

Principles of Microeconomics

ECON202



Exam Final Spring 2001

Please "bubble" your name in on the back side of the answer key, last name first. Use a number 2 pencil. **If you do not put your name in th bubbles on the answer key, a zero will be recorded for the final.**

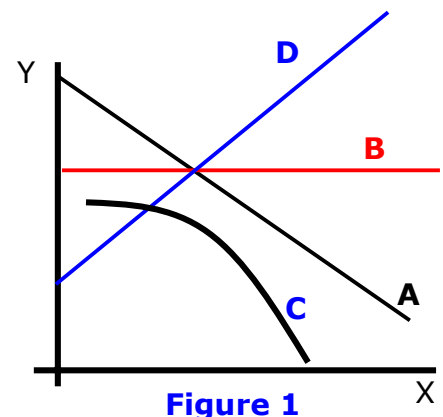
- 1) Economics is the study of
 - a) how individuals in society allocate scarce resources to satisfy unlimited wants
 - b) how businesses operate to make a profit
 - c) businesses operate to reduce costs
 - d) money is used
- 2) The central characteristic that forces economic choice is
 - a) Profits
 - b) Monetary costs
 - c) Scarcity
 - d) All the above
- 3) Land is a classification of inputs (resources or factor of production) that is defined as
 - a) Goods that are produced by labour to be used to produce more goods and services
 - b) Human effort (mental or physical) that is used to produce goods and services
 - c) Inputs that are "gifts of nature"
 - d) The process of innovation and creation of new activities
- 4) The return to capital (or "kaptial") is
 - a) Profit
 - b) Interest
 - c) Rent
 - d) Wages and compensation
- 5) Which of the following is a positive statement?
 - a) I think we should pass a constitutional amendment to change the Electoral College.
 - b) President Bush's position on campaign finance reform is better than Newt Gingrich's
 - c) If the price of hamburgers rises, individuals will tend to buy less, *ceteris paribus*.
 - d) People should work harder.
- 6) Opportunity cost of an alternative is the
 - a) Amount of money spent
 - b) The value of the next highest value alternative sacrificed
 - c) Price in current dollars
 - d) All the above
- 7) Utilitarianism is the underlying ethic of neoclassical economics. It is
 - a) A consequentialist ethic
 - b) A deontological ethic
 - c) Completely amoral
 - d) Always efficient
- 8) The concept of efficiency refers to
 - a) The basic ethical system that underlies all market transactions
 - b) The measure of the extent to which an objective is achieved
 - c) The fundamental objective of all economic behavior
 - d) Maximum profits

- 9) The big question that underlies economics (and social sciences) is
- How can society be structured to protect the autonomy (liberty) of the individual and coordinate their behavior to promote the commonweal?
 - How can each agent maximize his or her profits and wages?
 - How can I get the most stuff to make me happy?
 - How can the economic policies of the government be structured so that every business firm is able to make the most profits possible?
- 10) The three (Reynolds has 5) basic economic or fundamental economic questions include
- (1) What to produce? (2) How to produce it? And (3) Who gets it?
 - (1) How much money is made? (2) Who are the stockholders? And (3) Who is the CEO?
 - (1) What is the nominal price of a good? (2) What is the cost of the good? And (3) What is the tax on the good?
 - (1) How many firms are selling in the market? (2) What advertising is most effective? And (3) Who are the potential customers?
- 11) A model
- Can be described as a simplified description of reality
 - And a theory are two terms that can be used interchangeably
 - Emphasizes those variables that are most important in explaining an event
 - All the above
 - None of the above

12) In Figure 1, which line represents a positive relationship?

