MICROECONOMICS

1. The three major economic factors of production are **natural, human, and capital**. Which of the following groups best illustrates these factors?
   A. farmers, teachers, and investors.
   B. rent, wages, and interest.
   C. gold, bankers, and corporate stocks.
   D. iron ore, bricklayers, and money.
   E. water, secretaries, and desks.

2. The Toscano Pizza Company faces a demand for its pizzas which obeys the "**law of demand**." Thus, if the owner **lowers the price** she charges per pizza, the number of pizzas sold would:
   A. rise as would her total revenues.
   B. rise, but her total revenues would fall.
   C. rise, while her total revenues could rise, fall, or even stay the same.
   D. fall as would her total revenues.
   E. fall, while her total revenues could rise, fall, or even stay the same.

3. Suppose some good was available in **unlimited quantities** to everybody. Which of the following would be true?
   A. The price of the good would be equal to zero.
   B. The value of the good would be equal to zero.
   C. The opportunity cost of using a unit of the good would be equal to zero.
   D. Both A and C are true.
   E. A, B, and C are all true.

4. Instead of doing yardwork for $1.00 an hour for her neighbor, Mindy sets up a lemonade stand. In **three hours** she is able to sell 100 cups of lemonade at **five cents** each. If the ingredients (the lemonade mix, sugar, water, and cups) cost her a total of $3.00 and she obtained all her capital inputs (a table, pitcher, spoon, and sign) for free from a company called "M.O.M.", then her economic profits were:
   A. $5.00.
   B. $2.00.
   C. $1.00.
   D. $0 (that is, she "broke even").
   E. −$1.00 (that is, she suffered economic losses).

5. What provides the **best** assurance that firms in an industry will produce efficiently and earn no economic profits in the long run?
   A. Having many firms in the industry.
   B. Government regulation of the industry.
   C. The existence of large economies to scale.
   D. An absence of major barriers to entry in the industry.
   E. Economic rivalry among existing firms in the industry.
6. What effect would a decrease in the price of silicon chips (used to produce computers) and a decrease in the price of user-friendly software have on the price and production of personal computers?

<table>
<thead>
<tr>
<th>Price</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>increase</td>
</tr>
<tr>
<td>B.</td>
<td>indeterminable</td>
</tr>
<tr>
<td>C.</td>
<td>decrease</td>
</tr>
<tr>
<td>D.</td>
<td>decrease</td>
</tr>
<tr>
<td>E.</td>
<td>increase</td>
</tr>
</tbody>
</table>

7. Which of the following could cause supply to decrease in the short run?
   A. A labor union representing the workers who produce this good is able to negotiate higher wages for its members.
   B. More producers enter this industry.
   C. The price of a close substitute for this good falls.
   D. A large group of consumers decide to boycott this good due to the political beliefs of some of the producers.
   E. A technological breakthrough in the production of this good lowers the cost of producing it.

8. Which of the following represents a long-run adjustment?
   A. A supermarket hires two additional checkout people.
   B. A steel manufacturer cuts back on its purchases of taconite pellets.
   C. A food processor sells the real assets of one of its branch plants.
   D. The demand for tea falls in response to a fall in the price of coffee.
   E. A farmer uses an extra dose of fertilizer on his crop.

9. A newspaper reports, "Coffee growers in Brazil and Columbia organized to consider world coffee supply levels." If this group should decide to act in a concerted effort for the benefit of the group as a whole, the likely result is:
   A. Increased coffee production and prices.
   B. Decreased coffee production and increased prices.
   C. Increased prices with no change in coffee production.
   D. Increased coffee production and decreased prices.
   E. Coffee production and prices at competitive levels.

