From an efficiency perspective, too few of the low-skilled will work, and the firms will be hiring all of the low-skilled workers they want at the minimum wage.
 - B) From an efficiency perspective, too few of the low skilled will work.
 - C) All of the low skilled will be better off, but an inefficient amount of the low-skilled will work.
 - D) All of the low skilled will be better off.
34. Suppose we invent and produce 10 million robots, and then forget how to produce robots. Each of those robots has an absolute advantage over us (humans) in the production of everything.
 Like us, the robots do not know how to produce robots.
 The robots operate maintenance and energy free.
 The 10 million robots can produce, without any help from us, current output levels.
 The robots give humans all their output.
- In this world, all, or most, of us humans will surely end up unemployed?
- A) True
 - B) False

Use the following to answer question 35:

Figure: Cold Drinks Sold and Temperature



35. (Figure: Cold Drinks Sold and Temperature) Look at the figure Cold Drinks Sold and Temperature. If we move from point *C* to point *E* in the figure, the outside temperature has _____ and the number of cold drinks sold has _____.
- A) decreased by 30 degrees; decreased by 30 drinks
 - B) increased by 30 degrees; increased by 30 drinks
 - C) increased by 40 degrees; increased by 40 drinks
 - D) increased by 20 degrees; increased by 20 drinks
36. Some baseball fans leave the game in the seventh or eighth inning to avoid the post-game traffic. The fans are:
- A) underestimating the value of staying for the rest of the game.
 - B) thinking only about the benefits of avoiding traffic.
 - C) making marginal decisions by comparing the cost of leaving early to the benefit of leaving early.
 - D) not considering they have already paid the cost of their tickets.

37. Dr. Colgate is a dentist who employs an assistant, Ms. Crest. If Dr. Colgate worked all day at the front desk, he could answer 40 phone calls. If he worked all day with patients, he could clean the teeth of 30 patients. If Ms. Crest worked all day at the front desk, she could answer 60 phone calls. If she worked all day with patients, she could clean the teeth of 80 patients. Which of the following is true?
- A) Dr. Colgate has an absolute advantage in answering phones.
 - B) Dr. Colgate has an absolute advantage in cleaning patients' teeth.
 - C) Dr. Colgate has a comparative advantage in answering phones.
 - D) Ms. Crest has a comparative advantage in answering phones.
38. Suppose Alice consumes only wine and cheese. Alice's income increases, the price of wine decreases, and the price of cheese decreases. Consider Alice's budget line with wine on the horizontal axis and cheese on the vertical axis. What will happen to the slope of Alice's budget line?
- A) It becomes flatter.
 - B) It becomes steeper.
 - C) There is not enough information to tell whether it is steeper or flatter
 - D) It necessarily remains the same.
39. Soon after they graduate from high school many college-bound graduates break up with their high-school sweethearts. Which of the following is the best text-book economic explanation?
- A) "My high school sweetheart wanted to get married and I wasn't ready."
 - B) As one ages and matures one's preferences are continuously changing.
 - C) Many high school graduates perceive that their dating choice set will be much greater in college than it was in high school.
40. Markets are always the best way to organize economic activity. Any policies that interfere with markets reduce society's welfare.
- A) True
 - B) False

41. I am a firm that needs to dump my toxic waste in a stream, only one stream. The toxic waste will kill the fish in that stream. I know that after I do it, I will be sued by the Federal Government and forced to pay damages in the sum of total lost consumer's surplus to everyone who fished at the site before I dumped. Ignoring the varying cost of transporting the toxic waste to different streams, which of the following stream options would be my best choice if my intent is to **maximize** the damages I pay?
- A) a pristine stream with lots of fish but few good substitutes.
 - B) a polluted stream with few fish located near a good number of pristine trout streams with lots of fish
 - C) a pristine stream with lots of fish and a lot of good substitutes because many anglers will get almost as much utility by fishing at one of those close substitutes.
 - D) a polluted stream with few fish, located near a good number equally polluted stream with few fish
42. Consider the statement, "If you are a man, you will cry." Considering our discussion of models and theories which statement is both correct and most informative?
- A) The statement is an assumption in a theory.
 - B) It could be a prediction or it could be an assumption.
 - C) The statement is a prediction of a theory
43. The market price for donuts is \$7. The government sets a price floor of \$10. This will cause the
producer surplus to _____, consumer surplus to _____, and total surplus to _____.
- A) indeterminate, fall, fall
 - B) rise, fall, fall
 - C) rise, fall, rise
 - D) fall, fall, fall
44. In economic models, consumption is an endogenous variable?
- A) It might or might not be an endogenous variable
 - B) It is always an exogenous variable.
 - C) True
 - D) False

45. Consider the following constraint: The government has passed a law that forbids you from dating anyone that is **less** than **twice** your age **minus** seven. This law applies to everyone. Five people exist: Wilbur (34 years), Lois (65), Jane (40), Bill (84) and Denise (17). Given the rule, who can Wilbur date? (Explaining Wilbur could date Lois or Bill but neither Bill nor Lois could date Wilbur.)
- A) Bill or Lois
 - B) Bill or Denise
 - C) Only Lois
 - D) No one
46. I am thinking about hiring someone to go through my thousands of photos and delete at least half of them. I need to clear up space on my hard drive. Besides, there are just too many of them. Given that the goal is to delete half of the photos (Choose the alternative that is both correct and most informative.) Note this question was motivated by a reading from the New York Times.
- A) It makes no sense if I have the comparative advantage in choosing the photos to delete.
 - B) A real economist would never hire someone who does not know him and his family to do this.
 - C) It only makes sense if the person I hire to do it has an absolute advantage over me in deleting the photos.
47. You just bought a bag of M&Ms for \$1 and are now walking down the street holding the unopened bag. A stranger walks up to you and says could I please have your bag of M&Ms. You give him the bag.
- A) You cannot be behaving rationally.
 - B) Your willingness-to-accept the loss of the bag is zero.
 - C) Your willingness-to-accept the loss of the bag is likely greater than zero.
 - D) Your willingness-to-pay for M&Ms was \$1 when you bought the bag but it necessarily dropped to zero after you left the store.

Answer Key

1. B
2. B
3. B
4. C
5. *(No Answer Provided)*
6. C
7. C
8. A
9. A
10. C
11. A
12. B
13. *(No Answer Provided)*
14. C
15. A
16. D
17. A
18. D
19. *(No Answer Provided)*
20. D
21. B
22. A
23. C
24. A
25. C
26. D
27. C
28. B
29. C
30. *(No Answer Provided)*
31. A
32. B
33. A
34. B
35. C
36. C
37. C
38. C
39. C
40. B
41. A
42. B
43. A
44. A

- 45. D
- 46. A
- 47. B