- A
- B
- C
- D

- 13) Straight line A in Figure 1 shows that as
- Y increases, the value of X is unchanged
 - Y decreases, the value of X decreases
 - As X increases the value of Y decreases
 - X and Y are not related (there is no functional relationship between X and Y)



14) Given finite resources and literally unlimited wants, the tool most often used to analyze the problem of choice in the face of scarcity is

- Profits
- Opportunity cost
- Money
- The stock market

15) For both equity ("fairness") and "efficiency" reasons, in a market, each factor of production should earn an income or return that is proportional to its

- cost
- Social class
- Productivity
- age

16) A farmer is deciding whether or not to add fertilizer to his or her crop. If the farmer adds 1 pound of fertilizer per acre, the value of the resulting crops rises from \$90 to \$100 per acre. According to marginal analysis, the farmer should add the fertilizer if it costs

- More than \$12.50 per pound
- Less than \$90 per pound
- Less than \$20 per pound
- Less than \$10 per pound

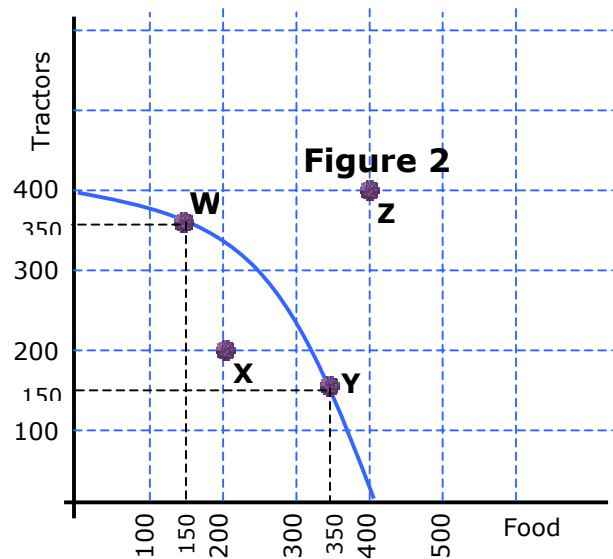
- 17) If the economy represented in Figure 2 were operating at point W
- No tractor production must be foregone to produce more food in the current period
 - Resources are not fully used
 - Some tractor production must be foregone to produce more food in the current period
 - Increased food production would be impossible

- 18) In Figure 2, which of the following moves from one point to another would represent an increase in technical efficiency?

- Z to W
- X to Y
- W to X
- W to Y

- 19) In Figure 2 if the price of food (P_F) were \$2 and the price of tractors was \$1, which point (that is shown) indicates the output combination that is most allocatively efficient or economically efficient?

- X
- W
- Y
- Z



- 20) Movement along the PPF in Figure 2 suggests that

- The inputs are not homogeneous or equally productive in food and tractors
- Declining opportunity cost
- Inputs are homogeneous
- All the above

- 21) A production possibilities frontier (PPF or transformation function) is a model that shows

- All output combinations possible given a set of finite inputs and a given state of technology in a given period of time
- All profit levels possible given a set of finite inputs and a given state of technology in a given period of time
- All costs incurred possible given a set of finite inputs and a given state of technology in a given period of time
- None of the above

- 22) Any output combination that lies inside the PPF is

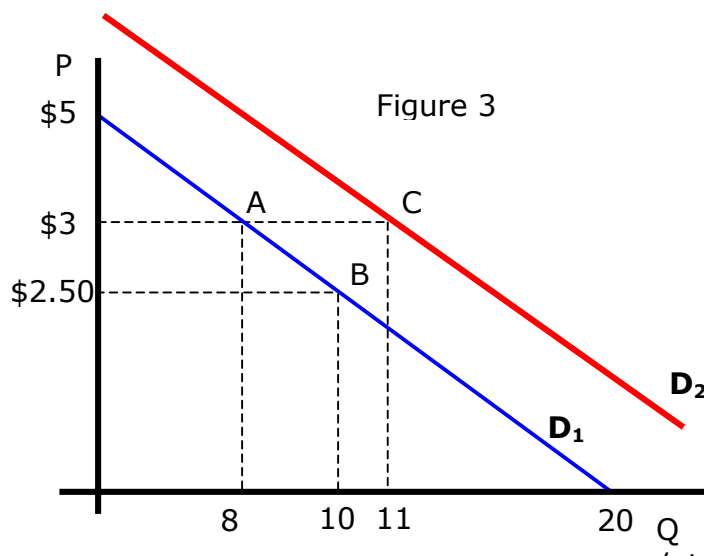
- Not possible
- Efficient
- Not profitable
- Not efficient

