

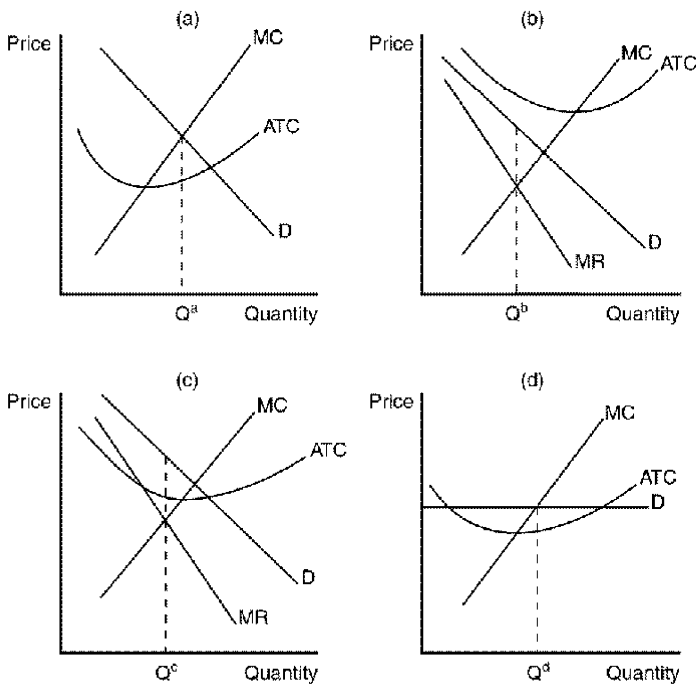
Study Guide - Exam 4

Multiple Choice

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

- _____ 1. In a monopolistically competitive industry, firms set price
- equal to marginal cost since each firm is a price taker.
 - below marginal cost since each firm is a price taker.
 - above marginal cost since each firm is a price setter.
 - always a fraction of marginal cost since each firm is a price setter.

Figure 17-2



- _____ 2. **Refer to Figure 17-2.** Which of the graphs shown would be consistent with a firm in a monopolistically competitive market that is earning a positive profit?
- Panel a
 - Panel b
 - Panel c
 - Panel d
- _____ 3. In monopolistically competitive markets, positive economic profits
- suggest that some existing firms will exit the market.
 - suggest that new firms will enter the market.
 - are sustained through government-imposed barriers to entry.
 - are never possible.

- _____ 4. The administrative burden of regulating price in a monopolistically competitive market is
- small due to economies of scale.
 - large because price is usually below marginal cost.
 - large because of the large number of firms that produce differentiated products.
 - small because firms produce with excess capacity.
- _____ 5. When the loss from a business-stealing externality exceeds the gain from a product-variety externality,
- firms are more likely to operate at efficient scale.
 - there are likely to be too many firms in a monopolistically competitive market.
 - market efficiency is likely to be enhanced by the entry of new firms.
 - the market structure is likely to be in transition.
- _____ 6. When a new firm enters a monopolistically competitive market, the individual demand curves faced by all existing firms in that market will
- shift to the left.
 - shift to the right.
 - shift in a direction that is unpredictable without further information.
 - remain unchanged. It is the supply curve that will shift.
- _____ 7. Which of the following goods are not likely to be sold in monopolistically competitive markets?
- Compact discs
 - Books
 - Cookies
 - Wheat
- _____ 8. New firms will likely enter a monopolistically competitive market when price exceeds
- marginal revenue.
 - average revenue.
 - marginal cost.
 - average total cost.
- _____ 9. A downward-sloping demand curve
- is a feature of all monopolistically competitive firms.
 - means that the firm in question will never experience a zero profit.
 - causes marginal revenue to exceed price.
 - prohibits firms from earning positive economic profits in the long run.
- _____ 10. In both perfect competition and monopolistic competition,
- each firm is, in many ways, like a monopoly.
 - each firm sells a product that is at least slightly different from those of other firms.
 - each firm faces a downward-sloping demand curve.
 - each firm has many competitors.
- _____ 11. Examples of monopolistically competitive markets include the markets for
- restaurants and furniture.
 - wheat and corn.
 - postage stamps and wooden pencils.
 - All of the above are correct.
- _____ 12. To maximize its profit, a monopolistically competitive firm chooses its level of output by looking for the
- level of output at which price equals marginal cost.
 - level of output at which marginal revenue equals marginal cost.
 - level of output at which marginal revenue equals zero.
 - level of output at which average total cost is minimized.

- _____ 13. Suppose for some firm that average total cost is minimized at Q_1 units of output. For a monopolistically competitive firm in long-run equilibrium, Q_1
- is also the level of output at which marginal cost equals average total cost.
 - exceeds the level of output at which there is a point of tangency between the demand curve and the average total cost curve.
 - exceeds the level of output at which marginal revenue equals marginal cost.
 - All of the above are correct.
- _____ 14. Entry by new firms into a monopolistically competitive market
- creates additional consumer surplus.
 - imposes a positive externality on existing firms.
 - leads to the same externalities that are observed when new firms enter a perfectly competitive market.
 - increases the demand for existing firms' products.
- _____ 15. A monopolistically competitive firm faces the following demand curve for its product:

Price (\$)	10	9	8	7	6	5	4	3	2	1
Quantity	2	4	6	8	10	12	14	16	18	20

The firm has total fixed costs of \$40 and a constant marginal cost of \$2 per unit. We can conclude that

