

EC 301

Prof. Fanis Tsoulouhas

Sample Final Exam

Name _____

SSN _____

Each multiple choice question is 2 points. Question 47 is 8 points.

1. Which of the following will cause a shift to the left in the supply curve of gasoline?
 - A. A decrease in the price of gasoline.
 - B. An increase in the wage rate of refinery workers.
 - C. A decrease in the price of crude oil.
 - D. An improvement in oil refining technology.
 - E. all of these.

2. Elasticity measures
 - A. the slope of a demand curve.
 - B. the inverse of the slope of a demand curve.
 - C. the percentage change in one variable in response to a one percent change in another variable.
 - D. sensitivity of price to a change in quantity.

3. The slope of an indifference curve reveals:
 - A. that preferences are complete.
 - B. the marginal rate of substitution between two goods.
 - C. the average rate of substitution between two goods.
 - D. that preferences are transitive.
 - E. none of these.

4. Assume that food is measured on the horizontal axis and clothing on the vertical axis. If the price of food rises relative to that of clothing, the budget line will:
 - A. become flatter.
 - B. become steeper.
 - C. shift outward.
 - D. become steeper or flatter depending on the relationship between prices and income.

5. Alfred derives utility from consuming iced tea and lemonade. Having spent all of his money he finds that the marginal utility that he receives from iced tea is 16 utils and the marginal utility he receives from lemonade is 8 utils. He should:
 - A. buy more iced tea and less lemonade.
 - B. buy more lemonade and less iced tea.
 - C. buy more iced tea and lemonade.
 - D. buy less iced tea and lemonade.
 - E. none of these is necessarily correct.

6. The income-consumption curve for Dana between Q_a and Q_b is given as: $Q_a = Q_b$. His budget constraint is given as:

$$120 = Q_a + 2Q_b$$

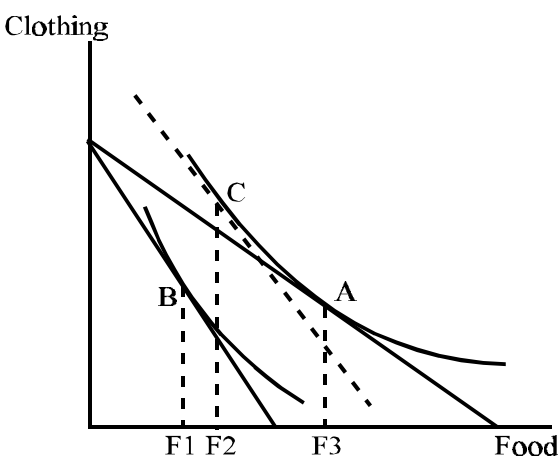
How much Q_a will Dana consume to maximize utility?

- A. 0
 B. 30
 C. 40
 D. 60
 E. More information is needed to answer this question.
7. Use the following two statements in answering this question:

- I. All Giffen goods are inferior goods.
 II. All inferior goods are Giffen goods.

- A. I and II are true.
 B. I is true and II is false.
 C. I is false and II true.
 D. I and II is false.

Use the following diagram:

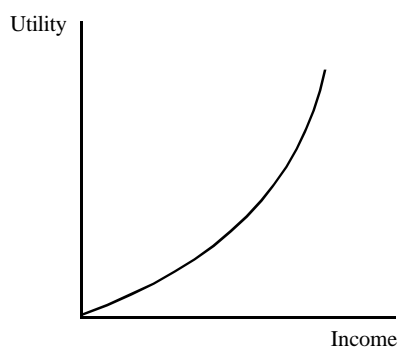


A consumer's original utility maximizing market basket of goods is shown in the diagram above as point A. Following a price change, the consumer's utility maximizing market basket changes is at point B.

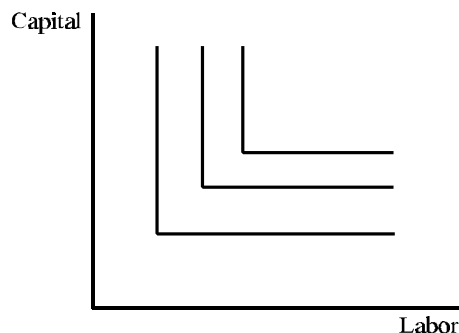
8. The substitution effect of the price change in food on the quantity of food purchased is the change from:
- A. F_3 to F_1 .
 B. F_3 to F_2 .
 C. F_2 to F_1 .
 D. F_1 to F_2 .
 E. none of these.