- 23) The ratio of output to input $\left\{ \frac{\text{output}}{\text{input}} \right\}$ is a measure of

- Profitability
- Technical efficiency
- The performance of the economic unit
- All the above

- 24) The ratio of value of output to value of input $\left[\frac{\text{value of output}}{\text{value of input}} \right]$ is a definition for
- a) Allocative efficiency
 - b) Technical efficiency
 - c) Pareto Efficiency
 - d) None of the above
- 25) Economic growth can be shown in a PPF model by a(n)
- a) Flatter PPF
 - b) Steeper PPF
 - c) Outward shift in the PPF
 - d) Inward shift in the PPF
- 26) Economic growth may be caused by
- a) An increase in the quantity of any or all inputs
 - b) An improvement in the quality of any or all inputs
 - c) An "improvement" in technology
 - d) All or any of the above
- 27) Three types of allocative mechanisms are
- a) Exchange, reciprocity and eminent domain
 - b) Demand, supply and opportunity cost
 - c) Corporations, sole proprietorships, and partnerships
- 28) Each of the following is an example of capital except
- a) A deposit of petroleum
 - b) An office building
 - c) A computer used to bill clients
 - d) A factory
- 29) Generally economists believe that market demand functions
- a) Indicate an inverse relationship between price and quantity
 - b) Are "negatively sloped"
 - c) Express the willingness and ability of consumers to buy goods (and services) at different prices
 - d) All the above
- 30) The supply function represents
- a) The behavior of the sellers
 - b) The behavior of government
 - c) The behavior of buyers
 - d) The maximum prices buyers will pay
- 31) An increase in the price of a good will
- a) Increase demand for the good
 - b) Decrease the demand for the good
 - c) Reduce the quantity demanded
 - d) Increase the quantity demanded
- 32) A demand function is usually defined as a "*schedule of quantities that people are willing and able to buy at a schedule of prices in a given period of time, other things remaining constant.*" The demand function can also be perceived as
- a) The minimum a buyer is willing and able to pay for each unit of a good
 - b) The minimum a seller is willing and able to accept for each unit of a good
 - c) The maximum a buyer is willing and able to pay for a unit of a good
 - d) The average price of a good over a period of time in any given market

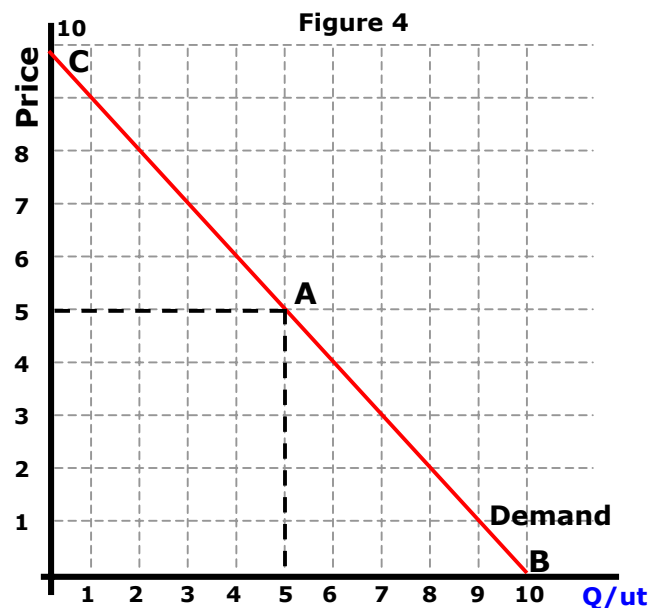
- 33) Which of the following is most likely to shift a demand function
- A change in the price of the good
 - A change in the supply of a good
 - A change in the incomes of the buyers
 - A change in Pareto efficiency
- 34) Which of the following is most likely to cause a change in quantity demanded
- A change in the price of the good
 - A change in the price of a substitute good
 - A change in incomes of the buyers
 - A change in the number of buyers
- 35) In Figure 3, a change in the price of the good from \$3 to \$2.50 would cause
- A change in quantity demanded
 - A change in demand
 - A shift of the demand
 - All the above