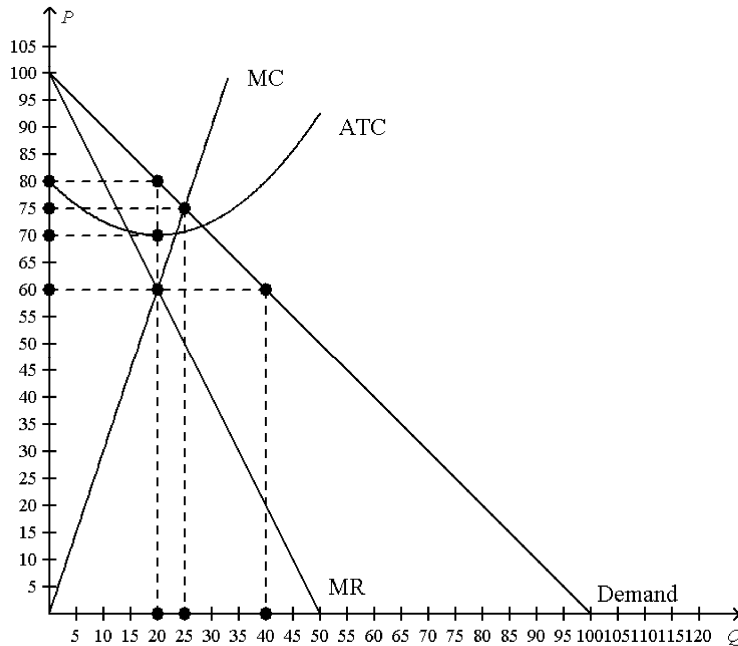
- firms will exit this market.
 - firms will enter this market.
 - this market is in long-run equilibrium.
 - this firm is operating at efficient scale.
- _____ 16. A firm has the following cost structure:

Output	1	2	3	4	5	6	7
Total Cost(\$)	30	32	36	42	50	63	77

If this firm is in a typical monopolistically competitive market, it will likely produce

- four or fewer units of output.
- five units of output.
- more than five units of output.
- None of the above are necessarily correct because there is not enough information to tell.

Figure 17-5



- _____ 17. Refer to Figure 17-5. This figure depicts a situation in a monopolistically competitive market. How much profit will the monopolistically competitive firm earn in this situation?
- A \$10 profit.
 - A \$20 profit.
 - A \$200 profit.
 - No profit, since monopolistically competitive firms never earn economic profit.
- _____ 18. In the long run,
- monopolistically competitive firms earn a higher profit than perfectly competitive firms because monopolistically competitive firms have some monopoly power.
 - monopolistically competitive firms produce a higher output than perfectly competitive firms because competition drives the perfectly competitive firm's output down.
 - both monopolistically competitive and perfectly competitive firms produce where $P = MC$.
 - both monopolistically competitive and perfectly competitive firms produce where $P = ATC$.
- _____ 19. Under which of the following market structures would the highest output of a particular good be produced?
- Perfect competition
 - Monopolistic competition
 - Oligopoly
 - Monopoly
- _____ 20. Under which of the following market structures would consumers likely receive the most product variety?
- Perfect competition
 - Monopolistic competition
 - Oligopoly
 - Monopoly

- ___ 21. In which of the following market structures can firms earn economic profits in the long run?
- Perfect competition
 - Monopolistic competition
 - Monopoly
 - Both b and c

Table 17-3

Traci's Hairstyling is one salon among many in the market for hairstyling. The following table presents cost and revenue data for Traci's Hairstyling.

COSTS			REVENUES			
<i>Quantity Produced</i>	<i>Total Cost</i>	<i>Marginal Cost</i>	<i>Quantity Demanded</i>	<i>Price</i>	<i>Total Revenue</i>	<i>Marginal Revenue</i>
0	\$10	--	0	\$50		--
1	\$15		1	\$45		
2	\$21		2	\$40		
3	\$28		3	\$35		
4	\$36		4	\$30		
5	\$45		5	\$25		
6	\$55		6	\$20		
7	\$66		7	\$15		
8	\$78		8	\$10		

- ___ 22. **Refer to Table 17-3.** When maximizing profit, what price does Traci's charge for hairstyling?
- \$20
 - \$25
 - \$30
 - \$35
- ___ 23. Select the type of market that is described by the following attributes: many firms, differentiated products, and free entry.
- Natural monopoly
 - Perfectly competition
 - Monopolistic competition
 - Monopoly
- ___ 24. Which of the following is a characteristic of oligopoly or monopolistic competition, but *not* perfect competition?
- Advertising and sales promotion
 - Profit maximization according to the $MR = MC$ rule
 - Firms being price takers rather than price makers
 - Horizontal demand and marginal revenue curves
- ___ 25. Which of the following best describes the idea of excess capacity in monopolistic competition?
- Firms produce more output than is socially desirable.
 - The output produced by a typical firm is less than what would occur at the minimum point on its ATC curve.
 - Due to product differentiation, firms choose output levels where $P > ATC$.
 - Firms keep some surplus output on hand in case there is a shift in the demand for their product.

- _____ 26. Firms that spend a large amount of money on advertising a particular product are likely to be providing consumers with
- information about the availability of the product.
 - information about product price.
 - a signal of product quality.
 - a good example of wasted resources.
- _____ 27. Which of the following statements is *false*?
- The typical monopolistically competitive firm could reduce its average total cost if it produced more output.
 - Monopolistically competitive firms advertise in order to increase the elasticity of the demand curve they face.
 - Expensive advertising might help consumers if it is a signal that the product is good.
 - Brand names acquired at great cost might help consumers by assuring quality.
- _____ 28. When quality cannot be easily judged in advance, what provides consumers with information about the quality of a product?
- A brand name
 - A tie-in
 - The quantity available for sale
 - The amount of deadweight loss
- _____ 29. Most of the total income earned in the U.S. economy is ultimately paid to households in the form of
- profit.
 - rent.
 - interest.
 - wages.
- _____ 30. In the United States economy, which of the following factors of production is considered to be the most important in terms of the magnitude of income earned by that factor of production?
- land
 - labor
 - profit
 - capital
- _____ 31. When a firm is a profit maximizer
- it is driven to produce as much of its product as possible.
 - it will measure its success by the number of employees it has.
 - its revenue will always be maximized as well.
 - it does not care directly about the number of workers it hires.
- _____ 32. If the price of airline tickets falls, what will happen to the demand curve for flight attendants?
- It will shift to the right.
 - It will shift to the left.
 - The direction of the shift is ambiguous.
 - It will remain unchanged.
- _____ 33. Which of the following events could increase the demand for labor?
- a decrease in output price
 - a decrease in the amount of capital available for workers to use
 - an increase in the marginal productivity of workers
 - All of the above are correct.