9. The income effect of the price change in food on the quantity of food purchased is the change from:
- A. F3 to F1.
 - B. F3 to F2.
 - C. F2 to F1.
 - D. F1 to F2.
 - E. none of these.
10. Based on the diagram, food is:
- A. a normal good.
 - B. an inferior good, but not a Giffen good.
 - C. a Giffen good.
 - D. none of these.
11. The weighted average of all possible outcomes of a project, with the probabilities of the outcomes used as weights, is known as the
- A. variance.
 - B. standard deviation.
 - C. expected value.
 - D. coefficient of variation.

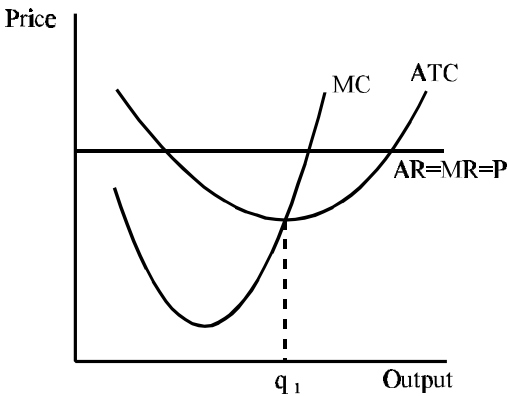
Use the following diagram:



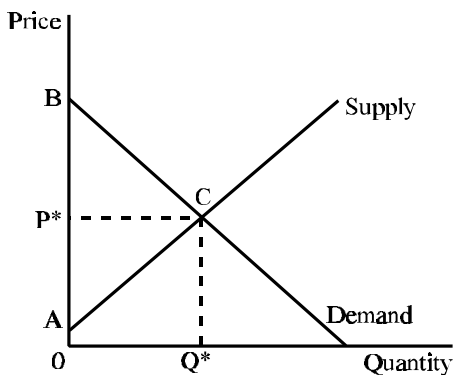
12. An individual whose attitude toward risk is illustrated in the diagram above is
- A. risk averse.
 - B. risk loving.
 - C. risk neutral.
 - D. none of these is necessarily correct.



13. An examination of the production isoquants in the diagram above reveals that:
- capital and labor must be used in fixed proportions.
 - capital and labor are perfectly substitutable.
 - the MRTS is constant.
 - both capital and labor are perfectly substitutable and the MRTS is constant.
 - none of these.
14. Which of the following statements is true regarding the differences between economic and accounting costs?
- Accounting costs include all implicit and explicit costs.
 - Economic costs include implicit costs only.
 - Accountants consider only implicit costs when calculating costs.
 - Accounting costs include only explicit costs.
15. With its current levels of input use, a firm calculates its MRTS is 3 (when capital is on the vertical axis and labor is on the horizontal axis). This implies
- the firm could produce 3 more units of output if it increased its use of capital by one unit (holding labor constant).
 - the firm could produce 3 more units of output if it increased its use of labor by one unit (holding capital constant).
 - if the firm reduced its capital stock by one unit, it would have to hire 3 more workers to maintain its current level of output.
 - if it used one more unit of both capital and labor, the firm could produce 3 more units of output.
 - the marginal product of labor is 3 times the marginal product of capital.
16. Which of the following does not necessarily apply to a competitive firm in short-run equilibrium?
- $P = MC$.
 - $P = MR$.
 - $P = \text{short-run average cost}$.
 - price equals average revenue.



17. A competitive firm is producing at output q_1 shown above. At output q_1 , the firm,
- A. incurs a loss and could reduce its losses further by shutting down immediately.
 - B. incurs a loss, but minimizes losses by staying in business in the short run.
 - C. is earning the maximum profit.
 - D. is earning a profit, but could increase profit further by increasing output.
 - E. is earning a profit, but could increase profit further by decreasing output.



