Choose the single best answer for each question. Do all of your scratch work in the margins or in the blank space at the bottom of the last page.

1. When calculating the opportunity cost of going to college, which of the following should you probably include?
   a. The cost of your meal plan for the cafeteria.
   * The cost of books required for college classes.
   c. The income you earn in your part-time job while attending college.
   d. The cost of living in the dormitory.

Questions 2 and 3 are based on the following information. Two small countries, Appanoose and Decatur, use their labor resources to produce goods of two types: manufactured goods and agricultural goods. The table below gives the number of hours of labor needed to produce one unit of each type of good in each country.

<table>
<thead>
<tr>
<th></th>
<th>Manufactured goods</th>
<th>Agricultural goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appanoose</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Decatur</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

2. The opportunity cost of 1 unit of agricultural goods in Decatur is
   a. 8 units of manufactured goods.
   b. 4 units of manufactured goods.
   c. 2 units of manufactured goods.
   * 0.5 units of manufactured goods.

3. Which of the following is true?
   a. Appanoose has the absolute advantage in the production of manufactured goods.
   b. Appanoose has the absolute advantage in the production of agricultural goods.
   c. Appanoose has the comparative advantage in the production of manufactured goods.
   * All of the above are true.

4. Which of the following is not a determinant of the quantity demanded of a good?
   a. the good's own price.
   b. household income.
   c. the price of a substitute good.
   * the price of a raw material used to produce the good.

5. An increase in demand corresponds to
   a. a movement downward and to the right along a demand curve.
   b. a movement upward and to the left along a demand curve.
   * a rightward shift of a demand curve.
   d. Either a or c.
6. Bagels and muffins are substitutes. An increase in the price of bagels will have what effect on the competitive market for muffins? The equilibrium price of muffins will
a. increase and the equilibrium quantity of muffins will increase.
* b. increase and the equilibrium quantity of muffins will decrease.
c. decrease and the equilibrium quantity of muffins will increase.
d. decrease and the equilibrium quantity of muffins will decrease.

7. Widgets are a normal good. Suppose that average household income increases and, simultaneously, the cost of a raw material used to make widgets increases. What effect would we observe in the competitive market for widgets? Equilibrium price
a. would increase and equilibrium quantity could increase, decrease, or stay the same.
* b. would decrease and equilibrium quantity could increase, decrease, or stay the same.
c. could increase, decrease, or stay the same, and equilibrium quantity would increase.
d. could increase, decrease, or stay the same, and equilibrium quantity would decrease.

8. If the own-price elasticity of supply of a good is 1.2, which of the following could account for a 6% increase in the quantity supplied of the good? Other things equal, the price of the good increases by
a. 1.2%
* b. 5.0%
c. 6.2%
d. 7.2%

9. In order to try to ease congestion at the municipal swimming pool, the City Council raises the pool's admission fee from $1.50 to $2.00 per person. As a result, the number of people using the pool on an average summer day decreases from 400 per day to 350 per day. Over this range of fees, the elasticity of demand (calculated by the midpoint method) for admission to the municipal pool is
a. -0.467.
* b. -0.834.
c. -1.528.
d. -2.143.

10. A price ceiling is binding when it is set
a. above the equilibrium price, causing a shortage.
b. above the equilibrium price, causing a surplus.
* c. below the equilibrium price, causing a shortage.
d. below the equilibrium price, causing a surplus.

11. Demand in the competitive market for wheat is inelastic. An increase in the supply of wheat will lead to
a. an increase in the price of wheat and an increase in wheat farmers' revenue.
b. an increase in the price of wheat and a decrease in wheat farmers' revenue.
c. a decrease in the price of wheat and an increase in wheat farmers' revenue.
* d. a decrease in the price of wheat and a decrease in wheat farmers' revenue.
Questions 12 and 13 refer to the following information. The table lists willingness to pay for the first, second, and third pizzas of the month for three hypothetical consumers. All three have zero willingness to pay for pizzas after the third of the month.

<table>
<thead>
<tr>
<th></th>
<th>First pizza</th>
<th>Second pizza</th>
<th>Third pizza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alex</td>
<td>$15.00</td>
<td>$12.00</td>
<td>$8.00</td>
</tr>
<tr>
<td>Angela</td>
<td>$9.00</td>
<td>$5.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Austin</td>
<td>$21.00</td>
<td>$16.00</td>
<td>$10.00</td>
</tr>
</tbody>
</table>

12. If the price of pizzas were $14.00, the number of pizzas purchased each month by each consumer would be:
   a. Alex - 2; Angela - 2; Austin - 2.
   b. Alex - 2; Angela - 3; Austin - 1.
   * Alex - 1; Angela - 0; Austin - 2.
   d. Alex - 1; Angela - 1; Austin - 3.

13. Which of the following is true? If the price of pizzas decreases from $14.00 to $10.00,
   a. Alex' consumer surplus would increase from $1/month to $7/month.
   b. Angela's consumer surplus would increase from 0$/month to $1/month.
   c. Austin's consumer surplus would increase from $7/month to $17/month.
   d. None of the above is true.

14. The government imposes an excise tax on a good traded in a competitive market. For a given $/unit size of the tax, the impact on the price buyers pay (inclusive of the tax) will be largest when
   a. demand is elastic and supply is elastic.
   b. demand is elastic and supply is inelastic.
   * demand is inelastic and supply is elastic.
   d. demand is inelastic and supply is inelastic.