- _____ 34. A Luddite would be expected to fear
- labor-saving technologies.
 - labor-augmenting technologies.
 - supply-shifting technologies.
 - the Chairman of the Federal Reserve.
- _____ 35. The marginal product of labor is defined as the change in
- output per additional unit of revenue.
 - output per additional unit of labor.
 - revenue per additional unit of labor.
 - revenue per additional unit of output.

Table 18-2

Consider the following daily production data for Davis Golf Balls, Inc. Davis Golf Balls, Inc. sells golf balls for 50 cents each and pays the workers a wage of \$30 a day.

Labor (number of workers)	Quantity (golf balls per day)	Marginal Product of Labor (golf balls per day)	Value of the Marginal Product of Labor	Wage (per day)	Marginal Profit
0	0				
1	100				
2	250				
3	375				
4	475				
5	550				
6	600				

- _____ 36. **Refer to Table 18-2.** Assuming Davis Golf Balls, Inc. is a competitive, profit-maximizing firm, how many workers will the firm hire?
- 3 workers
 - 4 workers
 - 5 workers
 - 6 workers

Table 18-3

Number of Workers	Output	Marginal Product of Labor	Value of Marginal Product of Labor	Wage	Marginal Profit
0	0				
1	100		\$1,000	\$500	\$500
2		80	\$ 800	\$500	
3		60		\$500	\$100
4	280		\$ 400	\$500	
5		20		\$500	

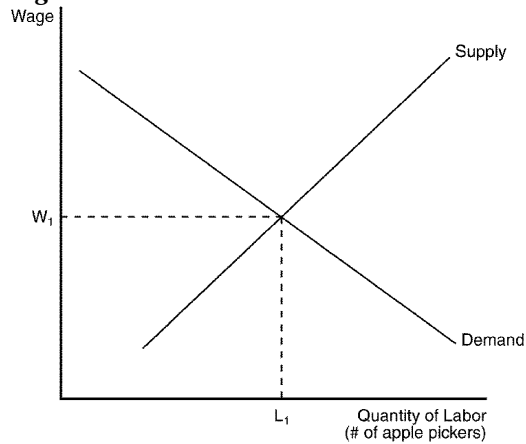
- _____ 37. **Refer to Table 18-3.** What is the market price of the final good?
- \$5
 - \$6
 - \$8
 - \$10
- _____ 38. **Refer to Table 18-3.** The fact that the production function exhibits diminishing marginal productivity implies that
- total production decreases beyond a certain level of output.
 - labor markets are not always competitive.
 - the additions to total output get smaller as more workers are hired.
 - marginal profit is negative.
- _____ 39. Which of the following statements is correct?
- The value of the marginal product curve is the labor demand curve for competitive, profit-maximizing firms.
 - A competitive, profit-maximizing firm hires workers up to the point where the value of the marginal product of labor equals the wage.
 - By hiring labor up to the point where the value of the marginal product of labor equals the wage, the firm is producing where price equals marginal cost.
 - All of the above are correct.
- _____ 40. Sally runs a hair styling salon. Sally is a profit-maximizing owner whose firm operates in a competitive market. The marginal cost of a haircut is \$7. What is the maximum wage that Sally will pay her stylists?
- less than \$7 per haircut
 - \$7 per haircut
 - more than \$7 haircut
 - There is insufficient information to answer this question.
- _____ 41. Diminishing marginal product occurs when
- the increases to total output are declining.
 - marginal product is decreasing.
 - total output is decreasing.
 - Both a and b are correct.
- _____ 42. When a firm experiences diminishing marginal product, what is the shape of the curve that represents the value of the marginal product of labor?
- U-shaped
 - flat
 - downward sloping
 - upward sloping

- ___ 43. The negative slope of the value of marginal product curve is most easily explained by
- tight labor markets.
 - a surplus of workers.
 - diminishing marginal product.
 - diminishing marginal cost.
- ___ 44. A profit-maximizing, competitive firm will always hire an additional worker when the additional worker makes a positive contribution to
- total revenue.
 - total profit.
 - the value of the marginal product of labor.
 - marginal revenue.

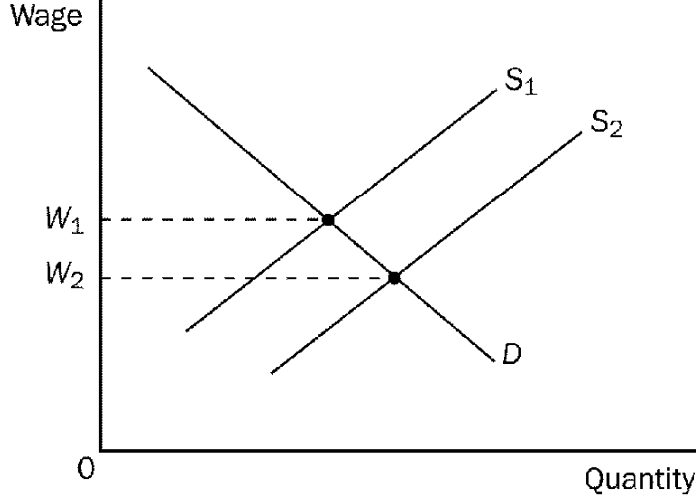
Scenario 18-2

Jerry has two jobs, one for the winter and one for the summer. In the winter, he works as a lift attendant at a ski resort where he earns \$10 per hour. During the summer, Jerry drives a tour bus around the ski resort, earning \$12 per hour.

