Name $\qquad$
You may not discuss this test in any way shape or form with anyone before 1500 Tuesday October 11, 2011.

## MULTIPLE CHOICE.Choose the one alternative that best completes the statement or answers the question.

1) The price elasticity of demand is a measure of
A) buyers' responsiveness to changes in the price of a product.
B) the equilibrium price of a product.
C) whether a product is a substitute or a complement.
D) the amount of a product purchased when income increases.
E) how much a change in demand affects the equilibrium price.
2) Suppose the Chicago Enforcers football team lowers ticket prices by 13 percent and as a result the quantity of tickets demanded increases by 21 percent. This response means that the demand for Enforcer tickets is
A) perfectly elastic.
B) inelastic.
C) unit elastic.
D) elastic.
E) perfectly inelastic.
3) If a good has many close substitutes, then its demand is most likely
A) elastic.
B) perfectly inelastic.
C) unit elastic.
D) inelastic.
4) If the price elasticity of demand for a product is 3.0 , then when its price falls from $\$ 1.50$ to $\$ 1.25$, the quantity demanded will increase by (Hint: Use the midpoint method for the percentage change in price.)
A) 0.18 percent.
B) 72.0 percent.
C) 54.5 percent.
D) 1.81 percent.
E) 42.2 percent.
${ }^{5)}$ If a 2 percent rise in price leads to a 4 percent decrease in quantity demanded, then demand is
A) elastic and total revenue increases.
B) elastic and total revenue decreases.
C) inelastic and total revenue decreases.
5) What is measured by the price elasticity of supply?
A) The price elasticity of supply measures how responsive producers are to changes in income.
B) The price elasticity of supply measures how responsive producers are to changes in the price of a product.
C) The price elasticity of supply measures how responsive producers are to changes in the cost of producing a product.
6) The extent to which the demand for a good changes when the price of a substitute or complement changes, other things remaining the same, is measured as the
A) income elasticity of demand.
B) price elasticity of demand.
C) price elasticity of supply.
D) cross elasticity of demand.
7) The income elasticity of demand is a measure of
A) how responsive suppliers are to changes in the price of a product.
B) how demand for a product changes when the price of a substitute or complement product changes.
C) the extent to which the supply of a good changes when the demand changes.
D) how responsive consumers are to changes in the price of a product.
E) the extent to which thequantity demanded for a good changes when income changes.

${ }^{9)}$ The figure above shows Kaley's marginal benefit from swimming with manatees and Scott's marginal cost of providing manatee swimming tours. For Kaley and Scott, allocative efficiency is achieved at what point?
A) $A$
B) $B$
C) C
D) $D$

${ }^{10)}$ The figure above shows a nation's production possibilities frontier. If the marginal cost equals the marginal benefit at point $A$ when 4 million pizzas are produced,
A) allocative efficiency is achieved but production efficiency is not achieved because there are no tacos being produced.
B) neither allocative nor production efficiency has been achieved.
C) production efficiency is achieved but allocative efficiency is not achieved because there are no tacos being produced.
D) both allocative and production efficiency are achieved.
E) production efficiency is achieved but allocative efficiency is not achieved because the number of tacos produced is at its absolute maximum.

Q10. In this society, the members value pizzas and not tacos so the point of 4 m pizzas and 0 tacos is a point of both productive (on the ppf) and allocative ( $\mathrm{MB}=\mathrm{MC}$ ) efficiency for them.

${ }^{11)}$ The figure above shows Lauren's demand curve for Barbie dolls and the market price for Barbie dolls. In order for Lauren to avoid paying more for dolls than they are worth to her, she must not purchase any more than
A) 4 dolls.
B) 1 doll.
C) 3 dolls.
D) 0 dolls.
E) 5 dolls.

${ }^{12)}$ In the figure above, at the market price of $\$ 15$, the consumer surplus equals
A) $\$ 30,000$.
B) $\$ 40,000$.
C) $\$ 10,000$.
D) 2,000 units

13) Bill and Krista sell potted plants from a roadside stand. The figure above shows Bill and Krista's marginal cost curve and the market price. If Bill and Krista sell 60 plants per week, their producer surplus from the 60 th plant will equal
A) $\$ 20$.
B) $\$ 8$.
C) $\$ 0$.
D) $\$ 480$.

${ }^{14)}$ In the figure above, the equilibrium market price is $\$ 20$. The producer surplus equals
A) $\$ 20$.
B) $\$ 3,000$.
C) $\$ 1,500$.
D) 150 .
E) $\$ 4,500$.

