Chapter 15 Exercises

Self-Check Questions

1. The following table shows levels of employment (labor), the marginal product at each of those levels, and the price at which the firm can sell output in the perfectly competitive market where it operates.

Labor	Marginal Product of Labor	Price of the Product
1	10	$4
2	8	$4
3	7	$4
4	5	$4
5	3	$4
6	1	$4

   a. What is the value of the marginal product at each level of labor?

   b. If the firm operates in a perfectly competitive labor market where the going market wage is $12, what is the firm's profit-maximizing level of employment?

2. The following table shows levels of employment (labor), the marginal product at each of those levels, and a monopoly's marginal revenue.

Labor	Marginal Product of Labor	Marginal Revenue
1	10	$10
2	8	$7
3	7	$5
4	5	$4
5	3	$2
6	1	$1

   a. What is the monopoly's marginal revenue product at each level of employment?

   b. If the monopoly operates in a perfectly competitive labor market where the going market wage is $20, what is the firm's profit-maximizing level of employment?

3. The following table shows the quantity demanded and supplied in the labor market for driving city buses in the town of Unionville, where all the bus drivers belong to a union.

Wage per Hour	Quantity of Workers Demanded	Quantity of Workers Supplied
$14	12,000	6,000
$16	10,000	7,000
$18	8,000	8,000
$20	6,000	9,000
$22	4,000	10,000
$24	2,000	11,000

   a. What would the equilibrium wage and quantity be in this market if no union existed?

   b. Assume that the union has enough negotiating power to raise the wage to $4 per hour higher than it would otherwise be. Is there now excess demand or excess supply of labor?

4. Do unions typically oppose new technology out of a fear that it will reduce the number of union jobs? Why or why not?

5. Compared with the share of workers in most other high-income countries, is the share of U.S. workers whose wages are determined by union bargaining higher or lower? Why or why not?

6. Are firms with a high percentage of union employees more likely to go bankrupt because of the higher wages that they pay? Why or why not?

7. Do countries with a higher percentage of unionized workers usually have less growth in productivity because of strikes and other disruptions caused by the unions? Why or why not?

8. The following table shows information from the supply curve for labor for a monopsonist—that is, the wage rate required at each level of employment.

Labor	Wage
1	$10
2	$8
3	$7
4	$5
5	$3
6	$1

   a. What is the monopsonist's marginal cost of labor at each level of employment?

   b. What is the firm's profit-maximizing level of employment and wage?

9. Explain in each of the following situations how market forces might give a business an incentive to act in a less discriminatory fashion.

   a. A local flower delivery business run by a bigoted White owner notices that many of its local customers are Black.

   b. An assembly line has traditionally only hired men, but it is having a hard time hiring sufficiently qualified workers.

   c. A biased owner of a firm that provides home health care services would like to pay lower wages to Hispanic workers than other employees.

10. Does the earnings gap between the average wages of females and the average wages of males prove labor market discrimination? Why or why not?

11. If immigration is reduced, what is the impact on the wage for low-skilled labor?

Review Questions

12. What determines the demand for labor for a firm operating in a perfectly competitive output market?

13. What determines the demand for labor for a firm with market power in the output market?

14. What is a perfectly competitive labor market?

15. What is a labor union?

16. Why do employers have a natural advantage in bargaining with employees?

17. What are some of the most important laws that protect employee rights?

18. How does the presence of a labor union change negotiations between employers and workers?

19. What is the long-term trend in American union membership?

20. Would you expect the presence of labor unions to lead to higher or lower pay for members? Would you expect a higher or lower quantity of workers hired by those employers? Explain briefly.

21. What are the main causes for the recent trends in union membership rates in the United States? Why are union rates lower in the United States than in many other developed countries?

22. What is a monopsony?

23. What is the marginal cost of labor?

24. How does monopsony affect the equilibrium wage and employment levels?

25. What is a bilateral monopoly?

26. How does a bilateral monopoly affect the equilibrium wage and employment levels compared to a perfectly competitive labor market?

27. Describe how the earnings gap between men and women has evolved in recent decades.

28. Describe how the earnings gap between Black and White workers has evolved in recent decades.

29. Does a gap between the average earnings of men and women, or between White and Black workers, prove that employers are discriminating in the labor market? Explain briefly.

30. Will a free market tend to encourage or discourage discrimination? Explain briefly.

31. What policies, when used together with antidiscrimination laws, might help to reduce the earnings gap between men and women and between White and Black workers?

32. Describe how affirmative action is applied in the labor market.

33. What factors can explain the relatively small effect of low-skilled immigration on the wages of low-skilled workers?

34. Have levels of immigration to the United States been relatively high or low in recent years? Explain.

35. How would you expect immigration by primarily low-skill workers to affect American low-skilled workers?

Critical Thinking Questions

36. Are unions and technological improvements complementary? Why or why not?

37. Will union membership continue to decline? Why or why not?

38. If the United States allows a greater quantity of highly skilled immigrants, what will be the impact on the average wages of highly skilled employees?

39. If it is not profitable to discriminate, why does discrimination persist?

40. If a company has discriminated against minorities in the past, should it be required to give priority to minority applicants today? Why or why not?

41. What is the marginal cost of labor for a firm that operates in a competitive labor market? How does this compare with the marginal cost of labor for a monopsony?

42. Given the decline in union membership over the past fifty years, what does the theory of bilateral monopoly suggest will have happened to the equilibrium level of wages over time? Why?

43. If all countries eliminated all barriers to immigration, would global economic growth increase? Why or why not?