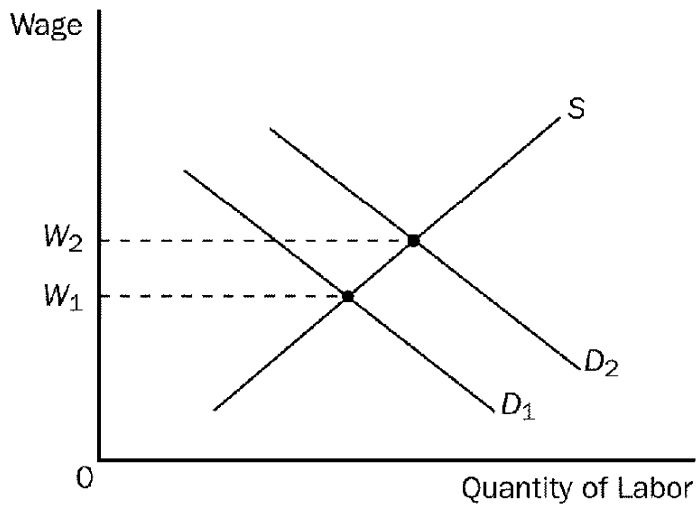
- ___ 45. **Refer to Scenario 18-2.** During the winter months, what is Jerry's opportunity cost of taking an hour off work to go skiing?
- \$12
 - between \$10 and \$12
 - \$10
 - less than \$10
- ___ 46. **Refer to Scenario 18-2.** During the summer months, what is Jerry's opportunity cost of taking an hour off work to go hiking?
- \$12
 - between \$10 and \$12
 - \$10
 - less than \$10
- ___ 47. What happens to the labor supply curves in both countries when Mexican workers leave Mexico and move to the United States?
- Labor supply decreases in Mexico and decreases in the United States.
 - Labor supply increases in the United States and increases in Mexico.
 - Labor supply increases in the United States and decreases in Mexico.
 - Labor supply increases in Mexico and decreases in United States.
- ___ 48. Consider the labor market for computer programmers, which is in equilibrium. During the late 1990s, the value of the marginal product of all computer programmers increased dramatically. Holding all else equal, what effect did this process have on the equilibrium quantity in the labor market for computer programmers?
- The equilibrium quantity increased.
 - The equilibrium quantity decreased.
 - The equilibrium quantity did not change.
 - It is not possible to determine the equilibrium quantity.

Figure 18-2

- _____ 49. **Refer to Figure 18-2.** If the apple pickers start working fewer hours (by taking more vacation time), the equilibrium wage will
- fall below w_1 due to a shift in demand.
 - fall below w_1 due to a shift in supply.
 - rise above w_1 due to a shift in demand.
 - rise above w_1 due to a shift in supply.
- _____ 50. **Refer to Figure 18-2.** What happens to the profit earned by apple producers and to the wage earned by apple pickers when the price of apples rises?
- Profit will rise, and the wage will fall.
 - Profit will fall, and the wage will rise.
 - Both profit and the wage will rise.
 - Both profit and the wage will fall.

Figure 18-3

51. Refer to Figure 18-3. When the relevant labor supply curve is S_1 and the labor market is in equilibrium,
- the wage is W_1 .
 - the opportunity cost of leisure to workers is W_1 .
 - the value of the marginal product of labor to firms is W_1 .
 - All of the above are correct.

Figure 18-4

52. Refer to Figure 18-4. When the relevant labor demand curve is D_1 and the labor market is in equilibrium,
- the value of the marginal product of labor to firms is less than W_1 .
 - the opportunity cost of leisure to workers is greater than W_1 .
 - the wage is W_1 .
 - All of the above are correct.

- _____ 53. **Refer to Figure 18-4.** Assume $W_1 = \$20$ and $W_2 = \$22$ and the market is always in equilibrium. Then the shift of the labor demand curve from D_1 to D_2
- increases the value of the marginal product of labor by \$2.
 - increases the value of the marginal product of labor by less than \$2.
 - decreases the value of the marginal product of labor by more than \$2.
 - does not change the value of the marginal product of labor.
- _____ 54. Suppose medical research provides evidence that eating bananas provides far greater health benefits than was previously thought. The resulting increase in the demand for bananas
- increases the marginal product of banana pickers for any given number of banana pickers.
 - increases the value of the marginal product of banana pickers for any given number of banana pickers.
 - increases the supply of banana pickers.
 - All of the above are correct.
- _____ 55. Which of the following statements is correct?
- The term "monopoly" refers to either a market with one buyer or to a market with one seller.
 - The term "monopoly" refers to a market with one buyer, while the term "monopsony" refers to a market with one seller.
 - The term "monopsony" refers to a market with one buyer, while the term "monopoly" refers to a market with one seller.
 - The term "monopsony" refers to a market with either one buyer or one seller.
- _____ 56. If one were to consider a university as a business, the computers in the computer labs would be regarded by economists as
- technology flows.
 - mechanization flows.
 - part of the university's stock of capital.
 - a flow of services from the university's stock of capital.
- _____ 57. The owners of capital resources are compensated according to the
- purchase price of the capital stock.
 - marginal product of capital.
 - value of the marginal product of capital.
 - absolute level of production of final goods and services.
- _____ 58. Because of diminishing returns, a factor in scarce supply has
- a low marginal product and a low rental price.
 - a low marginal product and a high rental price.
 - a high marginal product and a low rental price.
 - a high marginal product and a high rental price.
- _____ 59. Suppose that the wage paid to workers who detassel corn rises. What happens in the market for workers who weed soybean fields, given that workers who detassel corn can easily work weeding soybean fields?
- The demand curve for soybean workers increases.
 - The demand curve for soybean workers decreases.
 - The supply curve for soybean workers increases.
 - The supply curve for soybean workers decreases.

- _____ 60. The rental price of land is
- the price paid for ownership of the land.
 - the price paid for the flow of services from land over a specified time period.
 - always more than the purchase price.
 - All of the above are correct.
- _____ 61. Owners of land are compensated according to the
- absolute level of production from the land.
 - number of laborers the land can support.
 - purchase price of the land stock.
 - value of the marginal product of land.
- _____ 62. The equilibrium rental income paid to landowners at any point in time equals the
- purchase price of land.
 - value of the marginal product of land.
 - marginal product of land.
 - wage paid to laborers.
- _____ 63. Suppose that a rare virus, transmitted by mosquitoes, infects all the people who live in Minnesota. The virus is fatal to all blondes, but everyone else is unaffected. Assuming that land and labor are complements in a farming production function, what would happen to the wages earned by workers and the rents earned by landowners?
- Both wages and rents would increase.
 - Both wages and rents would decrease.
 - Wages would increase, and rents would decrease.
 - Wages would decrease, and rents would increase.
- _____ 64. A difference in wages that arises to offset the nonmonetary characteristics of different jobs is known as
- a compensating differential.
 - an inefficiency wage.
 - the equilibrium difference.
 - a union wage.
- _____ 65. Workers who work the night shift are often paid more than those who do identical work on the day shift. This is referred to as a
- discriminatory wage practice.
 - compensating differential.
 - wage inequity.
 - a market inefficiency.
- _____ 66. If a worker is indifferent between a job with a wage of \$12 per hour and a job with a wage of \$15 per hour, then the
- higher-paying job enjoys a compensating wage differential of \$3 per hour.
 - higher-paying job enjoys a compensating wage differential of \$15 per hour.
 - higher-paying job is intrinsically more attractive than the lower-paying job.
 - worker's preferences are not rational.
- _____ 67. The statement that "coal miners are paid more than workers with similar levels of education" is likely to reflect the fact that
- coal mining is a declining industry.
 - coal mining jobs are potentially more dangerous than jobs with comparable education requirements.
 - all coal mines use union labor.
 - coal exports are rising.