- 36) In Figure 3, a movement from D_1 to D_2 could be caused by
- An increase in income if it is a normal good
 - A increase in income if it is an inferior good
 - An increase in the price of a complimentary good.
 - All the above
- 37) In Figure 3, the quantity demanded at \$3 is 8 units on the function labeled D_1 . On the demand function " D_2 " 11 units are purchased at \$3, this represents
- An increase in demand
 - A decrease in demand
 - An increase in quantity demanded
 - A decrease in quantity demanded
- 38) When the market price is above equilibrium price,
- The market price will rise
 - Equilibrium price will rise
 - Market price will fall
 - Equilibrium price will fall
- 39) When demand decreases and supply increases,
- Equilibrium price will rise and equilibrium quantity will fall
 - Equilibrium price will fall and equilibrium quantity will rise
 - Equilibrium price stays the same and quantity falls
 - Equilibrium price will fall and the change in equilibrium quantity depends on the magnitude of the shifts and relative slopes of demand and supply
- 40) Considering the market for pizza, if the number of buyers in the market increased, we would expect that the equilibrium
- Price and quantity would fall
 - Price and quantity would rise
 - Price would fall and quantity would increase
 - Price would rise and quantity would decrease

- 41) Which of the following is likely to cause an increase in the equilibrium price and a decrease in the equilibrium quantity?
- a) An increase in the price of a substitute
 - b) A decrease in the price of a substitute
 - c) An increase in the price of labour used to produce the good
 - d) A improvement in the technology used to produce the good
- 42) When the total utility (TU) of a good being consumed is increasing at a decreasing rate
- a) The consumer should stop consuming
 - b) The marginal utility (MU) will be decreasing
 - c) The marginal utility (MU) will be increasing
 - d) The marginal utility will be negative
 - e) All the above
- 43) Suppose that an individual consumes cola and pizza. To reach consumer equilibrium (maximum utility given preferences, prices and income), the individual must consume pizza and cola so that the
- a) Price paid for the two goods is the same
 - b) Marginal utility (MU) of the two goods is the same
 - c) Ratio of marginal utility (MU) to price (P) is the same for both goods
 - d) Ratio of the marginal utility (MU_C) of cola to the marginal utility (MU_P) of pizza is 1
 - e) All the above
- 44) When the marginal utility (MU) of a good is 0, the
- a) Total utility (TU) is also 0
 - b) Total utility (TU) is negative
 - c) Total utility (TU) is a maximum
 - d) Total utility (TU) is a minimum
- 45) Elasticity is a
- a) Measure that can be used to describe a relationship between two related variables
 - b) A ratio of the percentage change in a dependent variable to a percentage change in an independent variable
 - c) A measure of the responsiveness of an independent variable to a change in a dependent variable.
 - d) All the above
- 46) Total revenue (TR) falls as the price of a good increases if the price elasticity of demand is
- a) Elastic
 - b) Inelastic
 - c) Unitary elastic
 - d) Perfectly elastic
- This question was dropped. It didn't count for or against your score.**
- 47) Which is a determinant of the price elasticity of demand?
- a) The number of good substitutes available for the good
 - b) The proportion of most consumers' budget that is spent on the product
 - c) The amount of time consumers have to adjust their purchases of a product in response to a change in the price of the good
 - d) All the above