15) In the figure above, if the market is at equilibrium, then the total consumer surplus equals the area $\qquad$ and the total producer surplus equals the area $\qquad$ _.
A) $A ; B$
B) $A+B ; C$
C) $B ; C$
D) $A$; $C$
E) $C$; $B$

16) The figure above shows the market for bell-bottom pants. If the efficient quantity is produced
A) a small deadweight loss will result.
B) the sum of consumer and producer surplus will be minimized.
C) the consumer surplus on all the pants must equal the producer surplus on all the pants.
D) the sum of consumer and producer surplus will be maximized.
E) there will be no consumer surplus.
17) Tax incidence is the
A) burden sellers have to absorb from a tax on goods and services.
B) deadweight loss created by a tax.
C) division of the burden of a tax between the buyer and the seller.
D) burden buyers have to absorb from a tax on goods and services.
E) lost revenue the government endures from goods and services that are not taxed.

18) The figure above shows the market for tires. The figure shows that the government has imposed a tax of $\qquad$ per tire and that $\qquad$ pay most of the tax.
A) \$60; sellers
B) $\$ 30$; sellers
C) $\$ 40$; buyers
D) \$30; buyers
E) \$60; buyers

| Price <br> (dollars per slice <br> of pizza) | Quantity supplied Quantity demanded <br> (slices of pizza <br> per week) | (slices of pizza <br> per week) |
| :---: | :---: | :---: |
| 1 | 10 | 50 |
| 2 | 20 | 40 |
| 3 | 30 | 30 |
| 4 | 40 | 20 |
| 5 | 50 | 10 |

19) The demand and supply schedules for pizza are in the table above. A price ceiling of $\$ 2$ per slice results in
A) a shortage of 60 slices of pizza.
B) a surplus of 20 slices of pizza.
C) a shortage of 20 slices of pizza.
D) a shortage of 40 slices of pizza.
20) In a market with a rent ceiling set below the equilibrium rent, the producer and consumer surplus
A) are eliminated.
B) both decrease but generally not to zero.
C) are both totally converted into deadweight loss.
D) do not change.
E) both increase.
${ }^{21)}$ Suppose the equilibrium wage rate for apricot pickers is $\$ 6.00$ per hour and at that wage rate the equilibrium quantity of apricot pickers employed is 14,000 . If the minimum wage is set at $\$ 6.50$ per hour, then the
A) quantity of apricot pickers employed decreases.
B) quantity of apricot pickers employed does not change.
C) wage rate for apricot pickers decreases.
D) quantity of apricot pickers employed increases.
E) quantity of apricot pickers demanded does not change and the quantity of apricot pickers supplied does not change.

${ }^{22)}$ In the figure above, if the wage rate is $\$ 6$ per hour, then the
A) workers' surplus is the area $a+b+c$.
B) firms' surplus is the area $d+e+f$.
C) deadweight loss equals zero.
D) Only answers A and C are correct.
E) Answers A, B, and C are correct.

Wage rate $=\$ 6$ is the market equilibrium. CS (firm's surplus def ) and PS (workers surplus abc) are maximized. Thert is no DWL because $\$ 6$ is the market equilibrium. A, B, C correct, so E .
23) A price support leads to inefficiency because
A) output is more than the efficient, equilibrium quantity.
B) producer surplus is less than consumer surplus.
C) the marginal benefit of the last unit produced is larger than the marginal cost.
D) the price charged is less than the equilibrium price.
E) producers must pay a subsidy to the government.

Q23. A. correct. (Hint: look at graph of next question.) Not B. producers are getting the subsidy so are made better off. Not C. (qs $>$ qd at $\$ 35$ so MC $>\mathrm{MB}$ ). Not D. $\$ 35>\$ 25$. E. Producers are getting the subsidy.


The figure above shows the market for sugar beets. The government intervenes in this market and sets a support price at $\$ 35$ a tos
24) The figure above shows that to make the price support work, the government buys $\qquad$ million tons of sugar beets.
A) 20
B) 5
C) 10
D) 15
E) 30
25) The fundamental force that generates international trade is
A) comparative advantage.
B) absolute advantage.
C) the need for more goods and services.
D) the existence of tariffs.
26) A nation has a comparative advantage in a good when it has a
A) higher absolute cost of producing the good.
B) lower absolute cost of producing the good.
C) tariff in place protecting the producers of the good.
D) higher opportunity cost of producing the good.
E) lower opportunity cost of producing the good.