- _____ 68. Assuming that all other things are equal, including the wage, which of the following statements is correct?
- The quantity of labor supplied for easy jobs exceeds that for difficult jobs.
 - The quantity of labor supplied for fun jobs exceeds that for dull jobs.
 - The quantity of labor supplied for safe jobs exceeds that for dangerous jobs.
 - All of the above are correct.

Scenario 19-1

Ferris B., a student at a community college, is considering what he should do for summer employment. Two recruiters show up at his school in search of summer workers. Recruiter A is looking for lifeguards to patrol the beach at an exclusive island resort in the Caribbean. Recruiter B is looking for workers to staff positions at a summer youth camp.

- _____ 69. **Refer to Scenario 19-1.** Ferris is carefully considering the options that each recruiter presents. On the basis of knowledge obtained in his economics class, Ferris concludes that
- wages are unlikely to be affected by job requirements.
 - since the lifeguard job would expose him to a threat of skin cancer, the wage will be low.
 - if the lifeguard job has a requirement for special training or certification, the wage offer will be higher than otherwise.
 - if the lifeguard job also requires a willingness to clean public restrooms, the wage offer will be lower than otherwise.
- _____ 70. Bob and Rob are identical twins who attended grammar school through college together. Bob took a job as an engineer who must travel out of state once a week. Rob took a job as an engineer who does not have to travel out of the state. Bob earns \$100,000 a year, and Rob earns \$85,000 a year. Select the best explanation for this wage difference.
- Rob has more human capital relative to Bob.
 - Rob has less human capital relative to Bob.
 - Bob receives a higher wage to compensate for the disagreeable nature of business travel.
 - Bob's higher salary supports the signaling theory of education.
- _____ 71. Mary and Ashley are identical twins who attended grammar school through high school together. Mary got a job after high school, and Ashley got a job after graduating from college. Mary earns \$36,000 a year, and Ashley earns \$69,000 a year. Select the best explanation for this wage difference.
- Ashley has more human capital relative to Mary.
 - Mary has more human capital relative to Ashley.
 - Mary has received a compensating differential
 - Ashley has received a compensating differential.

Scenario 19-2

Travis, a student at a community college, is considering what he should do for summer employment. Two recruiters show up at his school in search of summer workers. Recruiter A is looking for workers to help a disaster relief agency distribute food aid in Africa. Recruiter B is looking for custodial help to clean motel rooms in a motel located near the entrance to a famous national park.

- _____ 72. **Refer to Scenario 19-2.** Travis is carefully considering the options that each recruiter presents. On the basis of knowledge obtained in his economics class, Travis concludes that
- if the motel job also requires an ability to do general plumbing repairs, the wage offer will be higher than otherwise.
 - if the food distribution job has a requirement for special training or certification, the wage offer will be higher than otherwise.
 - if the food distribution job exposes him to the Ebola virus, the wage will be high.
 - All of the above are correct.
- _____ 73. Human capital
- represents the accumulation of investments in people, such as education and on-the-job training.
 - represents the types of capital built by people rather than by machines.
 - is less important to the economy's production than physical capital.
 - Both a and b are correct.
- _____ 74. Philip is the best contractor in town, and he earns \$400,000 a year. Billy is an average contractor in town, and he earns \$80,000 a year. Philip's contracting services
- are valued more by the market relative to Billy's and that explains why his income is higher than Billy's.
 - are valued less by the market relative to Billy's and that explains why his income is higher than Billy's.
 - are valued less by the market relative to Billy's and that explains why his income is lower than Billy's.
 - are more expensive because he receives a compensating differential.
- _____ 75. In general, the higher a person's education level,
- the higher the person's earnings.
 - the more physically attractive the person is likely to be.
 - the more socially outgoing the person is likely to be.
 - All of the above are correct.
- _____ 76. The belief that education makes a person more productive and thereby raises his or her wage is referred to as the
- compensating-differential view of education.
 - natural-ability view of education.
 - unmeasured-variables view of education.
 - human-capital view of education.
- _____ 77. The wage difference between jobs that require education and those that don't
- is not likely to be related to productivity differences.
 - is a barrier to obtaining an education.
 - does not affect the supply of workers in the different labor markets.
 - encourages workers to bear the cost of acquiring education.

- _____ 78. Nemedra and Aquilonia have just started to trade with each other. Nemedra exports goods produced with skilled labor and imports goods made with unskilled labor from Aquilonia. Over time, we would expect that the wages of skilled labor in Nemedra will
- rise, and the wages of unskilled labor in Nemedra will fall.
 - fall, and the wages of unskilled labor in Nemedra will rise.
 - rise, and the wages of unskilled labor in Nemedra will rise.
 - fall, and the wages of unskilled labor in Nemedra will fall.
- _____ 79. Which of the following explains the widening earnings gap between skilled and unskilled workers in the United States?
- International trade has altered the relative demand for skilled and unskilled labor.
 - Changes in technology have altered the relative demand for skilled and unskilled labor.
 - Both a and b are correct.
 - None of the above is correct.
- _____ 80. The difference in wages paid to major-league baseball players and minor-league baseball players is most likely due to
- chance.
 - natural ability.
 - the fact that the players' union is strong.
 - a compensating differential.
- _____ 81. Which of the following statements is true of wages, educational attainment, and gender?
- Male workers are compensated for attending college, while female workers generally are not.
 - Female workers are compensated for attending college, while male workers generally are not.
 - Both genders receive a higher wage for attending college.
 - Neither gender receives a higher wage for attending college.
- _____ 82. Why do major-league baseball players get paid more than minor-league players?
- Major-league players are better athletes.
 - The higher wage reflects a compensating differential.
 - Playing in the major leagues is more pleasant than playing in the minor leagues.
 - The higher wage is often due to educational discrepancies.
- _____ 83. In the signaling theory of education,
- schooling itself does not lead to more productive workers.
 - the worker signals to the employer that he is a valuable employee because he was willing to spend time to get an education.
 - schooling enhances worker productivity.
- (i) and (ii) only
 - (ii) and (iii) only
 - (ii) only
 - (iii) only