10. Forming and maintaining collusive agreements among firms is easier given all other things equal when:
    A. The number of firms involved is large.
    B. The firms involved produce differentiated products.
    C. The demand for the product produced is stable.
    D. The firms face different cost situations.
    E. There are ample opportunities to make secret price concessions to selected buyers.
11. Duff Firewood Supply, a competitive private logging firm, is currently maximizing its profits. Its total costs are $1100 of which $100 are fixed costs (insurance on its equipment). It is currently producing and selling 20 cords of wood at the going market price of $60. Suppose, due to its filing of a claim, its insurance premiums are raised to $300. Then the firm should in the short run:
A. increase its production of cords.
B. decrease its production of cords.
C. continue producing 20 cords.
D. increase its price.
E. shut down its operations.

12. Property (or “unearned”) income (that is, profits, interest, and rents) account for approximately what percent of total national income?
A. 90%     B. 70%     C. 50%     D. 20%     E. 10%

13. Assume labor is the only variable input and that an additional input of labor increases total output per day from 20 to 28 units. If the product produced sells for $6 per unit, the additional worker should be hired as long as the prevailing daily wage rate is less than:
A. $6                C. $48              E. $144
B. $24               D. $120

14. Which type of merger creates the greatest threat of increased monopoly power?
A. Conglomerate.
B. Horizontal.
C. Vertical.
D. Diagonal.
E. Multi-national.

15. Assuming that the market for a good is in equilibrium, the initial effect of an increase in demand is:
A. the generation of a surplus of the good.
B. the generation of a shortage of the good.
C. a shift in the supply of the good.
D. an increase in the price of the good.
E. a decrease in the price of the good.

16. Which of the following would most likely be considered a free good by an economist?
A. Your high-school education.
B. Network television programs received in your home.
C. Whales.
D. The "prize" in a Cracker-Jack box or in a box of cereal.
E. None of these.
17. Which of the following would be considered a productive economic resource?
   A. IBM stocks. C. Gold bullion. E. AT&T bonds.
   B. $100 in cash. D. A savings account.

18. When two or more individuals join together to form a business where their liability is not limited to the business' assets, their business is called a:
   A. Corporation.
   B. Co-op.
   C. Partnership.
   D. Merger.
   E. Cartel.

19. Which of the following is necessary for perfectly-competitive markets to exist?
   A. Economies of scale in production.
   B. Advertising.
   C. Barriers to entry for new entrepreneurs.
   D. Firms with products which are perfect (identical) substitutes for each other.
   E. A few firms each with a large market share.

20. What might cause the demand for a good to increase?
   A. A decrease in consumers' income (due perhaps to a tax increase).
   B. New research indicates there is a strong link between use of this good and heart disease.
   C. The price of a close substitute for this good rises.
   D. A large group of consumers decide to boycott this good due to the political beliefs of some of the producers.
   E. Technological breakthroughs in the production of this good dramatically lower the cost of producing it.

21. Public goods tend to be underproduced in a pure market economy because:
   A. They cost more to produce than private goods.
   B. They are over-advertised relative to private goods.
   C. Individuals have an incentive to understate their true demand for them.
   D. Suppliers have an incentive to restrict their production in order to secure higher prices (and profits).
   E. Only government can provide these goods.

22. What is the opportunity cost of buying a new car?
   A. The value of other goods and services you could have purchased with the money you spent on the car.
   B. The price you paid for the car.
   C. The cost of operating and maintaining the car.
   D. The difference between the price of the car and the price of a used car.
   E. The difference between what the car costs now and what a similar car like it will cost a year from now.
23. Which of the following is **not** characteristic of oligopolies?
   A. Large expenditures on advertising and product development.
   B. The existence of significant barriers to entry.
   C. "Price-setting" through informal price leadership arrangements.
   D. Considerable concentration of the means of production.
   E. Extensive price competition to gain market shares.

24. In the simple **circular flow model** of a market economy:
   A. households earn income in the product (or goods and services) markets.
   B. firms (or businesses) are suppliers in the resource (or factors of production) markets.
   C. households are demanders in all markets and firms are suppliers in all markets.
   D. firms earn their revenues in the product markets.
   E. only product markets are considered.

25. Which of the following are **capital** as defined by economists?
   A. stocks and bonds.
   B. water and air.
   C. gold and silver.
   D. computers and wrenches.
   E. cabins and boats.

