Test 1 - Dr. Rupp
Name $\qquad$ Sign Pledge
"I have neither given nor received aid on this exam"
Multiple Choice Questions (3 points each)

1. What you give up to obtain an item is called your
A. Opportunity cost
B. Explicit cost
C. True cost
D. Direct cost
2. The minimum that a seller is willing to accept before agreeing to sell an item is called the
A. sacrificial price
B. limit price
C. reservation price
D. marginal price
E. swing price
3. George W. Bush is the current U.S. President. This is an example of a:
A. Normative statement
B. Positive statement
4. Mike's Deli charges $\$ 1.25$ for a fountain drink and 25 cents per refill. You just got done mowing the lawn and you're extremely thirsty. So thirsty that you are willing to pay $\$ 2$ for the first drink and $50 \%$ less for each additional drink (i.e., $\$ 1$ for the second fountain drink). How many drinks do you buy at Mike's?
A. 0
B. 1
C. 2
D. 3
E. 4
5. The maximum legal price is called a
A. Limit price
B. Price floor
C. Reservation price
D. Price ceiling
E. Swing price
6. The supply curve for DVDs is $P=2 Q^{s}$ and the demand curve for DVDs is: $P=42-Q^{d}$. Find the equilibrium quantity.
A. $Q=42$
B. $\mathrm{Q}=7$
C. $\mathrm{Q}=28$
D. $Q=14$
E. $Q=21$
7. Using the information from the previous question (\#6), calculate the total revenue.
A. 882
B. 392
C. 98
D. 441
E. 245
8. The opportunity cost of attending college is:
A. The total spent on food, clothing, lodging, books, and tuition
B. The value of the best opportunity a student gives up to attend college
C. Zero for students who are lucky enough to have their parents pay for their education
D. Zero since a college education provides a student with larger income after graduation
9. You are considering whether to drive to Washington, D.C. to visit the White House. Here are some potential costs of making the drive from Greenville to Washington (round-trip):

| Car Insurance | $=\$ 120$ |
| :--- | :--- |
| Interest on Car loan | $=\$ 40$ |
| Gas \& oil | $=\$ 150$ |
| Maintenance | $=\$ 20$ |
| Tags \& registration fees | $=\$ 100$ |
| Toll roads in Virginia | $=\$ 10$ |

How much does it cost to drive to Washington?
A. $\$ 440$
B. $\$ 200$
C. $\$ 160$
D. $\$ 180$
E. $\$ 340$
10. As the price of a good rises, firms typically offer more of the good for sale. This is called
A. Excess supply
B. the Law of Demand
C. Excess demand
D. the Law of Supply
E. Moore's Law
11. Hawaii, the U.S. state with the highest average gasoline prices in the U.S., is currently considering a price cap on gasoline prices. If this price cap occurs what will be the likely result:
A. Gasoline surplus
B. Gasoline shortages
C. Higher profits for gasoline stations
12. Increasing the price of gas from $\$ 2$ to $\$ 3$ per gallon will cause a decrease in:
A. Quantity supplied
B. Supply
C. Quantity demanded
D. Demand

Use the graph below to answer questions \#13 \& \#14:

13. If the government imposes a price floor at $\$ 8$, how much quantity would be traded?
A. 30
B. 40
C. 50
D. 60
E. 70
14. If the government imposes a price floor at $\$ 8$, the result will be:
A. A surplus of 20
B. A surplus of 40
C. A shortage of 20
D. A shortage of 40
E. Neither a shortage nor a surplus
15. The price of a gallon of milk is $\$ 3$. The price of a Big Mac is $\$ 2$. Suppose your income is $\$ 12$ per week. What is the opportunity cost of a Big Mac?
A. Cannot be determined
B. $1 / 6$ of a gallon of milk
C. $1 / 3$ of a gallon of milk
D. $2 / 3$ of a gallon of milk
E. $3 / 2$ of a gallon of milk
16. True/False: Indifference curves always cross.
A. True
B. False
17. Marginal rate of substitution is
A. The point in which a consumer is willing to trade their first unit of the good
B. The price of good X compared to the price of good Y.
C. The tradeoff between two goods under consideration at any particular point.
D. The trade-off between labor and leisure.
18. What effect does an increase in income have on a consumer's budget constraint?
A. It would cause the budget constraint to rotate inward
B. It would cause the budget constraint to rotate outward
C. It would cause the budget constraint to shift in
D. It would cause the budget constraint to shift out
19. Peanut butter and jelly are said to be complements. How will an increase in the price of peanut butter affect the jelly market? (Hint, graph the jelly market). What happens to the equilibrium price and quantity of jelly?
A. Jelly prices increase and jelly quantity increases
B. Jelly prices increase and jelly quantity decreases
C. Jelly prices decrease and jelly quantity increases
D. Jelly prices decrease and jelly quantity decreases
20. Which of the following is not an assumption that we make about preferences?
A. Concavity
B. More-is-better
C. Complexity
D. Completeness
E. Transitivity
21. The price of gum is 20 cents and the price of candy is 5 cents. A student is willing to give up 1 piece of gum (vertical axis) for 2 pieces of candy (horizontal axis). Money income is $\$ 1$. Hence the marginal rate of substitution is: (hint, graph this information)
A. $1 / 2$
B. $1 / 4$
C. 1
D. 2
E. 4
22. The price of gum is 20 cents and the price of candy is 5 cents. A student is willing to give up 1 piece of gum (vertical axis) for 2 pieces of candy (horizontal axis). Money income is $\$ 1$. Hence the slope of the budget constraint is: (hint, graph this information)
A. $-1 / 2$
B. $-1 / 4$
C. -1
D. -2
E. -4
23. Based on your answers to the previous two questions, what should this student do:
A. Buy more gum and less candy
B. Buy more candy and less gum
C. Do not change her consumption since she is already consuming the optimal bundle.
24. Based on the information from question \#21, what is the equation of the budget constraint?
(where G = Gum and C = Candy)
A. $G=10-2 C$
B. $G=10-C$
C. $G=5-1 / 2 \mathrm{C}$
D. $G=10-1 / 2 C$
E. $G=5-1 / 4 \mathrm{C}$
25. Josh has a decision to make this fall. He can go to an ECU-State football game in Raleigh which is worth $\$ 80$ to him or he can work that day. The ticket cost is $\$ 30$. Josh must pay $\$ 10$ to park at the game and $\$ 20$ for gas to get to and from the game. Or Josh can go to work for 8 hours and earn $\$ 7$ an hour. Josh's reservation wage is $\$ 4$ (i.e., he would not show up for work if his boss paid him less than $\$ 4$ per hour.) What should Josh do?
A. Go to the game
B. Go to work
C. Josh is indifferent

Extra Credit (+3 points)
26. Sam views coffee and tea as perfect substitutes: one cup of coffee is perfect substitute for one cup of tea. If Sam earns $\$ 12$ per week, coffee costs $\$ 1$ per cup, while tea is $\$ 2$ per cup. Find Sam's best affordable bundle.
A. 4 coffees and 3 teas
B. 3 teas and 4 coffees
C. 12 coffees and 0 teas
D. 0 coffees and 6 teas
E. 6 coffees and 6 teas

## Discussion Questions

I. Courtney likes grapes and neither likes nor dislikes blueberries. Graph three indifference curves for Courtney with blueberries on the vertical axis and grapes on the horizontal axis. Label your indifference curves where $\mathrm{I}_{3}$ is preferred to $\mathrm{I}_{2}$ which is preferred to $\mathrm{I}_{1}$ (3 points)
II. Hybrid cars run on a combination of electricity and gasoline. Most small hybrid cars average more than $50+$ miles per gallon. Using diagrams show the effect on price and quantity on the small hybrid car market immediately following an increase in gas prices from $\$ 1.50$ per gallon to $\$ 3$ per gallon. Clearly label all curves that you draw. Label the old equilibrium point "A" on your graph, and the new equilibrium point "B". (4 points)

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III. Jane likes DVDs twice as much as she likes VHS tapes.
A. On a graph below draw three indifference curves for Jane where $I_{3}$ is preferred to $I_{2}$ which is preferred to $\mathrm{I}_{1}$ (3 points)
B. Jane earns $\$ 60$ per week. If DVDs cost $\$ 12$ and VHS tapes cost $\$ 5$, how many DVDs and VHS tapes will she buy? (3 points)
IV. Billie Joe earns $\$ 200$ per week. He spends money on two things: Diet Pepsi (\$1 each) and Big Macs (\$2 each).
A. Sketch Billie Joe's budget constraint with Diet Pepsi on the vertical axis and Big Macs on the horizontal (3 points).
B. What is the equation of Billie Joe's budget constraint that you just sketched in (A)? (3 points)
V. Jessica likes bikinis. However, Jessica will only buy a bikini if she can find a matching top and bottom.
A. Draw three indifference curves for Jessica with bikini tops on the vertical axis and bikini bottoms on the horizontal axis where $I_{3}$ is preferred to $I_{2}$ which is preferred to $I_{1}(3$ pts)
B. If Jessica earns $\$ 150$ a month and if the price per bikini top is $\$ 20$ and the price per bikini bottom is $\$ 10$, how many bikini tops and bottoms will she buy? (3 pts)

## Extra Credit - Notre Dame Football (+3 points)

On a graph below, show the market for hotel rooms in South Bend, Indiana (home of the University of Notre Dame) on a typical weekend during the fall. On the same graph, show how the market for hotel rooms is affected by a Notre Dame home football game.

Label all curves that you draw!

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