- 48) You are the newly appointed sales manager of the Rock Record Company and have been charged with the task of increasing **revenues**. Your economics consultants have informed you that at the present level of prices and output level, the price elasticity of demand for your product is greater than one (the absolute value of price elasticity is less than one.) You should
- Raise prices
 - Lower prices**
 - Hold prices constant and increase supply
 - Cut advertising expenditures, to decrease the demand for your product
- 49) If a 10% increase in the price of good X results in an increase of 5% in the demand for good Y at the same price, then it can be concluded that goods X and Y are
- Complements
 - Substitutes**
 - Inferior
 - Normal
- 50) Most goods can be classified as normal goods rather than inferior goods. The definition of an inferior good means that
- The income elasticity of demand is positive
 - As consumer income decreases the amount purchased increases**
 - As consumer income increases the amount purchased increases
 - None of the above
- 51) In Figure 4, the demand function is relatively elastic between points
- C and A**
 - A and B
 - The entire range from C to B
 - Only at point A
- 52) In Figure 4, the total revenue will be a maximum at the output level where Q is equal to
- 2
 - 3
 - 5**
 - 10
- 53) In Figure 4, at point A (where P = 5 and Q = 5) the demand function is
- relatively elastic
 - relatively inelastic
 - unitary elastic**
 - none of the above
- 54) In Figure 4, if the price currently charged were \$5 (5 units are sold) and the price were increased
- Total revenue would increase
 - Total revenue would decrease**
 - Total revenue would remain the same
 - None of the above
- 55) When two goods (xebecs and Yawls) are substitutes an increase in the price of Xebecs will
- Increase the quantity demanded of Xebecs
 - Decrease the demand for Xebecs
 - Increase the demand for Yawls**
 - Decrease the demand for Yawls



- 56) The income elasticity of demand for shoes is estimated to be $+0.3$. We can conclude that shoes
- a) Have a relatively steep demand function
 - b) Have a relatively flat demand function
 - c) Are a normal good
 - d) Is a substitute good
- 57) An increase in bus fares in Charlotte, NC reduces total revenue of the public transit system, this is evidence that the demand is
- a) Price elastic
 - b) Price inelastic
 - c) Unitary elastic
 - d) A complement
- 58) When total revenue (TR) is a maximum, marginal revenue (MR) is
- a) A minimum
 - b) A maximum
 - c) Equal to zero (0)
 - d) All the above
- 59) The quantity intercept of the marginal revenue function will be
- a) Half the quantity intercept of the demand function
 - b) 0, zero
 - c) the highest price that can be charged
 - d) none of the above
- 60) The reason that the total product function (TP) may increase at an increasing rate is
- a) The firm earns more profits at higher levels of output
 - b) Specialization and division of labour
 - c) Costs decrease as output rises
 - d) All the above
- 61) If the marginal product (MP) is greater than the average product (AP), the
- a) MP must be decreasing
 - b) AP must be decreasing
 - c) MP must be increasing
 - d) AP must be increasing
- 62) When the MP is equal to the AP (the two functions intersect), the
- a) MP will be a maximum
 - b) MP will be a minimum
 - c) AP will be a minimum
 - d) AP will be a maximum
- 63) When the marginal product (MP) is increasing, the
- a) AVC (average variable cost) will be decreasing
 - b) AFC (average fixed cost) will be increasing
 - c) MC (marginal cost) will be decreasing
 - d) TC (total cost) will be decreasing
- 64) The short-run time period is
- a) a time period short enough that at least one input and technology are fixed while at least one input is variable
 - b) a time period in which all inputs but not technology are fixed
 - c) 5-7 years
 - d) none of the above

- 65) At an inflection point in the TP, i.e. when the TP function changes from increasing at an increasing rate to increasing at a decreasing rate, the
- MP is zero
 - MP is a minimum
 - MP becomes negative
 - MP is a maximum
 - AP is zero
- 66) If there is one variable input, such as labour, the most "efficient" use of that input [maximum "efficiency"] will be
- at the maximum of the MP_L
 - at the maximum of the total product of labour [TP_L]
 - at the maximum of the AP_L
 - when the MP_L is zero
 - none of the above
- 67) The Average Variable Cost [AVC]
- Is the total variable cost [TVC or VC] divided by the units of output [Q or TP]
 - Is a mirror image of the AP of the variable input
 - Will be increasing [have a positive slope] when the AP of the variable input is decreasing [has a negative slope]
 - Will be decreasing [have a negative slope] when the AP of the variable input is increasing [has a positive slope]
 - All the above
- 68) When the total product function reaches a maximum the
- Marginal product function will be a minimum
 - Average product function will be a minimum
 - Marginal product function will be zero
 - Average product function will be zero
 - Marginal product function will be a maximum
- 69) If the marginal cost function is in a range where it is rising, the
- Average product must be zero
 - Marginal product must be increasing
 - Marginal product must be decreasing
 - Marginal product must be negative but increasing
- 70) At the output level where the marginal cost is equal to the average variable cost, an increase in the use of the variable input will
- Increase productivity as measured by output per worker
 - Decrease productivity as measured by output per worker
 - Will necessarily increase profits
 - None of the above
- 71) "Economies of scale" are said to exist when the
- long run average cost function is decreasing
 - the long run fixed cost function is decreasing
 - the long run marginal cost function is decreasing
 - all the above
- 72) If there is one variable input, such as labour, the most "efficient" [technically efficient] use of that input [maximum "efficiency"] will be
- at the maximum of the MP_L
 - at the maximum of the total product of labour [TP_L]
 - where $MP_L = AP_L$
 - when the MP_L is zero
 - none of the above