26. Suppose Mindy's happiness could be measured in units called "utils." If one shirt gives her 20 utils of happiness, then what amount of utils is it possible for two shirts to give her without violating the usual assumptions economists make about people's wants and desires?

27. An industry has one firm producing 40% of the industry's total output, two firms producing 20% each, and four firms producing 5% each. The **four-firm concentration ratio** for this industry is:
   A. 85%.  B. 20%.  C. 15%.  D. 70%.  E. 50%.

28. The **law of demand** essentially says that:
   A. the price of a good is the most important determinant of its demand.
   B. as a person's income rises, so does his/her demand for goods.
   C. as the price of a good falls, people tend to buy more of the good.
   D. the amount of a good purchased each year depends mainly on the size of the population.
   E. the quantity of a good demanded and its price tend to move in the same direction.
29. "US companies are taking advantage of **falling oil prices** resulting from increased world output by switching to oil for fuel. This is expected to **depress coal prices and output**. In terms of conventional demand and supply analysis, statement is best described as a:

A. shift in the demand curves for both oil and coal.
B. movement along the demand curves for both oil and coal.
C. shift in the demand curve for oil and a movement along the demand curve for coal.
D. movement along the demand curve for oil and a shift in the demand curve for coal.
E. change in prices, but not a change in demand for either oil or coal.

30. Which of the following is **not** usually considered to be a **barrier** for new resources to enter into an industry?

A. economies of scale.
B. extensive brand-loyalty on the part of consumers.
C. the existence of patent rights.
D. control of vital inputs (including technological "know-how").
E. the existence of fairly standardized products.

31. **Externalities** are the result of:

A. a misallocation of resources by markets.
B. the existence of monopoly or economic power.
C. undefined or unenforced property rights.
D. illegal or covert market transactions.
E. governmental restraints of trade.

32. From the perspective of **efficiency**, if the production of more widgets reduces the quality of the environment, more widgets should:

A. not be produced.
B. be produced since they would add to the economy's gross domestic product.
C. be produced as long as their value exceeds the value of the lost environmental quality and other resources used.
D. be produced only if the producers of them install equipment to ensure that the quality of the environment is not reduced.
E. not be demanded by society.

33. Car manufacturers offering **rebates** to purchasers is an example of:

A. sellers responding to a surplus on the market.
B. buyers responding to a surplus on the market.
C. sellers responding to a shortage on the market.
D. buyers responding to a shortage on the market.
E. non-price competition between sellers.
34. Which of the following would **not** help unions meet both their objectives of higher wages and more employment of members?
   A. collective bargaining which leads to a higher than equilibrium wage.
   B. increases in members' productivity.
   C. increases in the demand for the products produced by union members.
   D. decreases in immigration quotas.
   E. increased entry requirements into the labor market (such as competency tests, longer apprenticeships, etc.).

35. Which of the following would likely in the short run lead to an increase in the price of VCRs?
   A. the elimination of all import restraints on VCRs.
   B. a technological improvement which lowers the cost of producing VCR's.
   C. the entry of more VCR producers into the industry.
   D. a decrease in the price of purchasing video tapes of recent movies.
   E. a recession.

36. Which of the following statements is **false** about the income received from the selling or leasing of property resources (that is, land, capital, and natural resources)?
   A. It accounts for well over half of all income earned in the United States each year.
   B. The majority of it is received by a very small proportion (less than 2%) of the U.S. population.
   C. Individuals in socialistic economies can not generally earn income from this source.
   D. It is referred to as "unearned" income by the Internal Revenue Service of the U.S.
   E. It is viewed as a cost by those using these resources.

37. A college education usually leads to higher future wages because:
   A. the extra cost of obtaining a college degree limits the number of people with such a background.
   B. people with a college degree tend to be less productive workers.
   C. the demand for people with college degrees is low relative to the supply.
   D. the minimum wage that employers can pay workers with a college degree is set higher by the government.
   E. going to college teaches people how to make more money.