- _____ 84. Above-equilibrium wages caused by efficiency wages will most likely result in
- (i) an increase in the quantity of labor supplied.
 - (ii) a surplus of labor.
 - (iii) increased unemployment.
- a. (i) and (ii)
 - b. (ii) and (iii)
 - c. (i) and (iii)
 - d. (i), (ii), and (iii)
- _____ 85. A worker association that bargains with employers over wages and working conditions is called
- a. a strike.
 - b. an oligopoly.
 - c. a firm.
 - d. a union.
- _____ 86. The organized withdrawal of labor from a firm by a union is called
- a. a strike.
 - b. a bargain.
 - c. a monopoly.
 - d. a tournament.
- _____ 87. Which of the following is *not* an example of efficiency wages?
- a. More productive workers are paid more to reflect their higher output.
 - b. Higher wages induce higher output from workers.
 - c. Better quality applicants apply for jobs that pay above-equilibrium wages.
 - d. Workers are less likely to leave jobs that pay above-equilibrium wages.
- _____ 88. The theory of efficiency wages challenges the assumption that
- a. workers are efficient.
 - b. workers have an incentive to shirk their responsibilities to their employers.
 - c. wages adjust to balance labor supply and labor demand.
 - d. firms sometimes choose to pay their workers above-equilibrium wages.
- _____ 89. In 1913, the Ford Motor Company decided to pay its employees \$5 a day. This wage was significantly higher than what any other organization offered. Henry Ford believed that this wage would make his employees happier, increase their productivity, and lower employee turnover. Economists would say that Mr. Ford offered his employees
- a. a union.
 - b. an efficiency wage.
 - c. a diminishing rate of marginal return.
 - d. a leisure wage.
- _____ 90. Evidence of differences in average wages of black workers compared to white workers
- a. does not alone provide conclusive evidence of discrimination.
 - b. clearly indicates differences in productivity between races.
 - c. is seldom used to provide evidence of discriminatory bias.
 - d. clearly indicates discrimination on the basis of race.

- _____ 91. Economists generally agree that
- human capital theory provides the best explanation of discriminatory practices.
 - differences in average wages do not by themselves provide conclusive evidence about the magnitude of discrimination effects in labor markets.
 - discrimination is exclusively an economic, rather than political, phenomenon.
 - most of the wage differentials observed in the U.S. economy are due to discrimination.
- _____ 92. A natural antidote to employer discrimination in market economies is the
- threat of judicial review.
 - profit motive.
 - political process.
 - union movement.

Scenario 19-4

Assume that the labor market for barbers is competitive and that it is differentiated into two groups: barbers who are bald (or going bald) and those who have a full head of hair. Assume that the barbers in this market have identical hair-cutting ability, regardless of whether they are bald or not. Currently the equilibrium wage in the bald barber market is lower than that in the nonbald market. Further assume that the market for haircuts is competitive.

- _____ 93. **Refer to Scenario 19-4.** Competition in the market for haircuts is consistent with which of the following statements?
- Firms hiring nonbald barbers will have a cost advantage, leading to an increase in the demand for nonbald barbers.
 - All firms that hire only bald barbers will go out of business.
 - Firms hiring bald barbers will enter the market, increasing the demand for bald barbers.
 - Firms hiring nonbald barbers will enter the market, increasing the demand for nonbald barbers.
- _____ 94. **Refer to Scenario 19-4.** If some consumers in the market for haircuts have a strong preference for having their hair cut by a barber who is not going bald, then
- the difference in wages will eventually disappear since a haircut is a homogeneous good.
 - barbershops that hire barbers with hair will be able to charge a higher price for a haircut to those consumers who have a strong preference for barbers with hair.
 - barbershops that hire barbers with hair will always be much more profitable.
 - barbershops that hire bald barbers will always be much more profitable.
- _____ 95. Regarding the possibility of labor-market discrimination, a consensus view among economists is that
- all wage differences among groups are attributable to differences in human capital and compensating differentials.
 - most wage differences among groups are attributable to discrimination.
 - wage differences among groups are not sufficient by themselves to determine how much discrimination there is.
 - many employers use compensating differentials to hide discriminatory practices.

- _____ 96. In discussing discrimination and the wage differences that exist between men and women and between blacks and whites, it has been said that "the disease is political even if the symptom is economic." What does this mean?
- Wage differences persist because the political system has failed to enact laws to equalize wages among all groups.
 - Wage differences exist because of past discrimination on the part of political bodies such as city councils and school boards.
 - Wage differences exist because of the differences in the political views of the different groups.
 - Wage differences exist because the political system is biased against paying compensating differentials.
- _____ 97. Discrimination may persist even in competitive markets when the source of the discrimination is
- employer prejudice.
 - customer prejudice.
 - wage prejudice.
 - Both a and b are correct.
- _____ 98. Evidence from a 1988 study of the market for professional basketball players
- found no evidence of consumer-driven wage discrimination.
 - found some evidence of consumer-driven wage discrimination.
 - found that measurement of marginal productivity was very difficult for basketball players.
 - indicated that sports with strong player associations are unlikely to experience wage discrimination.
- _____ 99. Which of the following affects a worker's wage?
- worker characteristics such as years of experience and education
 - job attributes such as the unpleasantness of the work
 - discrimination based on the age, race, or gender of the worker
- (i) and (ii) only
 - (i) and (iii) only
 - (ii) and (iii) only
 - (i), (ii), and (iii)
- _____ 100. Which of the following statements is *not* correct?
- If the signaling theory of education is correct, additional schooling does not affect worker productivity but rather signals a correlation between natural ability and education.
 - The theory of efficiency wages suggests that firms pay higher wages to workers in order to induce workers to be more productive.
 - Discrimination against workers of a certain race or ethnicity is often in conflict with a firm's desire to maximize profits.
 - The theory of compensating wage differentials reflects the different skills, abilities, and productivity of workers.