18. The price of beef and quantity of beef traded are P^* and Q^* as shown above, respectively. Given this information, producer surplus is the area:
- A. $OBCQ^*$
 - B. ABC
 - C. ACP^*
 - D. CBP^*
 - E. $OACQ^*$

19. An effective price ceiling causes a loss of
- A. producer surplus for certain and possibly consumer surplus as well.
 - B. consumer surplus only.
 - C. producer surplus only.
 - D. consumer surplus for certain and possibly producer surplus as well.
 - E. neither producer nor consumer surplus.
20. With a downward sloping demand curve, marginal revenue is
- A. equal to price.
 - B. equal to average revenue.
 - C. less than price.
 - D. more than price.
21. In order to find the profit maximizing level of output, all firms equate
- A. price and marginal cost.
 - B. marginal revenue and average total cost.
 - C. price and marginal revenue.
 - D. all of these.
 - E. none of these.
22. For a monopolist, changes in demand can lead to changes in
- A. price with no change in output.
 - B. output with no change in price.
 - C. both price and quantity.
 - D. any of these can be true.
23. If a monopolist sets her output such that marginal revenue, marginal cost and average total cost are equal, economic profit must be:
- A. negative.
 - B. positive.
 - C. zero.
 - D. indeterminate from the given information.
24. Second-degree price discrimination is the practice of charging
- A. the reservation price to each customer.
 - B. different prices for different blocks of the same good or service.
 - C. different groups of customers different prices for the same products.
 - D. each customer the maximum price that he or she is willing to pay.

25. Excess capacity in monopolistically competitive industries results because in equilibrium
- A. each firm's output rate is too great to minimize average cost.
 - B. each firm's output rate is too small to minimize average cost.
 - C. firms make positive economic profit.
 - D. price equals marginal cost.
26. Which of the following can be thought of as a barrier to entry?
- A. scale economies
 - B. patents.
 - C. strategic actions by incumbent firms.
 - D. all of these.
27. In the _____, each firm treats the output of its competitor as fixed, then decides how much to produce.
- A. Cournot model
 - B. model of monopolistic competition
 - C. Stackelberg model
 - D. kinked-demand model
 - E. none of these
28. A _____ shows how much a firm will produce as a function of how much it thinks its competitors will produce.
- A. contract curve
 - B. demand curve
 - C. reaction curve
 - D. Nash equilibrium curve
 - E. none of these
29. The oligopolistic model that is most appropriate when one large firm usually takes the lead in setting quantity is the _____ model.
- A. Cournot
 - B. Stackelberg
 - C. game theory
 - D. prisoner's dilemma
30. In the Bertrand model with homogeneous products,
- A. the firm that sets the lower price will capture all of the market.
 - B. the Nash equilibrium is the competitive outcome.
 - C. both firms set price equal to marginal cost.
 - D. all of these.
 - E. none of these.

31. Which statement most nearly describes a Nash equilibrium applied to price competition?
- Two firms get together and set the price that maximizes joint profits.
 - Each firm automatically moves to the purely competitive equilibrium because it knows the other firm will eventually move to that price anyway.
 - Each competitor is doing the best it can, given the price its competitor has set, so neither firm has an incentive to change its price.
 - One dominant firm sets the price, and the other firms take that price as if it were given by the market.
32. Two firms operating in the same market must choose between a high high price and a low price. Firm A's profit is listed before the comma, B's outcome after the comma.

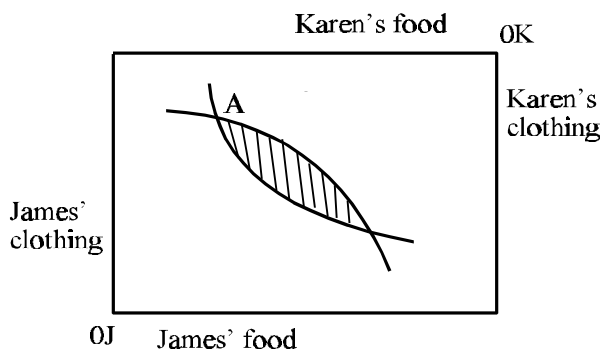
		Firm B	
		Low Price	High Price
Firm A	Low Price	18, 18	30, 6
	High Price	6, 30	24, 24

If each firm tries to choose a price that is best for it, regardless of its competitor's price, which of these statements is correct?

- Firm A should charge a high price, Firm B should charge a low price.
 - Firm A should charge a low price, Firm B should charge a high price.
 - Both firms should charge a high price.
 - Both firms should charge a low price.
33. A firm should hire MORE labor when the marginal revenue product of labor
- equals the wage rate.
 - exceeds the wage rate.
 - is less than the wage rate.
 - any of these can be true.
 - all of these.
34. The marginal revenue product of labor is equal to
- $MP_L - P$.
 - MP_L / P .
 - $MP_L \times MR$.
 - MP_L per unit of MR.
 - MR / MP_L .