38. Interest rates on loans tend to be **lower** the:
   A. shorter the period to maturity.
   B. greater the risk of default (non-repayment).
   C. the lower the amount of the loan.
   D. greater the expected rate of inflation.
   E. none of the above.
39. Suppose A is currently a low-wage area and B is a high-wage area. In the long run (assuming resources are fairly mobile) one would expect all of the following except:
A. The supply of labor will increase in B.
B. The demand for labor will increase in A.
C. Wages will rise in A.
D. Workers will migrate to B.
E. Employment levels will fall in A.

40. A shortage of good A:
A. indicates that its current price is too high.
B. is a possible result of a government-imposed price ceiling.
C. could be eliminated by an decrease in the price of A.
D. can only be eliminated by producing more of good A.
E. indicates that government intervention into the market for good A is required.

41. Which of the following would not decrease the demand for citrus farm workers?
A. A freeze which destroys much of the citrus crop.
B. Automated citrus picking machines are found to pick the fruit rapidly and with little damage.
C. New, higher-wage job opportunities open up for unskilled laborers.
D. The demand for citrus products (oranges, limes, grapefruits, etc.) decreases.
E. Import restrictions on citrus products are eliminated.

42. If the government taxes electric utilities for the amount of sulfur they emit when burning coal to produce electricity, which of the following would not be expected?
A. The amount of electricity produced declines.
B. Less sulfur emissions.
C. The price of electricity rises.
D. Utilities begin using more low-sulfur coal.
E. Sulfur-related pollution would be eliminated.

43. Natural monopolies:
A. are prevented from forming by antitrust laws.
B. occur when one firm can produce all the output for a market at a lower cost than several competing firms could.
C. are created when the government issues patent rights.
D. are unlikely when extensive economies to scale exist in the production process.
E. would include entire river basins and air sheds.
44. If there is a permanent **increase in the demand** for the product of a **perfectly-competitive** industry, which of the following is **not** true?
   A. Individual firms will increase their output in the short run.
   B. Industry output will expand via the entry of new firms in the long run.
   C. Firms in the industry will earn economic profits in the short run.
   D. Price will rise more in the long run than in the short run.
   E. Each firm in the industry will earn no economic profits in the long run.

45. Firms **finance** their investment in new capital in all the following ways **except:**
   A. through retained earnings or profits.
   B. by borrowing from banks or other financial institutions.
   C. by issuing stock.
   D. with government grants.
   E. by levying business taxes.

46. Factors that directly effect the market demand for goods and services do **not** include:
   A. income.
   B. prices of related goods and services.
   C. the cost of productive resources.
   D. the number of buyers.
   E. tastes and preferences.

47. A firm has total capital of $500 million. The opportunity cost of capital is **12 percent** per year. The firm earns an economic profit of **$15 million** this year. Its **total rate of return on capital** is thus:
   A. -9 percent.        D. +9 percent.
   B. -3 percent.        E. +15 percent.
   C. +3 percent.

48. Which of the following **types of mergers** leads directly to higher "four-firm concentration ratios"?
   A. horizontal.  C. conglomerate.  E. freeway.
   B. vertical.  D. international.

49. **Producer** sovereignty (as opposed to **consumer** sovereignty):
   A. refers to producers responding to the demands of consumers.
   B. is best exemplified by the product development efforts of businesses in response to changing consumer tastes.
   C. is supported by mass media advertising.
   D. is a fundamental principle of capitalistic economies.
   E. All of the above are true.
50. Suppose there are two kinds of drill bits which may be used to drill through solid rock—one made of a special steel alloy, the other of diamonds. The hardness of the diamonds allows the diamond drill to cut through 10,000 feet of rock before it must be replaced. The steel bit must be replaced every 2000 feet. The price of each diamond bit is $2000, while each steel bit sells for $300. Which of the following is false?
A. The diamond bit is technologically more efficient (i.e., it is capable of doing five times the work of a steel bit).
B. The steel bit is economically more efficient (i.e., five steel bits could drill through 10,000 feet of rock cheaper than one diamond bit could).
C. Drilling firms would choose to use the steel bits.
D. The per foot cost of using the diamond bit is $5.
E. None of the above statements is false.