27) The figure above shows the U.S. demand and U.S. supply curves for cherries. At a world price of $\$ 2$ per pound, the total exports of cherries from the United States to other nations equals
A) 400,000 pounds.
B) 0 pounds.
C) 800,000 pounds.
D) 600,000 pounds.
E) 200,000 pounds.
28) When a nation imports a good, its consumer surplus $\qquad$ and its producer surplus $\qquad$ $\ldots$.
A) decreases; decreases
B) increases; decreases
C) increases; increases
D) decreases; increases
E) does not change; increases
29) When a nation exports a good or service in which it has a comparative advantage, employment in that industry
A) stays the same.
B) increases.
C) decreases.
30) When a nation exports a good, its total surplus $\qquad$ and when it imports a good, its total surplus $\qquad$ .
A) does not change; does not change
B) increases; decreases
C) decreases; increases
D) decreases; decreases
E) increases; increases

Q30. Remember the picture, you get that extra triangle in each case. Hint: see figure for Q32.
31) In the wake of worsening relations with China, some Americans called for an increase in tariffs on Chinese products coming into America. If higher tariffs are imposed on clothing produced in China and imported into the States, the price of clothing in America would
A) decrease.
B) increase.
C) not change.


The figure above shows the U.S. market for T-shirts, where $S_{\mathrm{US}}$ is the domestic supply curve and $D_{\mathrm{US}}$ is the domestic demand curve. The world price of a T-shirt is $\$ 5$.The U.S. government imposes a $\$ 2$ per unit tariff on imported T-shirts.
32) The figure aboveshows that as a result of the tariff, consumer surplus in the United States
A) decreases by $\$ 30$ million per year.
B) remains unchanged.
C) increases by $\$ 55$ million per year.
D) decreases by $\$ 105$ million per year.
E) decreases by $\$ 20$ million per year.

Q32. Math errors on area of triangle.
33)

Suppose two neighborhoods each with 10 homes each in Buffalo, New York are identical except one group of 10 of them is near a toxic waste dump. If homes near the dump sell for an average of $\$ 40,000$ and the other homes sell for $\$ 90,000$, the external cost of the dump is
A) $\$ 500,000$.
B) $\$ 900,000$.
C) $\$ 90,000$.
D) $\$ 400,000$.
E) $\$ 1,300,000$.
34)

If a good has an external cost, the
A) marginal private cost reflects the external cost.
B) competitive market outcome is inefficient.
C) marginal social benefit is equal to the marginal social cost when the market is in equilibrium.
D) competitive market outcome is efficient.

Q34. B. See graph in next question.

35) The figure above illustrates the marginal private cost and the marginal social cost to the city of Seattle for each rock concert that is offered. It also illustrates the marginal private benefit. There is no external benefit. The efficient number of concerts in Seattle is
A) 5 .
B) 15 .
C) 0 .
D) 10 .
E) 20 .
36) In order to make emission charges effective, the regulator must determine the marginal external cost of pollution at different levels of output and levy a charge on polluters that
A) is less than that cost.
B) is equal to that cost.
C) eliminates pollution.
D) is greater than that cost.
37) Firm A and Firm B emit 300 tons of pollution each and each have marketable permits that allow each to emit 100 tons of pollution. If it costs $\$ 5,000$ for Firm A to eliminate 100 tons of pollution and it costs Firm B \$6,000 to eliminate 100 tons of pollution, then
A) Firm B sells its permits to Firm A for a price above $\$ 6,000$.
B) Firm B sells its permits to Firm A for a price below $\$ 6,000$.
C) Firm A sells its permits to Firm B for a price above $\$ 6,000$.
D) Firm A sells its permits to Firm B for a price below $\$ 6,000$.
38) When the benefits of producing a good or service spill over to other people, rather than just the buyer, the spillover is referred to as
A) an external benefit.
B) an equilibrium social output.
C) an external cost.
D) a Coasian good.
E) a marginal cost.

39) The figure above shows the market for college education. The efficient quantity of education is
A) 0 students.
B) 6 million students.
C) more than 4 million students and less than 6 million students.
D) 4 million students.


The figure above shows the demand for college education $(D)$, the marginal social benefit of college education (MSB), and the marginal cost of the private schools (MC).
40) In the figure above, suppose the government provides vouchers worth $\$ 15,000$ per student per year. When the market is in equilibrium, marginal social benefit $\qquad$ marginal cost, and the number of students enrolled is
A) equals; efficient
B) exceeds; below the efficient quantity
C) is below; below the efficient quantity
D) exceeds; above the efficient quantity
E) is below; above the efficient quantity

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