Name $\qquad$ Sign Pledge "I have neither given nor received aid on this exam"

Multiple Choice Questions (20 questions worth 3 points each)

1. Billie Joe makes $\$ 100$ per week. He buys two items Big Macs and Coors Light. The price of Big Macs $=\$ 4$ each and six-packs of Coors Light $=\$ 5$. What is Billie Joe’s budget constraint equation? (Let Big Macs (BM) be on the Y-axis, and Coors Lights (CL) be on the X-axis)
A. $\mathrm{BM}=25-4 / 5 \mathrm{CL}$
B. $B M=100-4 C L$
C. $B M=25-5 / 4 C L$
D. $B M=100-5 C L$
E. $B M=20-4 / 5 C L$
2. What is the opportunity cost of a Big Mac for Billie Joe?
A. 1 Coors Light six-pack
B. $4 / 5$ of a Coors Light six-pack
C. $5 / 4$ of a Coors Light six-pack
D. 4 Coors Light six-packs
E. 5 Coors Light six-packs
3. If McDonald's puts Big Macs on sale, reducing the price to $\$ 2$, what effect will this price change have on the budget constraint?
A. The budget constraint will have a parallel shift in
B. The budget constraint will have a parallel shift out
C. The budget constraint will not change
D. The budget constraint will become steeper
E. The budget constraint will become flatter
4. The demand for textbooks is: $P=180-3 Q^{d}$ and supply of Nokia cell phone is $P=30+2 Q^{\text {s }}$, find the equilibrium quantity of Nokia cell phones.
A. $\mathrm{Q}=30$
B. $\mathrm{Q}=50$
C. $\mathrm{Q}=90$
D. $Q=150$
E. $\mathrm{Q}=40$
5. Find the equilibrium price of Nokia cell phones using the information from the previous question.
A. $P=30$
B. $P=60$
C. $\mathrm{P}=90$
D. $P=110$
E. $P=50$
6. In words a price ceiling is:
A. How fast prices are rising.
B. The cost of installing a new floor in a house.
C. The highest legal price that a seller can charge.
D. The lowest legal price that a seller can charge.
E. The most that a buyer is willing to pay.
7. Wal-mart recently announced that it is reducing prices on 30,000 of the items it sells. This event will likely cause an increase in $\qquad$ of Wal-mart items.
A. quantity supplied
B. quantity demanded
C. supply
D. demand
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

Figure 1

9. Refer to Figure 1. Which point(s) are inefficient?
a. A, B, C, E
b. A, B, D, E
c. A, C
d. B, E
e. D
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. 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.

## Figure 2


12. Refer to Figure 2. The movement from $D$ to $D_{1}$ is called
a. an increase in demand.
b. a decrease in demand.
c. a decrease in quantity demanded.
d. an increase in quantity demanded.
13. What will happen in the gasoline market if next week buyers are expecting gasoline prices to rise by $\$ 1$ a gallon?
a. The demand for gasoline will be unaffected.
b. The demand for gasoline will decrease.
c. The demand for gasoline will increase
d. The supply of gasoline will increase.
14. 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
15. 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

## Figure 3


16. Refer to Figure 3. If the government imposes a price ceiling at $\$ 12$, the result would be
a. a shortage of 20 units.
b. a surplus of 20 units.
c. a shortage of 40 units.
d. a surplus of 40 units.
e. neither a surplus nor a shortage.
17. Again, referring to Figure 3, if the price floor is at $\$ 8$, what will be the quantity traded?
a. 30
b. 40
c. 50
d. 60
e. 70
18. The price of gum is 15 cents and the price of candy is 10 cents. A student is willing to give up 1 piece of gum (vertical axis) for 2 pieces of candy (horizontal axis). Money income is $\$ 3$. Hence the marginal rate of substitution is: (hint, graph this information)
a. $1 / 2$
b. $1 / 3$
c. $2 / 3$
d. 1.5
e. 2
19. The price of gum is 15 cents and the price of candy is 10 cents. A student is willing to give up 1 piece of gum (vertical axis) for 2 pieces of candy (horizontal axis). Money income is $\$ 3$. Hence the slope of the budget constraint is: (hint, graph this information)
a. $-1 / 2$
b. $-1 / 3$
c. $-2 / 3$
d. -1.5
e. -2
20. 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.

Discussion Questions - 40 points
I. Suppose that the state of Florida increases it minimum wage by $\$ 2$ per hour. Label the both the initial equilibrium (point A) and new equilibrium (point B) in the market for Florida oranges following this change in the labor laws (7 points)

## Florida Oranges Market

Price

Quantity
A. What happens to the equilibrium price of oranges? (3 points)
B. What happens to the equilibrium quantity of oranges? (3 points)
II. Karen likes ECU Men’s basketball twice as much as she likes watching the women play.
A. On a graph below draw three indifference curves for Karen where $I_{3}$ is preferred to $I_{2}$ which is preferred to $\mathrm{I}_{1}$ (label all axes and curves) (6 points)
B. Karen earns $\$ 60$ per week. If Men's basketball tickets cost $\$ 12$ and Women's tickets cost $\$ 5$, how many Men's and Women's basketball tickets will Karen buy? (6 points)
III. If the price of a CD is $\$ 10$ and the price of a DVD is $\$ 17$ and Jill's income is $\$ 170$ :
A. Sketch Jill's budget constraint with DVD's on the vertical axis and CD's on the horizontal (4 points). (Make sure you indicate the x and y -intercepts on your graph)

## DVD

CDs
B. What is the equation for Jill's budget constraint? (i.e., express in $\mathrm{Y}=\mathrm{mx}+\mathrm{b}$ form) (4 points):
C. Suppose that for a given inventory of CDs and DVDs, Jill is willing to trade one DVD for two CDs. Is Jill currently maximizing her utility? Why or why not? (3 points)
D. If Jill is not doing the best she can, what change do you suggest in her consumption to increase her utility? (4 points)

Answers

1. C
2. B
3. D
4. A
5. C
6. C
7. B
8. B
9. E
10. D
11. C
12. B
13. C
14. C
15. D
16. E
17. C
18. A
19. C
20. A