51. Resources are said to be efficiently allocated when:
A. the amount of output produced by an economy is maximized.
B. the rate of economic growth is maximized.
C. the total value generated from available resources is maximized.
D. the number of jobs in the economy is maximized.
E. businesses produce their outputs in the least-costly manner available.

52. Businesses will alter their packaging and production methods to reduce solid waste flows:
A. whenever they discover a way it can be done.
B. only if the government forces them to.
C. whenever it reduces their costs.
D. whenever the resulting change in their revenues exceeds the cost of the change.
E. at any cost.

53. In general, how does the government exercise property rights with respect to environmental resources (air, wildlife, waterways, etc.)?
A. it charges businesses and individuals for their use of these resources.
B. it forbids any use of these resources.
C. it establishes laws and regulations businesses and individuals must obey when using these resources.
D. it doesn't exercise them at all—everyone is free to use these resources as they please.
E. it sells these rights to businesses which in turn manage these resources in the most profitable manner they can.
54. Higher wages for some occupations is likely a result of:
A. easy entry into the field.
B. low demand for the services provided.
C. high productivity.
D. either A or C.
E. A, B, or C.

55. Which of the following requires scarce economic resources?
A. preserving endangered species.
B. providing education.
C. producing consumer goods.
D. recycling.
E. all of the above.

56. The unequal distribution of income in the U.S. is primarily the result of differences in:
A. ability.
B. race.
C. opportunity.
D. productivity.
E. resource ownership.

57. If the price of cattle feed increases, the result will probably be:
A. an increase in the supply of cattle and lower cattle prices.
B. a decrease in the supply of cattle and higher cattle prices.
C. an increase in the demand for cattle and higher cattle prices.
D. a decrease in the demand for cattle and lower cattle prices.
E. a decrease in both the demand and supply of cattle and lower cattle prices.

58. Which of the following is false about a market shortage?
A. the quantity desired by buyers exceeds the quantity offered for sale by the sellers.
B. they are a likely result if the government establishes price floors.
C. they are eliminated in free markets through a rising price.
D. it is an indication that the price in the market is below its equilibrium level.
E. if price is not free to move, then the supply curve will determine the amount of the good actually exchanged.

59. Which of the following is least likely to be a variable cost?
A. the cost of raw materials.
B. the wages of production workers.
C. insurance premiums.
D. shipping expenses.
E. energy costs.
60. If one of a firm's fixed costs rises,
A. its profit-maximizing output level will increase.
B. its profit-maximizing output level will decrease.
C. its profit-maximizing output level will not change.
D. its profits will remain the same after it adjusts its output level (either up or down).
E. it would likely increase its price.

61. Firms which have no ability to effect the price of their output are called "price-takers." All other firms are "price-setters." Which of the following is true for both these types of firms?
A. They face downward-sloping demand curves for their products.
B. To maximize their profits they produce up to the point where the additional revenue earned on the last unit produced just equals the additional cost of producing it.
C. They produce products which are identical to those produced by other firms in their industry.
D. They must reduce their price to sell more.
E. All of the above are true.

62. Stefanie's Waterbeds faces the demand shown below for its beds. Each bed costs $300 to produce (no matter how many are made). What price should Stefanie charge to maximize her profits?

<table>
<thead>
<tr>
<th>Price (per bed)</th>
<th>Quantity Demanded (per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1000</td>
<td>1</td>
</tr>
<tr>
<td>900</td>
<td>2</td>
</tr>
<tr>
<td>800</td>
<td>3</td>
</tr>
<tr>
<td>700</td>
<td>4</td>
</tr>
<tr>
<td>600</td>
<td>5</td>
</tr>
</tbody>
</table>

A. $1000     B. $900     C. $800     D. $700     E. $600

63. Wage differentials in labor markets (between markets requiring similar skills) play essentially the same role as ______ in the goods and services markets.
A. economic profits.
B. normal profits.
C. total revenues.
D. total costs.
E. barriers to entry.

