

厦门大学《经济学原理》课程试卷



经济学科 2023 年级经济学本科拔尖班和国际化试点班

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试卷类型：(A 卷)

PRINCIPLES OF ECONOMICS

MIDTERM EXAMINATION

Part I

Multiple Choices (2 points each)

1. Economics deals primarily with the concept of
 - (a) **Scarcity.**
 - (b) Money.
 - (c) Banking.
 - (d) Poverty.
2. Which of the following statements best represents the principle represented by the adage, “There is no such thing as a free lunch”?
 - (a) Michelle can attend the concert only if she takes her sister with her.
 - (b) Michael is hungry and homeless.
 - (c) Andrea must repair the tire on her bike before she can ride it to class.
 - (d) **Dani must decide between going to Florida or Brazil for spring break.**
3. While pollution regulations yield the benefit of a cleaner environment and the improved health that comes with it, the regulations come at the cost of reducing the incomes of the regulated firms’ owners, workers, and customers. This statement illustrates the principle that
 - (a) Trade can make everyone better off.
 - (b) Rational people think at the margin.
 - (c) **People face tradeoffs.**
 - (d) People respond to incentives.
4. The Get-There-Safe Bus company incurs an average cost of \$45 for each passenger it carries on its trip from Atlanta to Chattanooga. In advance of a particular trip, four seats remain unsold. The bus company could increase its profit only if it
 - (a) **Charged any ticket price above \$0 for the four remaining seats.**
 - (b) Charged at least \$11.25 for each of the four remaining seats.
 - (c) Charged at least \$45 for each of the four remaining seats.
 - (d) Paid four people to occupy the four remaining seats.

5. Following the implementation of laws requiring automobiles to have seat belts, which of the following occurred?
- (a) An individual's probability of surviving an auto accident rose.
 - (b) There was an increase in pedestrian deaths.
 - (c) There was an increase in automobile accidents.
 - (d) **All of the above are correct.**
6. Which of the following is not an example of a market?
- (a) **In a big city, a sick person who is in danger cannot legally buy a kidney.**
 - (b) A small town has only one seller of water.
 - (c) In Xiamen, there are many buyers and sellers of hotel rooms.
 - (d) The availability of internet shopping has expanded the shoe choices for buyers who do not live near large cities.
7. Currently you hang out with friends twice per week. Your parents announce you that they will raise your allowance next month to encourage your hardworking, and you decide to decrease the frequency to once. Other things being equal, hanging out with friends is a
- (a) substitute good.
 - (b) **inferior good.**
 - (c) normal good.
 - (d) complementary good.
8. A likely example of substitute goods for most people would be
- (a) tennis balls and tennis rackets.
 - (b) shoes and socks.
 - (c) computers and trains.
 - (d) **iced tea and cola.**
9. After a successful strike, the workers' wage in a country increases by 30%. Suppose this country only produce cars that is a typical normal good, which of the following statements about the new market equilibrium for cars is correct.
- (a) The new equilibrium quantity must be higher than the original equilibrium.
 - (b) **The new equilibrium price must be higher than the original equilibrium.**
 - (c) The new equilibrium quantity must be lower than the original equilibrium.

- (d) The new equilibrium price must be lower than the original equilibrium.
10. Demand is said to be price elastic if
- (a) **buyers respond substantially to changes in the price of the good.**
 - (b) demand shifts substantially when income or the expected future price of the good changes.
 - (c) buyers do not respond much to changes in the price of the good.
 - (d) the price of the good responds substantially to changes in demand.
11. In a perfectly competitive market, the demand curve faced by each individual seller is
- (a) in general downward sloping.
 - (b) perfectly inelastic.
 - (c) **perfectly elastic.**
 - (d) upward sloping.
12. In order to reduce its deficit, the post office planned to adjust the price of stamp. Suppose the demand function for stamps is $Q^d = 10 - 2P$ and the current price is $P = 3$. Given the information, the post office should
- (a) ask for more information.
 - (b) increase P .
 - (c) remain P unchanged.
 - (d) **lower P .**
13. Suppose the price of a bag of onion rings decreases from 6.10 to 5.90 and, as a result, the quantity of bags demanded increases from 560 to 620. Using the midpoint method, the price elasticity of demand for onion rings in the given price range is
- (a) 0.33.
 - (b) 0.10.
 - (c) **3.05.**
 - (d) 0.03.
14. Suppose the market of rice has standard demand and supply curves. In order to help the farmers to earn more revenue, the government can
- (a) **set a price floor above the current equilibrium price.**
 - (b) set a price ceiling below the current equilibrium price.
 - (c) set a price ceiling above the current equilibrium price.
 - (d) set a price floor below the current equilibrium price.