- 73) The firm will "shut-down" in the short run if the price falls below the point
- Where the average revenue (AR) is below the average cost (AC)
 - Where the marginal cost (MC) is equal to the marginal revenue (MR)
 - Where the marginal cost (MC) is equal to the average variable cost (AVC)
 - Where the average fixed cost (AFC) is a minimum
- 74) Profits will be maximized (or losses minimized) when
- The price is greater than the cost of production each unit
 - The marginal revenue is equal to the marginal cost and greater than the average variable cost
 - Production takes place in a corporation which is able to pay a minimum of taxes and is not regulated
 - The average fixed cost (AFC) is less than the average variable costs (AVC) and equal to both the marginal revenue (MR) and the price (P)

K	L	TP (Q)	MP	FC	VC	TC	≈ MC	AFC	AVC	ATC
5	0	0		\$15	\$0	\$15		#DIV/0!	#DIV/0!	#DIV/0!
5	1	5	5	15	22	37	\$4.40	\$3.00	\$4.40	\$7.40
5	2	12	7	15	44	59	3.14	1.25	3.67	4.92
5	3	21	9	15	66	81	2.44	0.71	3.14	3.86
5	4	31	10	15	88	103	2.20	0.48	2.84	3.32
5	5	40	9	15	110	125	2.44	0.38	2.75	3.13
5	6	48	8	15	132	147	2.75	0.31	2.75	3.06
5	7	55	7	15	154	169	3.14	0.27	2.80	3.07
5	8	61	6	15	176	191	3.67	0.25	2.89	3.13
5	9	66	5	15	198	213	4.40	0.23	3.00	3.23
5	10	70	4	15	220	235	5.50	0.21	3.14	3.36
5	11	73	3	15	242	257	7.33	0.21	3.32	3.52
5	12	75	2	15	264	279	11.00	0.20	3.52	3.72
5	13	76	1	15	286	301	22.00	0.20	3.76	3.96
5	14	76	0	15	308	323	#DIV/0!	0.20	4.05	4.25
5	15	75	-1	15	330	345	-22.00	0.20	4.40	4.60

- 75) In the table above, if the price were \$6 and you wanted to maximize profits you would produce
- 66 units
 - 70 units
 - 73 units
 - 75 units
 - 76 units
- 76) Profits (losses) will be
- \$395 profit
 - \$185 profit
 - \$396 profit
 - \$395 loss
 - \$400 loss

- 77) The most "efficient" (technically efficient) level of output for the plant depicted in the table would be
- 70 units
 - 73 units
 - between 40 and 48 units
 - 31 units

- 78) When the market in Figure 5 is in equilibrium, the net benefits to society would be shown as
- The price shown at point P
 - The area FJHP
 - The area CEN
 - The area REN

- 79) When the market in Figure 5 is in equilibrium, the portion of net benefits to the buyers is represented by
- The price shown at point P
 - The area FJHP
 - The area CEN
 - The area REN