64. Which of the following would not likely be considered productive economic resources?
A. gold and silver.
B. stocks and bonds.
C. Tiger Woods and Hillary Clinton.
D. hammers and computers.
E. whales and rain forests.
65. Suppose the price of a good with a normally-shaped demand curve increases, what happens to each of the following:

<table>
<thead>
<tr>
<th></th>
<th>Total Expenditures</th>
<th>Total Value Received</th>
<th>Consumer Surplus</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>falls</td>
<td>rises</td>
<td>rises</td>
</tr>
<tr>
<td>B.</td>
<td>rises</td>
<td>falls</td>
<td>rises</td>
</tr>
<tr>
<td>C.</td>
<td>rises</td>
<td>falls</td>
<td>falls</td>
</tr>
<tr>
<td>D.</td>
<td>indeterminable</td>
<td>falls</td>
<td>falls</td>
</tr>
<tr>
<td>E.</td>
<td>indeterminable</td>
<td>rises</td>
<td>falls</td>
</tr>
</tbody>
</table>

66. Which of the following best represents a conservative’s overall view of markets?
A. They work best with little or no government interference.
B. They have problems that require government intervention to correct.
C. They are often equitable ("fair"), but not usually very efficient.
D. They are so inefficient and unfair that they should be replaced with another allocating mechanism.
E. They are too unstable due to supply and demand shifts.

67. If the costs of using environmental resources (such as the atmosphere, rain forests, and whales) were fully paid by the users of these resources:
A. these resources would be used less.
B. the prices of most goods would be lower.
C. a negative externality would still exist.
D. A, B, and C are all true.
E. A, B, and C are all false.

68. If the average product of labor when three workers build a house is 150 square feet (per day) and the marginal product of a fourth worker is 75 square feet, then the total product with four workers is:
A. 225 square feet.
B. 525 square feet.
C. 675 square feet.
D. 300 square feet.
E. 50 square feet.

69. If a good has a price of zero, it may be concluded that:
A. it has no value to society.
B. it is available in unlimited quantities.
C. it is not scarce relative to the demand for it.
D. none of the above.
E. A, B, and C are all true.
70. Given the following market data, answer the question below.

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity Demanded</th>
<th>Quantity Supplied</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>15</td>
<td>60</td>
</tr>
</tbody>
</table>

A tax of $3 per unit is to be imposed on the sellers. What will be the total tax revenues received by the government?
A. $30.          C. $60.          E. $135.
B. $40.          D. $90.

71. Suppose hot dogs and colas yield Clark the same amount of satisfaction (that is, he likes 2 hot dogs exactly the same as he likes 2 colas, etc.), but that the price of hot dogs is twice that of colas. Given that he has a limited amount of income, to maximize his satisfaction he should:
A. buy the same amount of hot dogs and colas.
B. buy more colas than hot dogs.
C. buy more hot dogs than colas.
D. buy only colas.
E. buy only hot dogs.

72. If the price of a fixed factor of production rises by 20%, what effect would this have on the marginal costs of a firm using this factor?
A. marginal costs would fall.
B. marginal costs would rise by 20%.
C. marginal costs would rise but by less than 20%.
D. marginal costs would rise by more than 20%.
E. none.

73. What is the defining feature of a competitive market?
A. no buyer or seller is able to unilaterally influence the market price.
B. there are many buyers and sellers.
C. sellers actively engage in advertising and product development.
D. new firms find it difficult to compete against existing sellers.
E. all of the above.

74. Corporate profits (as measured by return on equity) over the past thirty years have been in which of the following ranges?
A. 0 – 5%  D. 20 – 30%
B. 5 – 10%  E. 30 – 40%
C. 10 – 15%
75. A decrease in the price of a productive resource will result in each of the following except:
A. a reduction in the average cost of producing products which require this resource.
B. an increase in the supply of products which require this resource to produce.
C. an increase in the demand for products which require this resource to produce.
D. an increase in the quantity of this resource which is demanded.
E. a reduction in the demand for resources that are substitutes for this resource.

