CHAPTER 3 The Demand for Labor

In addition to the multiple choice and quantitative problems listed here, you should answer review questions 1, 3, 5, and 7 and problems 1-4 at the end of chapter 3.

Multiple-Choice

Choose the one alternative that BEST completes the statement or answers the question.

1. The marginal product of labor tells us
   A) which employee is the most productive.
   B) the average output produced by each employee.
   C) the additional output produced by the last employee hired.
   D) how much money the firm can make from hiring each employee.

2. Diminishing marginal returns occur because
   A) hiring more employees means that each has less capital with which to work.
   B) it is more difficult to manage a firm as the size of the workforce and capital stock both grow.
   C) the best employees will always be hired first.
   D) hiring more employees means that they will subdivide tasks and therefore become more efficient.

   \[
   \text{TABLE 3-1} \quad \begin{array}{|c|c|}
   \hline
   \text{Number of Workers} & \text{Total # of Pots Produced Per Day} \\
   \hline
   0 & 0 \\
   1 & 6 \\
   2 & 13 \\
   3 & 18 \\
   4 & 21 \\
   5 & 23 \\
   6 & 22 \\
   \hline
   \end{array}
   \]

3. Referring to Table 3-1, diminishing marginal returns begins with the ______ employee.
   A) first
   B) second
   C) third
   D) sixth
4. Referring to Table 3-1, which is **INCORRECT**. If pots sell for $20 each then  
A) the marginal revenue product of labor of the second worker is $260.  
B) the marginal product of the third worker is five pots.  
C) the marginal revenue from selling the eighteenth pot is $20.  
D) the marginal revenue product of labor equals the marginal product of labor  
multiplied by the additional revenue that is received per unit of output.

5. Referring to Table 3-1, if wages are $50.00 per day and pots sell for $20.00 each, how  
many potters will the firm hire?  
A) two  
B) three  
C) four  
D) five

6. If the firm hires to a point where the marginal expense of labor is greater than the  
marginal revenue product of labor, then  
A) profits could be increased by increasing employment.  
B) profits could be increased by reducing employment.  
C) profits are maximized.  
D) total cost must be greater than total revenue.

7. When deciding the salary of a sports star,  
A) the team must consider how much money the sports star should earn.  
B) the team must consider how much the sports star will cause revenues to increase.  
C) the team estimates the sports star's marginal product; because this is a guess, sports  
stars are generally underpaid.  
D) the team will hire the sports star if doing so will increase the team's revenues.

8. The firm's labor demand curve in the short run  
A) is upward sloping.  
B) is horizontal.  
C) is the downward sloping segment of the marginal revenue schedule.  
D) is the downward sloping segment of the marginal product of labor schedule.

9. If a tax is placed on an employer  
A) workers will not have to pay the tax.  
B) both wages and employment levels will usually decrease.  
C) customers will not have to pay the tax.  
D) wages will decrease but employment levels will increase.

10. An employer who is a monopolist in the product market will probably  
A) hire more employees than a perfect competitor would.  
B) hire fewer employees than a perfect competitor would.  
C) hire the same number of employees as a perfect competitor, due to  
competitiveness in the labor market.
D) hire fewer workers at a higher wage than a perfect competitor would.

11. An employer who is a monopsonist will probably
   A) hire more workers at a higher wage than a perfect competitor.
   B) hire fewer workers at a higher wage than a perfect competitor.
   C) hire more workers at a lower wage than a perfect competitor.
   D) hire fewer workers at a lower wage than a perfect competitor.

12. Monopsony
   A) implies that the marginal expense of hiring labor exceeds the wage.
   B) is very common in the United States labor market.
   C) exists if a large state university is the only firm in town which hires people with
      Ph.D.'s in economics.
   D) implies that a firm can cut the wage as it expands its work force.

13. For two substitutes in production, if the scale effect dominates
   A) then the inputs are gross complements.
   B) then the inputs are gross substitutes.
   C) then the inputs could be either gross complements or gross substitutes.
   D) then the inputs can not be used at the same time.

14. For two substitutes in production, if the substitution effect dominates
   A) then the inputs are gross complements.
   B) then the inputs are gross substitutes.
   C) then the inputs could be either gross complements or gross substitutes.
   D) then the inputs can not be used at the same time.

15. If two inputs are complements in production
   A) then the inputs can not be used at the same time.
   B) then the inputs can be either gross complements or gross substitutes.
   C) then the inputs are gross complements.
   D) then the inputs are gross substitutes.

16. In the long run a profit-maximizing firm will select capital and labor so that
   A) the marginal product of labor equals the marginal product of capital.
   B) the wage divided by the marginal product of labor equals the rental cost of a unit
      of capital divided by the marginal product of capital.
   C) labor equals capital.
   D) the wage equals the rental cost of a unit of capital.
17. If two inputs are substitutes in production and an increase in the price of one input shifts the demand curve for the other input to the left then
   A) the scale effect is greater than the substitution effect and the two are gross complements.
   B) the scale effect is less than the substitution effect and the two are gross complements.
   C) the scale effect is greater than the substitution effect and the two are gross substitutes.
   D) the scale effect is less than the substitution effect and the two are gross substitutes.

18. Most of a payroll tax is eventually paid by
   A) employers if the supply of labor curve is very inelastic.
   B) employers if the labor demand curve is very elastic.
   C) workers if the supply of labor curve is very inelastic.
   D) workers if the supply of labor curve is very elastic.

19. A leftward shift in a monopsonist's supply of labor curve
   A) will cause the monopsonist to move along its marginal revenue product curve and will result in a higher wage and lower employment.
   B) will cause a shift in the monopsonist's labor demand curve and will result in a higher wage and lower employment.
   C) will cause the monopsonist to move along its marginal expenditure curve and will result in a higher wage and lower employment.
   D) will cause the monopsonist to increase its wage but not to cut its employment level.

20. When the price of capital increases, a firm will
   A) employ more labor because labor has become relatively cheaper.
   B) employ less labor due to the increase in costs.
   C) employ the same amount of labor.
   D) employ more, less, or the same amount of labor.

21. If an increase in the cost of labor causes the firm to use less capital, then
   A) the scale effect has dominated over the substitution effect.
   B) the substitution effect has dominated over the scale effect.
   C) the firm has moved along an isoquant curve.
   D) the firm has moved onto a higher isoquant.

22. If employers are paid a subsidy of $.75 per hour for hiring teenage workers, then
   A) the teenagers' wage rate will usually increase by less than $.75 per hour.
   B) the teenagers' wage rate will usually increase by more than $.75 per hour.
   C) the teenagers' wage rate will usually increase by exactly $.75 per hour.
   D) the teenagers' wage rate will usually decrease.
23. In the short run
   A) a firm can not hire new workers.
   B) wage rates and product prices cannot change.
   C) a firm can not add on to an assembly line or introduce new machines to the production process.
   D) employment levels cannot change.