Study Guide - Exam 4 Answer Section

MULTIPLE CHOICE

- | | | | | |
|-----|-----------------------------|--------|-----------|-------------------------------|
| 1. | ANS: C
MSC: Interpretive | DIF: 2 | REF: 17-1 | TOP: Price |
| 2. | ANS: C
MSC: Interpretive | DIF: 2 | REF: 17-1 | TOP: Monopolistic competition |
| 3. | ANS: B
MSC: Interpretive | DIF: 1 | REF: 17-1 | TOP: Long-run equilibrium |
| 4. | ANS: C
MSC: Interpretive | DIF: 2 | REF: 17-1 | TOP: Regulation |
| 5. | ANS: B
MSC: Interpretive | DIF: 2 | REF: 17-1 | TOP: Externalities |
| 6. | ANS: A
MSC: Analytical | DIF: 2 | REF: 17-1 | TOP: Demand curve |
| 7. | ANS: D
MSC: Applicative | DIF: 1 | REF: 17-1 | TOP: Monopolistic competition |
| 8. | ANS: D
MSC: Interpretive | DIF: 2 | REF: 17-1 | TOP: Long-run equilibrium |
| 9. | ANS: A
MSC: Interpretive | DIF: 2 | REF: 17-1 | TOP: Demand curve |
| 10. | ANS: D
MSC: Definitional | DIF: 1 | REF: 17-1 | TOP: Monopolistic competition |
| 11. | ANS: A
MSC: Applicative | DIF: 1 | REF: 17-1 | TOP: Monopolistic competition |
| 12. | ANS: B
MSC: Interpretive | DIF: 2 | REF: 17-1 | TOP: Profit maximization |
| 13. | ANS: D
MSC: Analytical | DIF: 3 | REF: 17-1 | TOP: Long-run equilibrium |
| 14. | ANS: A
MSC: Interpretive | DIF: 3 | REF: 17-1 | TOP: Externalities |
| 15. | ANS: C
MSC: Analytical | DIF: 3 | REF: 17-1 | TOP: Long-run equilibrium |
| 16. | ANS: A
MSC: Analytical | DIF: 3 | REF: 17-1 | TOP: Profit maximization |
| 17. | ANS: C
MSC: Analytical | DIF: 2 | REF: 17-1 | TOP: Profit |
| 18. | ANS: D
MSC: Interpretive | DIF: 2 | REF: 17-1 | TOP: Profit |
| 19. | ANS: A
MSC: Analytical | DIF: 2 | REF: 17-1 | TOP: Markets |
| 20. | ANS: B
MSC: Analytical | DIF: 2 | REF: 17-1 | TOP: Markets |

21. ANS: C DIF: 2 REF: 17-1 TOP: Profit
MSC: Analytical
22. ANS: C DIF: 2 REF: 17-1 TOP: Profit maximization
MSC: Applicative
23. ANS: C DIF: 1 REF: 17-1 TOP: Monopolistic competition
MSC: Definitional
24. ANS: A DIF: 2 REF: 17-1 TOP: Monopolistic competition
MSC: Interpretive
25. ANS: B DIF: 2 REF: 17-1 TOP: Excess capacity
MSC: Interpretive
26. ANS: C DIF: 2 REF: 17-2 TOP: Advertising
MSC: Interpretive
27. ANS: B DIF: 2 REF: 17-2 TOP: Advertising
MSC: Interpretive
28. ANS: A DIF: 1 REF: 17-2 TOP: Advertising
MSC: Interpretive
29. ANS: D DIF: 1 REF: 18-0 TOP: Factor markets
MSC: Definitional
30. ANS: B DIF: 1 REF: 18-0 TOP: Factor markets
MSC: Definitional
31. ANS: D DIF: 2 REF: 18-1 TOP: Labor demand
MSC: Interpretive
32. ANS: B DIF: 2 REF: 18-1 TOP: Labor demand
MSC: Applicative
33. ANS: C DIF: 2 REF: 18-1 TOP: Labor demand
MSC: Applicative
34. ANS: A DIF: 1 REF: 18-1 TOP: Labor demand
MSC: Interpretive
35. ANS: B DIF: 1 REF: 18-1 TOP: Marginal product of labor
MSC: Definitional
36. ANS: C DIF: 3 REF: 18-1
TOP: Marginal product of labor, Value of the marginal product MSC: Analytical
37. ANS: D DIF: 2 REF: 18-1
TOP: Marginal product of labor, Value of the marginal product MSC: Analytical
38. ANS: C DIF: 1 REF: 18-1 TOP: Diminishing marginal product
MSC: Definitional
39. ANS: D DIF: 2 REF: 18-1
TOP: Marginal product of labor, Value of the marginal product MSC: Interpretive
40. ANS: D DIF: 3 REF: 18-1
TOP: Marginal product of labor, Value of the marginal product MSC: Analytical
41. ANS: D DIF: 2 REF: 18-1 TOP: Diminishing marginal product
MSC: Interpretive
42. ANS: C DIF: 2 REF: 18-1 TOP: Value of the marginal product
MSC: Interpretive
43. ANS: C DIF: 2 REF: 18-1 TOP: Value of the marginal product
MSC: Applicative