76. Which of the following is not an example of price discrimination?
A. A theater charging children less than adults to see the latest Disney movie.
B. A college charging higher tuition for out-of-state students.
C. A utility charging less for electricity used during off-peak hours when its costs are lower.
D. A doctor charging patients for her services according to their income.
E. An airline charging different fares for seats in the same section of the same flight.

77. Which of the following would most likely result in the market price of a good falling?
A. Rising demand with falling supply.
B. Rising demand with rising supply.
C. Rising demand with unchanging supply.
D. Falling demand with falling supply.
E. Falling demand with rising supply.

78. Suppose you were trying to illustrate the concept of diminishing marginal productivity. What would be reasonable values for the amount of capital and the amount of output produced when 3 units of labor are used given the table below:

<table>
<thead>
<tr>
<th>Units of Capital</th>
<th>Units of Labor</th>
<th>Units of Output Produced</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>?</td>
<td>3</td>
<td>?</td>
</tr>
</tbody>
</table>

Units of Capital | Units of Output Produced
A. 2             | 30
B. 1             | 30
C. 2             | 15
D. 2             | 25
E. 1             | 25
79. Which of the following would a labor union interested in maintaining high wages not likely support?
   A. A more restrictive immigration policy.
   B. Tough enforcement of child-labor laws.
   C. Early retirement programs.
   D. A successful advertising campaign about the product produced by its members.
   E. None of the above (i.e., it would support all of these).

80. In which of the following cases would a free market for good X produce too much of X from the perspective of economic (or allocative) efficiency?
   A. Good X has public good characteristics.
   B. Good X is produced by imperfectly-competitive firms.
   C. Producing good X generates unaccounted for social costs.
   D. Consuming good X generates unaccounted for social benefits.
   E. None of the above.

81. Labor costs account for 80% of a local restaurant's total variable costs. Other costs (including the food itself) account for the remaining portion. Suppose wages rise by 10% while the other costs rise by 5%. How much would this restaurant's total variable costs rise (assuming no changes in the input mix)?
   A. 15%
   B. 12%
   C. 6%
   D. 8%
   E. 9%

82. A firm has fixed costs of $1000. Its per unit variable costs are $6 and it can sell its output for $10 each. How much must it sell in order to break-even?
   A. 100 units.
   B. 167 units.
   C. 200 units.
   D. 250 units.
   E. 400 units.

83. Which of the following is the best example of a good or service which generates spillover costs to society?
   A. imported steel.
   B. pizza.
   C. flu shots.
   D. cars.
   E. education.

84. Which of the following would decrease the equilibrium quantity of good Y exchanged in its market, but would not change the demand for good Y?
   A. an increase in the number of sellers of good Y.
   B. an increase in the cost of producing good Y.
   C. an increase in the price of a complementary good.
   D. a decrease in buyers' incomes.
   E. a decrease in the price of an input used to make good Y.
85. Which of the following best illustrates products which are produced by a homogeneous oligopoly?
A. steel and oil.
B. soft drinks and cars.
C. wheat and corn.
D. haircuts and video rentals.
E. local telephone service and cable TV.

86. A good with standard-looking supply and demand curves has an equilibrium price of $10. If the government imposes a tax of $2 on each unit sold, what will it cost consumers to buy this good once equilibrium has been re-established?
A. More than $12.
B. $12.
C. More than $10, but less than $12.
D. $10.
E. Less than $10.

87. At any disequilibrium price, the quantity that is actually exchanged is determined by:
A. the quantity demanded.
B. the quantity supplied.
C. the lesser of quantity demanded and quantity supplied.
D. the greater of quantity demanded and quantity supplied.
E. the greater of quantity demanded and quantity supplied minus the smaller of the two.