15. Suppose the supply curve is an upward-sloping straight line, whose intercept on the vertical axis is positive. Compared with the equilibrium in a free market, after a binding price ceiling is imposed, the point price elasticity of supply (PES) of the new market outcome is
- (a) lower.
 - (b) **higher.**
 - (c) unchanged.
 - (d) indeterminate.
16. Welfare economics is the study of
- (a) Taxes and subsidies.
 - (b) How technology is best put to use in the production of goods and services.
 - (c) Government welfare programs for needy people.
 - (d) **How the allocation of resources affects economic well-being.**
17. On a graph, consumer surplus is represented by the area
- (a) Between the demand and supply curves.
 - (b) **Below the demand curve and above price.**
 - (c) Below the price and above the supply curve.
 - (d) Below the demand curve and to the right of equilibrium price.
18. In a market, the marginal buyer is the buyer
- (a) Whose willingness to pay is higher than that of all other buyers and potential buyers.
 - (b) Whose willingness to pay is lower than that of all other buyers and potential buyers.
 - (c) Who is willing to buy exactly one unit of the good.
 - (d) **Who would be the first to leave the market if the price were any higher.**
19. Kristi sells purses. Her cost is \$35 per purse. On a certain day, she sells 12 purses, and her producer surplus for that day amounts to \$180. Kristi sold each purse for
- (a) \$65
 - (b) **\$ 50**
 - (c) \$ 45
 - (d) \$ 33

20. Five hundred units of good x are currently bought and sold. The marginal buyer is willing to pay \$40 for the 500th unit, and the cost to the marginal seller is \$35 for the 500th unit. We know that
- (a) The equilibrium price of good x is somewhere between \$35 and \$40.
 - (b) The equilibrium quantity of good x exceeds 500 units.
 - (c) 500 units is not an efficient quantity of good x.
 - (d) **All of the above are correct.**
21. Which of the following observations would be consistent with the imposition of a binding price ceiling on a market? After the price ceiling becomes effective,
- (a) **a smaller quantity of the good is bought and sold.**
 - (b) a smaller quantity of the good is demanded.
 - (c) a larger quantity of the good is supplied.
 - (d) the price rises above the previous equilibrium.
22. Suppose the government has imposed a price floor on cellular phones. Which of the following events could transform the price floor from one that is binding to one that is not binding?
- (a) Cellular phones become less popular.
 - (b) **Traditional land line phones become more expensive.**
 - (c) The components used to produce cellular phones become less expensive.
 - (d) Firms expect the price of cellular phones to fall in the future.
23. A surplus results when a
- (a) nonbinding price floor is imposed on a market.
 - (b) nonbinding price floor is removed from a market.
 - (c) **binding price floor is imposed on a market.**
 - (d) binding price floor is removed from a market.
24. When a binding price floor is imposed on a market to benefit sellers,
- (a) every seller in the market benefits.
 - (b) all buyers and sellers benefit.
 - (c) every seller who wants to sell the good will be able to do so, but only if he appeals to the personal biases of the buyers.
 - (d) **some sellers will not be able to sell any amount of the good.**