35. The marginal revenue product can be expressed as the
- A. additional revenue received from selling one more unit of product.
 - B. increment to revenue received from one additional unit of input hired.
 - C. marginal physical product of an input times the average revenue received from the sale of the product.
 - D. average physical product of the input times the marginal revenue received from the sale of the final product.
36. In the competitive output market, marginal revenue product for an input X can be expressed as
- A. MP_X / P_Q .
 - B. $MP_X \times MR_Q$.
 - C. $MP_Q \times MR_X$.
 - D. $AP_X \times MR_Q$.
 - E. $MP_X \times P_X$.
37. If an individual's labor supply curve is backward bending, then the:
- A. income effect associated with a higher wage is greater than the substitution effect.
 - B. substitution effect associated with a higher wage is greater than the income effect.
 - C. substitution effect associated with a higher wage encourages more leisure.
 - D. income effect associated with a higher wage is greater than the substitution effect AND the substitution effect associated with a higher wage encourages more leisure.
 - E. substitution effect associated with a higher wage is greater than the income effect AND the substitution effect associated with a higher wage encourages more leisure.
38. Assume that labor and capital are complements in production and that the wage of labor is being reduced. Adjustments in the use of labor can be described by which of the following?
- A. Adjustments in labor use are not influenced by adjustments in capital use.
 - B. The MRPL curve shifts downward in this case.
 - C. More labor is used both because of the reduced wage and increased use of capital.
 - D. Changes in labor use are indeterminate because the reduced wage and reduced use of capital have opposite influences on the use of labor.

39. When deriving the industry demand curve for labor from the individual firm demand curve, we must account for
- A. changes in the prices of other inputs.
 - B. changes in the output price.
 - C. differences in the productivity of labor among the various firms.
 - D. differences in the productivity of capital among the various firms.
 - E. all of these.
40. Which of these is NOT an exercise in general equilibrium analysis?
- A. A discussion of factors within the wheat market that influence wheat prices.
 - B. An analysis of the effects of changes in oil prices upon the natural gas market.
 - C. An evaluation of relationships between the markets for tires and automobiles.
 - D. None of these.
41. An efficient allocation of goods in an exchange economy means that
- A. goods were produced by the most efficient technology available.
 - B. no one can be made better off without making somebody else worse off.
 - C. those made worse off are not hurt as badly as the benefits resulting from those made better off; that is, there is a net positive gain.
 - D. in a particular production process one gets the maximum output for a given input.



42. The Edgeworth box above illustrates possibilities for Karen and James to increase their satisfaction by trading goods. If point A gives the initial allocation of food and clothing, a movement into the shaded area leaves:
- Karen better off, but James worse off.
 - James better off, but Karen worse off.
 - James and Karen worse off.
 - James and Karen better off.
43. Assume that John's marginal rate of substitution between a and y is 4, while Jane's marginal rate of substitution is 5. We can conclude that
- no mutually beneficial trades are possible.
 - mutually beneficial trades are possible.
 - if trade takes place, both John and Jane will be better off.
 - more information is needed to determine if there can be gains from trade.
44. In a competitive equilibrium, the marginal rate of substitution of one good for another, for each competitor, is
- equal to the ratio of prices of the goods.
 - divided by the respective prices to produce efficiency.
 - multiplied by the price ratio to produce efficiency.
 - none of these.
45. Which of the following is true at the exchange equilibrium between two individuals?
- Their marginal rates of substitution are equal.
 - The slopes of the individuals' indifference curves are equal.
 - Both individuals' marginal rates of substitution are equal to the ratio of the prices of the goods.
 - all of these.
 - none of these.

46. The function that shows various combinations of two goods that can be produced with fixed inputs is called

- A. isoquant curve.
- B. contract curve in exchange.
- C. indifferent curve.
- D. production possibilities curve.
- E. utility possibilities curve.

47. Consider two identical firms (no. 1 and no. 2) that face a linear market demand curve. Each firm has a marginal cost of zero and the two firms together face demand:

$$P = 50 - 0.5Q, \text{ where } Q = Q_1 + Q_2.$$

- a. Find the Cournot equilibrium Q and P for each firm.
- b. Find the equilibrium Q and P for each firm assuming that the firms collude and share the profit equally.
- c. Contrast the efficiencies of the markets in (a) and (b) above.