88. A rise in the price of milk used in producing chocolate bars will cause the equilibrium price of chocolate bars to ______ and the equilibrium quantity sold to ______.
A. rise; rise
B. rise; fall
C. fall; rise
D. fall; fall
E. rise; stay the same

89. Economic power and barriers to entry in an industry will usually result in:
A. economic profits for businesses in the long run.
B. output levels greater than those which are socially desirable (i.e. economically efficient).
C. artificially low prices.
D. fairly competitive conditions for the industry.
E. All of the above.

90. The demand for a brand of soda is \( Q = 10 - 2P \) where \( Q \) is the number of bottles (in thousands) and \( P \) is price (in dollars). At what price are total revenues maximized?
A. $5.00
B. $3.00
C. $2.50
D. $1.00
E. $0.50
91. If the market price of a good is greater than the per unit cost of producing it in a competitive market,
   A. businesses are likely suffering economic losses.
   B. in the long run the price will likely rise.
   C. the supply in the market will likely increase over time.
   D. the per unit cost is likely to rise.
   E. the market is likely in long-run equilibrium.

92. While the local McDonald's restaurant which sells hamburgers is likely competing in a _______ market, the McDonald's corporation which sells fast-food franchises competes in a market which is probably best described as ________.
   A. perfectly-competitive; monopolistically-competitive
   B. monopolistically-competitive; oligopolistic
   C. oligopolistic; monopolistic
   D. perfectly-competitive; oligopolistic
   E. monopolistically-competitive; monopolistic

93. A firm can produce 50 units of output using any of the five combinations of labor and capital inputs shown below. If the prices of labor, capital, and its output are $5, $4, and $1 respectively, which combination would it likely use?

<table>
<thead>
<tr>
<th>Labor</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>1</td>
</tr>
<tr>
<td>B.</td>
<td>2</td>
</tr>
<tr>
<td>C.</td>
<td>3</td>
</tr>
<tr>
<td>D.</td>
<td>4</td>
</tr>
<tr>
<td>E.</td>
<td>5</td>
</tr>
</tbody>
</table>

94. If Q = KL where Q is output, K is the amount of capital used, and L is the number of workers used, how would you describe the returns to scale of producing Q?
   A. average.
   B. marginal.
   C. constant.
   D. decreasing
   E. increasing.

95. Workers in the United States enjoy a high standard of living because:
   A. unions keep overall wages in the U.S. high.
   B. we have protected industries from foreign competition.
   C. Congress has established a high minimum wage.
   D. workers in the U.S. are highly productive.
   E. the lack of capital resources in the U.S. has increased the demand for workers.

96. A price floor below the equilibrium price causes:
   A. shortages.          D. excess supply.
   B. surpluses.          E. None of the above.
   C. excess demand.
97. Which of the following would most likely lead to an increase in airline fares?
   A. an decrease in the price of oil
   B. the entry of new airline companies
   C. increases in consumer wealth due to rising stock prices
   D. improved technology in reservations and baggage handling
   E. an increase in airline fatalities

98. Which of the following costs always rise as output is expanded?
   A. Average fixed costs.
   B. Total fixed costs.
   C. Average total costs.
   D. Marginal costs.
   E. Total variable costs.

99. If economies of scale exist, then if a firm doubles its output in the long run, it will:
   A. double its total costs.
   B. lower its total costs.
   C. less than double its total costs.
   D. increase its average costs, but they will less than double.
   E. double its average costs.

100. How would 10 units of a resource be allocated between the markets below if market conditions were ideal and resource owners pursue their own self-interest?

<table>
<thead>
<tr>
<th>Market 1: Price</th>
<th>Quantity Demanded</th>
<th>Market 2: Price</th>
<th>Quantity Demanded</th>
</tr>
</thead>
<tbody>
<tr>
<td>$8</td>
<td>3</td>
<td>$6</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

   A. 5 to each market
   B. 6 to Market 1 and 4 to Market 2
   C. 4 to Market 1 and 6 to Market 2
   D. 7 to Market 1 and 3 to Market 2
   E. 3 to Market 1 and 7 to Market 2