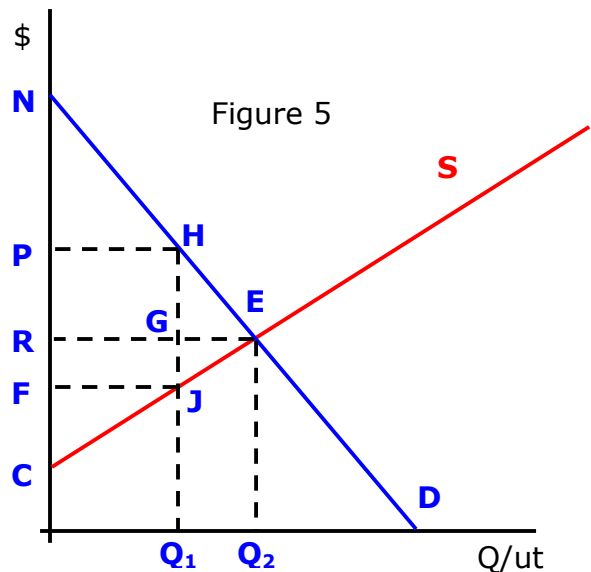
- 80) When the market in Figure 5 is in equilibrium, the area CER is a measure of
- Profits
 - Consumer surplus
 - Producer surplus
 - Opportunity cost

- 81) When the market in Figure 5 is in equilibrium, the equilibrium price would be R. If the price were increased to P, the loss of welfare to society would be
- $H - G = \text{loss}$
 - Area REN
 - Area FJHP
 - Area RGJF
 - Area JEH

- 82) In the economics of industrial organization, many economists believe that
- the conduct of an industry determines the structure and ultimately the performance of an industry
 - the performance of an industry determines the structure and conduct of an industry
 - the structure of an industry determines the conduct and ultimately the performance of the industry
 - all market structures equally result in efficient and equitable outcomes of all societies

- 83) What is the simple criterion used to judge the performance of an industry?
- How much the normal profit is in each industry
 - The extent to which the price is greater than the marginal cost
 - The difference between the average revenue of the firm and the average total cost of that firm
 - The number of workers employed in the industry

- 84) The difference between a monopoly and a purely competitive firm is that
- The monopolist will charge a higher price but will produce a larger output than the purely competitive firm.
 - The purely competitive firm will sell at a price that is equal to the marginal cost of producing the good while the monopolist will sell at a price greater than MC
 - The purely competitive firm will necessarily be larger than the monopolist
 - In the long run the purely competitive firm will earn economic (or above normal) profits while the monopolist will earn only a normal profit



- 85) An oligopoly is a firm characterized by a small number of firms in an industry that
- Must have homogeneous products
 - Have no barriers to entry
 - Has firms that recognize their interdependence
 - None the above
- 86) Peak load pricing suggests that in the peak load period the price should include
- Only the marginal cost and average cost of operations
 - The marginal cost of operations
 - The marginal cost of operations and the fixed cost
 - The marginal cost of operations plus the marginal cost of additional capacity
- 87) In the off peak period the price should be
- Only the marginal cost and average cost of operations
 - The marginal cost of operations
 - The marginal cost of operations and the fixed cost
 - The marginal cost of operations plus the marginal cost of additional capacity
- 88) Ideally an economic system should be structured so that
- All firms earn an economic profit
 - All consumers have the goods and services they want
 - Resources are allocated to their highest valued use
 - No one has to work
- 89) In neoclassical economics, a purely competitive market is considered
- undesirable because firms can only earn a normal profit in the long run
 - desirable because firms can earn above normal profits in the long run
 - desirable because firms are forced to produce at the minimum cost per unit and sell at a price equal to the marginal cost
 - desirable because the individual sellers are able to set prices at the level most advantageous to the firm
- 90) The feature that allows a monopolist to capture above normal profits in the long run is
- Homogeneous outputs or goods
 - Barriers to entry
 - Free entry and exit
 - Competition from firms that produce close substitutes
- 91) One approach to regulation of a monopolist is to
- Set the regulated price equal to the average cost so the firm earns a normal profit
 - Set the regulated price equal to the marginal revenue so the firm maximizes profit
 - Set the regulated price equal the average variable cost so they will not shut down
 - Set the regulated price equal to the fixed cost

Have a Good Summer!