Exam 3 Econ 101 Section 3 Fall 2008

Multiple Choice
Identify the letter of the choice that best completes the statement or answers the question.

1. The markets in which labor, land, and capital are traded are called
a. product markets
b. factor markets
c. service markets
d. household supply markets

2. When Dave's Donut Shop hires another worker, production rises by 500 donuts per day, and the marginal revenue of each donut is $.50. Thus, the additional worker has a Marginal Revenue Product of
a. $.50
b. 500 donuts
c. $250
d. $2500

3. If Bob determines that the marginal factor cost is higher than the marginal revenue product for the last worker he hired, Bob should
a. fire the worker
b. hire another worker to try to boost MRP
c. keep the worker, since it's efficient to have some excess labor
d. try charging higher prices for his output

4. | Units of Labor | Daily Output | Price of Output |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>$5</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>$5</td>
</tr>
<tr>
<td>3</td>
<td>45</td>
<td>$5</td>
</tr>
<tr>
<td>4</td>
<td>55</td>
<td>$5</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
<td>$5</td>
</tr>
</tbody>
</table>

The table above describes the relationship between labor input, output, and product price for a firm operating in a perfectly competitive labor market. The marginal revenue product of the third unit of labor is
a. $5
b. 45
c. $100
d. $225

5. The introduction of mechanized weaving looms in England during the Industrial Revolution had what effect on the demand for hand weavers?
a. an increase
b. a decrease
c. no effect
d. less elastic

6. An input that increases the marginal product of a certain type of labor is called a(n)
a. complementary input
b. substitutable input
c. technological input
d. derived input
7. One of the characteristics of competitive labor markets is that
   a. individual workers negotiate their wage rates with potential employers
   b. each individual employer sets the wage rate that it pays to its employees
   c. individual workers and employers have no control over the wage rate
   d. individual workers have no ability to set wage rates, but employers choose whether or not to pay the market wage

8. Suppose new federal rules allow nurse practitioners to perform tasks formerly done by physicians. This new rule causes hospitals and medical clinics around the country to begin hiring more nurse practitioners. What is the likely effect on the wages paid to nurse practitioners?
   a. They will stay constant in the short run.
   b. They will rise in the short run.
   c. They will stay constant in the short run (but rise in the long run).
   d. They will fall in the short run (but rise in the long run).

9. A compensating wage differential reflects
   a. differences in workers' productivities
   b. differences in the supplies of labor to various professions
   c. differences in the demand for labor in various professions
   d. differences in the attractiveness of various jobs

10. Consider the market for workers who do road construction in Alaska and Florida. Which of the following would you expect to be true?
    a. Workers in Florida will earn higher wage rates.
    b. Workers in Alaska will earn higher wage rates.
    c. Workers in Florida and Alaska will earn equal wage rates.
    d. There will be no systematic relationship between the wage rates paid to road construction workers in Florida and Alaska.

11. Suppose that all auto mechanics working at car dealerships form a union and negotiate higher wage rates. What will be the likely effect on the wages paid to non-unionized mechanics working at gas stations?
    a. They will rise.
    b. They will fall.
    c. They will not change.
    d. They will fall, then rise.

12. Which of the following helps explain persistent wage differences among occupations?
    a. different educational requirements
    b. barriers to entry into some labor markets
    c. compensating differentials
    d. all of the above

13. Suppose that an employer refuses to hire Diane for a job because, as a woman, Diane is more likely to quit working in order to have children. Diane is a victim of
    a. statistical discrimination
    b. gender discrimination
    c. sex discrimination
    d. employee discrimination

14. If a population's income were distributed perfectly equally, which each fifth of the population receiving the same share, then the Lorenz Curve would be
    a. a horizontal line
    b. a straight line with a slope equal to one
    c. a vertical line
    d. a positively-sloped line that is slightly bowed downward
15. In the United States since 1970, income inequality has been
   a. growing
   b. shrinking
   c. staying roughly the same
   d. shrinking until 1985, then growing

16. Which of the following is true regarding income mobility in the U.S.?
   a. The income distribution is fairly mobile.
   b. The income distribution demonstrates almost no mobility.
   c. Income mobility increased slightly in the 1990s.
   d. None of the above are true.

17. If the interest rate is 10%, the present value of $1,000 to be received in two years is
   a. $900
   b. $800
   c. $826
   d. $810

18. If a firm determines that a certain capital investment will yield a positive return, what will be the effect of a higher interest rate?
   a. It will increase the present value of the return.
   b. It will decrease the present value of the return.
   c. Nothing—the interest rate has no effect on the present value of the investment's return.
   d. It could increase or decrease the present value of the return—it depends on the costs vs. rewards of the investment.

19. The amount of money that a bond promises to pay to its owner on the maturity date is the
   a. coupon payment
   b. cash discount
   c. dividend
   d. principal

20. When interest rates rise throughout an economy, bond prices will
   a. rise
   b. rise and then fall to re-establish equilibrium
   c. stay the same—they are unrelated to interest rates
   d. fall

21. A Pareto Improvement is
   a. a trade that creates a benefit for one party and a loss for the other
   b. a trade that creates losses for both parties
   c. a trade that creates a benefit for at least one party and leaves neither party in a worse position
   d. a trade that leaves at least three parties better off
22. In the demand schedule pictured in the above graph, the value of the 3rd unit is
   a. $4
   b. $2
   c. $16
   d. -$4

23. Given the above supply schedule, the cost to the producer of the third unit of this good is
   a. $2
   b. $6
   c. $12
   d. $18
24. The above graph shows a consumer's demand schedule for slices of pizza. If a slice is currently priced at $4, this buyer will have a consumer surplus of
a. $18
b. $4
c. $6
d. $12

25. In the market pictured above, total net benefits are maximized when the price is equal to
a. $2
b. $4
c. $5
d. $6
26. A price floor of $5 in the market depicted above will
a. increase total net benefits
b. have no effect on total net benefits
c. decrease total net benefits
d. increase consumers' surplus and decrease producers' surplus

27. In the market depicted above, a price floor of $5 will have which effect on consumers' surplus?
   a. It increases it by $1.
   b. It increases it by $2.
   c. It reduces it by $2.
   d. It leaves it unchanged.
28. Laws designed to prevent businesses from reducing competition and harming consumers are called
   a. antitrust laws
   b. tort laws
   c. criminal laws
   d. competition law

29. In the natural monopoly depicted above, under *average cost pricing* the price would be set at
   a. $2
   b. $3
   c. $5
   d. $10

30. Which of the following is an example of a public good?
   a. national defense
   b. a shirt
   c. seats in a movie theater
   d. all of the above
Problem: Be sure to show all of your work.

31. John owns a candy store and can sell his candy for 50 cents a pound. His workers can produce candy on an hourly basis as follows:

<table>
<thead>
<tr>
<th>Number of Workers</th>
<th>Quantity produced per hour (pounds)</th>
<th>Marginal Product</th>
<th>Marginal Revenue Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>145</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>164</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>190</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Complete the above table, computing the marginal product of each additional student and their marginal revenue product.
b. How many workers should John hire if the going wage rate is $7.50 per hour?

c. What would happen to the number of workers John hires if the price of candy dropped to 33.3 cents per pound?