44.	ANS: B MSC: Analytical	DIF: 2	REF: 18-1	TOP: Value of the marginal product
45.	ANS: C MSC: Interpretive	DIF: 1	REF: 18-2	TOP: Labor supply
46.	ANS: A MSC: Interpretive	DIF: 1	REF: 18-2	TOP: Labor supply
47.	ANS: C MSC: Applicative	DIF: 1	REF: 18-2	TOP: Labor supply
48.	ANS: A MSC: Applicative	DIF: 2	REF: 18-1,18-3	TOP: Labor-market equilibrium
49.	ANS: D MSC: Analytical	DIF: 2	REF: 18-3	TOP: Labor-market equilibrium
50.	ANS: C MSC: Analytical	DIF: 2	REF: 18-3	TOP: Labor-market equilibrium
51.	ANS: D MSC: Analytical	DIF: 2	REF: 18-3	TOP: Labor-market equilibrium
52.	ANS: C MSC: Analytical	DIF: 2	REF: 18-3	TOP: Labor-market equilibrium
53.	ANS: A MSC: Analytical	DIF: 2	REF: 18-3	TOP: Labor-market equilibrium
54.	ANS: B MSC: Analytical	DIF: 3	REF: 18-3	TOP: Labor-market equilibrium
55.	ANS: C MSC: Definitional	DIF: 1	REF: 18-3	TOP: Labor-market equilibrium
56.	ANS: C MSC: Interpretive	DIF: 2	REF: 18-4	TOP: Capital
57.	ANS: C MSC: Interpretive	DIF: 2	REF: 18-4	TOP: Capital
58.	ANS: D MSC: Analytical	DIF: 2	REF: 18-4	TOP: Factor markets
59.	ANS: D MSC: Applicative	DIF: 2	REF: 18-2, 18-4	TOP: Labor supply
60.	ANS: B MSC: Interpretive	DIF: 2	REF: 18-4	TOP: Land markets
61.	ANS: D MSC: Interpretive	DIF: 2	REF: 18-4	TOP: Land markets
62.	ANS: B MSC: Applicative	DIF: 2	REF: 18-4	TOP: Land markets
63.	ANS: C MSC: Analytical	DIF: 3	REF: 18-4	TOP: Land markets
64.	ANS: A MSC: Definitional	DIF: 1	REF: 19-1	TOP: Compensating differentials
65.	ANS: B MSC: Definitional	DIF: 2	REF: 19-1	TOP: Compensating differentials
66.	ANS: A MSC: Definitional	DIF: 1	REF: 19-1	TOP: Compensating differentials

67. ANS: B DIF: 2 REF: 19-1 TOP: Compensating differentials
MSC: Interpretive
68. ANS: D DIF: 2 REF: 19-1 TOP: Compensating differentials
MSC: Interpretive
69. ANS: C DIF: 2 REF: 19-1 TOP: Human capital, Compensating differentials MSC: Interpretive
70. ANS: C DIF: 2 REF: 19-1 TOP: Compensating differentials, Human capital, Signaling MSC: Applicative
71. ANS: A DIF: 2 REF: 19-1 TOP: Human capital, Compensating differentials MSC: Applicative
72. ANS: D DIF: 2 REF: 19-1 TOP: Human capital, Compensating differentials MSC: Interpretive
73. ANS: A DIF: 1 REF: 19-1 TOP: Human capital
MSC: Definitional
74. ANS: A DIF: 2 REF: 19-1 TOP: Human capital
MSC: Interpretive
75. ANS: A DIF: 1 REF: 19-1 TOP: Human capital
MSC: Applicative
76. ANS: D DIF: 1 REF: 19-1 TOP: Human capital
MSC: Definitional
77. ANS: D DIF: 1 REF: 19-1 TOP: Human capital
MSC: Applicative
78. ANS: A DIF: 3 REF: 19-1 TOP: Wages
MSC: Analytical
79. ANS: C DIF: 1 REF: 19-1 TOP: Increasing value of skills
MSC: Definitional
80. ANS: B DIF: 1 REF: 19-1 TOP: Human capital
MSC: Applicative
81. ANS: C DIF: 1 REF: 19-1 TOP: Human capital
MSC: Applicative
82. ANS: A DIF: 1 REF: 19-1 TOP: Human capital
MSC: Interpretive
83. ANS: A DIF: 2 REF: 19-1 TOP: Signaling, Human capital
MSC: Applicative
84. ANS: D DIF: 2 REF: 19-1 TOP: Above-equilibrium wages
MSC: Applicative
85. ANS: D DIF: 1 REF: 19-1 TOP: Unions
MSC: Definitional
86. ANS: A DIF: 1 REF: 19-1 TOP: Unions
MSC: Definitional
87. ANS: A DIF: 3 REF: 19-1 TOP: Efficiency wages, Above-equilibrium wages MSC: Analytical
88. ANS: C DIF: 2 REF: 19-1 TOP: Efficiency wages
MSC: Interpretive
89. ANS: B DIF: 2 REF: 19-1 TOP: Efficiency wages
MSC: Interpretive

90. ANS: A DIF: 2 REF: 19-2 TOP: Labor-market discrimination
 MSC: Applicative
91. ANS: B DIF: 2 REF: 19-2 TOP: Labor-market discrimination
 MSC: Interpretive
92. ANS: B DIF: 2 REF: 19-2 TOP: Labor-market discrimination
 MSC: Interpretive
93. ANS: C DIF: 2 REF: 19-2 TOP: Labor-market discrimination
 MSC: Analytical
94. ANS: B DIF: 2 REF: 19-2 TOP: Labor-market discrimination
 MSC: Analytical
95. ANS: C DIF: 2 REF: 19-2 TOP: Labor-market discrimination
 MSC: Analytical
96. ANS: B DIF: 2 REF: 19-2 TOP: Labor-market discrimination
 MSC: Analytical
97. ANS: B DIF: 2 REF: 19-2 TOP: Labor-market discrimination
 MSC: Applicative
98. ANS: B DIF: 2 REF: 19-2 TOP: Labor-market discrimination
 MSC: Interpretive
99. ANS: D DIF: 2 REF: 19-1, 19-2
 TOP: Wages, Labor-market discrimination, Human capital, Compensating differentials
 MSC: Applicative
100. ANS: D DIF: 3 REF: 19-1, 19-2
 TOP: Compensating differentials, Signaling, Efficiency wages, Labor-market discrimination
 MSC: Analytical