15. The demand and supply curves in the competitive market for a good are straight lines. When the government imposes a $5.00/unit excise tax on the good, it has the effect of reducing the quantity traded in the market by 1000 units/day. The deadweight loss of this tax is
   a. $5000/day.
   * $2500/day.
   c. $1000/day.
   d. Not enough information given for an answer.

16. A tax on an imported good is called a
   a. quota.
   b. subsidy.
   c. comparative tax.
   * tariff.
17. The country of Lusitania currently bans international trade in cotton, and the price of cotton on the world market is higher than the price in the country's domestic market. If the government of Lusitania were to repeal the trade ban, the country would become
a. an exporter of cotton and domestic cotton consumers would gain.
* b. an exporter of cotton and domestic cotton consumers would lose.
c. an importer of cotton and domestic cotton consumers would gain.
d. an importer of cotton and domestic cotton consumers would lose.

18. A country produces some textiles domestically and imports some textiles from abroad. What effect would the imposition of a tariff have on the country's domestic textile market? Consumer surplus would ________, producer surplus would ________, and total surplus would ________.
   a. increase; decrease; decrease.
   b. decrease; increase; increase.
   c. increase; increase; increase.
* d. decrease; increase; decrease.

19. The impact of one person's actions on the well-being of a bystander is called
* a. an externality.
   b. a deadweight loss.
   c. a Pigovian tax.
   d. a transactions cost.

Question 20 refers to tax schedule Y-1 for 2008. Ronald and Millie, a married couple, use the "married, filing jointly" tax status to file their 2008 federal income tax returns. They reported taxable income of $73,425.

Schedule Y-1. Use if your filing status is married, filing jointly.

<table>
<thead>
<tr>
<th>If your taxable income is over</th>
<th>but not over</th>
<th>your tax is</th>
<th>of the amount over</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$16,050</td>
<td>-----------</td>
<td>10%</td>
</tr>
<tr>
<td>16,050</td>
<td>65,100</td>
<td>$1,605 + 15%</td>
<td>16,050</td>
</tr>
<tr>
<td>65,100</td>
<td>131,450</td>
<td>8,962.50 + 25%</td>
<td>65,100</td>
</tr>
<tr>
<td>131,450</td>
<td>200,300</td>
<td>25,550 + 28%</td>
<td>131,450</td>
</tr>
<tr>
<td>200,300</td>
<td>357,700</td>
<td>44,828 + 33%</td>
<td>200,300</td>
</tr>
<tr>
<td>357,700</td>
<td>-----------</td>
<td>96,770 + 35%</td>
<td>357,700</td>
</tr>
</tbody>
</table>

20. According to schedule Y-1, Ronald and Millie's federal income tax for 2008 is
   a. $8,962.50.
   b. $11,043.75.
   c. $18,356.25.
   d. $14,343.75.
21. The market for a good is likely to be subject to the free-rider problem if the good is
a. rival in consumption.
b. non-rival in consumption.
c. excludable.
* d. non-excludable.

22. Consider the imposition of an excise tax on a competitive market for a good. If one were to graph the amount of deadweight loss (on the vertical axis) as a function of the dollar-per-unit size of the excise tax (on the horizontal axis), the graph would be
a. "U"-shaped.
b. an upside down "U"-shape.
c. a horizontal straight line.
* d. an upward-sloping curve.

23. In 2008, the Durable Doodad Company had revenue of $34,500,000, explicit costs of $25,750,000, and implicit costs of $6,200,000. For the year, Durable Doodad's accounting profit was
a. $28,300,000 and economic profit of $2,550,000.
b. $28,300,000 and economic profit of $19,550,000.
* c. $8,750,000 and economic profit of $2,550,000.
d. None of the above.

24. If, at a particular output level, a firm's marginal cost is less than average total cost, then, at that output level,
* a. the average total cost curve is downward-sloping.
b. the average total cost curve is upward-sloping.
c. the marginal cost curve is downward-sloping.
d. Any one of the above is possible.

25. A competitive firm faces a price of $25/unit for its product. It is currently operating where marginal cost is $25/unit and average total cost is $20/unit. To maximize profit (or minimize loss) in the short-run, the firm should
a. increase output.
b. decrease output, but not shut down.
* c. maintain its current output.
d. shut down.

26. A monopoly firm faces a price of $25/unit for its product. It is currently operating where marginal cost is $25/unit and average total cost is $20/unit. To maximize profit (or minimize loss) in the short-run, the firm should
a. increase output.
* b. decrease output, but not shut down.
c. maintain its current output.
d. shut down.
27. Drug companies are allowed to have temporary monopolies in the new drugs they discover in order to
a. make it possible for them to charge a price that is equal to marginal cost.
b. discourage destructive competition among drug companies.
* c. encourage research in the development of new drugs.
d. create an opportunity for the government to earn patent revenue.

28. A monopolist can sell 40 widgets/day when it charges a price of $3.50/widget. In order to sell 41 widgets/day, the monopolist would have to reduce its price to $3.35/widget. The monopolist's marginal revenue of the 41st widget is
a. $3.35/widget.
b. -$0.15/widget.
* c. -$2.65/widget.
d. None of the above.

29. In the language of game theory, a situation in which each person must consider how others might respond to her own actions is called a
a. cartel situation.
b. cooperative situation.
* c. strategic situation.
d. no-win situation.

30. In a game, a dominant strategy for a given player is a strategy that
a. makes every player better off.
b. makes that player better off without hurting any other player.
c. increases the total payoff for all players combined.
* d. is best for that player, regardless of the strategies chosen by other players.