25. When a tax is placed on the sellers of a product, the
- (a) size of the market decreases.
 - (b) effective price received by sellers decreases, and the price paid by buyers increases.
 - (c) supply of the product decreases.
 - (d) **All of the above are correct.**
26. When a tax is placed on the buyers of a product, buyers pay
- (a) more and sellers receive more than they did before the tax.
 - (b) **more and sellers receive less than they did before the tax.**
 - (c) less and sellers receive more than they did before the tax.
 - (d) less and sellers receive less than they did before the tax.
27. When a tax is placed on the buyers of cell phones, the size of the cell phone market
- (a) **and the effective price received by sellers both decrease.**
 - (b) decreases, but the effective price received by sellers increases.
 - (c) increases, but the effective price received by sellers decreases.
 - (d) and the effective price received by sellers both increase.
28. If the government removes a \$1 tax on sellers of gasoline and imposes the same \$1 tax on buyers of gasoline, then the price paid by buyers will
- (a) increase, and the price received by sellers will increase.
 - (b) increase, and the price received by sellers will not change.
 - (c) not change, and the price received by sellers will increase.
 - (d) **not change, and the price received by sellers will not change.**
29. The incidence of a tax falls more heavily on
- (a) consumers than producers if demand is more inelastic than supply.
 - (b) producers than consumers if supply is more inelastic than demand.
 - (c) consumers than producers if supply is more elastic than demand.
 - (d) **All of the above are correct.**
30. If the government wants to reduce smoking, it should impose a tax on
- (a) buyers of cigarettes.
 - (b) sellers of cigarettes.
 - (c) **either buyers or sellers of cigarettes.**
 - (d) whichever side of the market is less elastic.

Part II

Problems

Problem 1 (20 points)

Compute the opportunity cost for the following scenarios. Show your calculation.

1. You have the afternoon free. You have a choice between going to the movies with a friend or studying economics for three hours. If you go to the movies, you will spend \$8.00 on a ticket and \$4.50 on popcorn. If you choose to study economics for three hours, you will raise your exam grade by 10 points, which is equivalent to a \$ 10 increase in your income. What is your opportunity cost of going to the movies?
2. Suppose now that you have a choice between going to the movies with a friend for two hours or working at your job. If you go to the movies, you will spend \$7 on a ticket and \$5 on popcorn. If you choose to work, you will earn \$10 an hour. In this case, what is your opportunity cost of going to the movies?
3. Debbie quits her job, which pays \$30,000 a year, to finish her college degree. Her annual college expenses are \$10,000 for tuition, and \$2,000 for books. What is her opportunity cost of attending college for the year?
4. Zack quits his job at a consulting firm, which pays \$40,000 a year, to enroll in a two-year graduate program. His expenses at school are \$30,000 per year for tuition, and \$2,000 per year for books. What is his opportunity cost of attending the two-year graduate program?

Ans:

1. \$ 22.5
2. \$ 32
3. \$ 42,000
4. \$ 144,000

Problem 2 (10 points)

1. Consider a labor market, where workers are on the supply side and firms are on the demand side. The price paid by firms to hire workers are called wages. The market demand and supply are given by, respectively, $Q_d = 400 - 2W$ and $Q_s = 2W$. To begin with, the market is free and has reached its equilibrium where the number of workers supplied equals to the number of workers demanded. "Employment" is the number of workers who are hired. "Unemployment" is the number of workers who are looking for a job at the on-going wage level but cannot find a job.
 - (a) What are the equilibrium wage level and employment? (2 Points)
 - (b) Suppose a minimum wage of 150 is imposed on the the market. Would the minimum wage be binding? (2 points) What is the employment and the unemployment after the minimum wage is imposed? (4 points)
 - (c) Who will like the minimum wage policy and who will not? (2 points)

Ans:

- (a) $W = 100$ and $Q = 200$
- (b) **The minimum wage would be binding. The employment would be $Q_d = 400 - 300 = 100$. The unemployment would be $Q_s - Q_d = 2 * 150 - 100 = 200$.**
- (c) **Those workers who can still find a job (be employed) will like the policy. Those workers who are unemployed (who want to work but can't find a job) will dislike the policy.**

Problem 3 (10 points)

Suppose the market demand and supply for a certain type of good is given by the following equations:

$$Q^d = 800 - 50P$$

$$Q^s = 30P$$

1. Compute the equilibrium price and quantity. (2 points)
2. Because of technological advance, the supply curve shifts down by 0.8 RMB for any value of Q^s , what is the new supply curve and what is the new market equilibrium? (3 points)
3. Use mid-point method to compute the price elasticity of demand between the two equilibria. (3 points)
4. Will this shift increase or decrease the total revenue? Relate your answer to price elasticity of demand. (2 points)

Ans:

1. $P^E = 10$, $Q^E = 300$.
2. The new S curve is $P = \frac{Q^s}{30} - 0.8$, $P_{new}^E = 9.7$ and $Q_{new}^E = 315$.
3. $|PED| \simeq 1.60 > 1$.
4. Since demand is elastic in this interval, decreasing price can increase the total revenue. The total revenue increases from 3000 to 3055.5.