

1. Explain the following concepts using 3~4 lines (with example if necessary) (20 points)
 - (1) Public Goods
 - (2) Information asymmetry
 - (3) Risk Aversion
 - (4) Signaling

2. True or False? Explain using 3~4 lines (with examples and graphs if necessary) (20 points)
 - (1) According to the Coase Theorem, government intervention is probably not needed to solve major externalities and public goods problems.
 - (2) Signaling is an action taken by an uninformed party to induce an informed party to reveal information.
 - (3) Informational asymmetry may apply to a hidden action or hidden characteristic where the informed party may be reluctant to reveal relevant information.
 - (4) Government mandated health insurance coverage for all would not solve the problems caused by asymmetric information/adverse selection (e.g., low risk people are more likely to be uninsured without mandates)

3. Multiple Choices (32 points)
 - (1) How to resolve adverse selection?
 - A. Actions taken by the buyer: screening.
 - B. Action taken by a third party: appraisal.
 - C. Actions taken by the seller: signaling.
 - D. Actions taken by the buyer: signaling.

 - (2) Cost-effectiveness analysis differs from cost-benefit analysis in that
 - A. no attempt is made to monetize benefits.
 - B. geometric discounting is not imposed.
 - C. costs and benefits in the distant future are not ignored.
 - D. contingent valuation can be used as a method of measuring outcomes.

 - (3) In a used car market, asymmetry of information problem helps sellers of cars with:
 - A. Lower quality
 - B. Higher quality
 - C. Average quality
 - D. None of the above

 - (4) Which of the following is often referred to as the 'hedonic price' method for valuing environmental assets?
 - A. Using 'existence value' to estimate the value of an environmental asset.
 - B. Using 'willingness to pay' to value an environmental asset
 - C. Using travel costs to estimate the value of an environmental asset.
 - D. Using linkages between variations in house prices and geographical proximity to an environmental asset.



(5) Economists Lipsey and Lancaster demonstrated that if just one condition for full Pareto efficiency is not met, then the next best outcome can generally be reached only by departing from all of the other conditions. This insight is known as the:

- A. Coase Theorem.
- B. Second-best Theorem.
- C. Benefit-Cost Analysis.
- D. Discounting

(6) The theory of “second best” in health economics refers to the fact that:

- A. Physicians often don’t know what the best thing to do is
- B. Physicians know more information than the potential patients
- C. We do not know the exact outcome of an uncertain situation
- D. Addressing one market imperfection may negatively influence other things unexpectedly

(7) When the buyer knows less than the seller about the characteristics of the good being sold, there is

- A. a principal-agent problem.
- B. a moral hazard problem.
- C. an adverse selection problem.
- D. a signaling problem.

(8) The benefits in benefit/cost analysis are derived from:

- A. The supply curve
- B. The total willingness to pay
- C. The marginal costs
- D. None of the above

4. (10 points) Consider the following information on Tom’s demand for visits per year to his health clinic, if his health insurance does not cover clinic visits (100% coinsurance rate).

| P | Q |
|----|---|
| 5 | 9 |
| 10 | 9 |
| 15 | 9 |
| 20 | 8 |
| 25 | 7 |
| 30 | 6 |
| 35 | 5 |
| 40 | 4 |

(a) Tom has been paying \$30 per visit. How many visits does he make per year? Draw his demand curve (3 pts).

(b) What happens to his demand curve if the insurance company institutes a 40%

coinsurance feature (Tom pays 40% of the price of each visit)? What is his new equilibrium demand (3 pts)?

(c) What happens to his demand curve if the insurance company institutes an 20% coinsurance feature (Tom pays 20% of the price of each visit)? What is his new equilibrium demand? Considering about (b), what do you find (4pts)?

5. (20 points) Discussion Question

In many beachfront communities on the coast, it is impossible to buy private homeowners' insurance to protect homes against storm damage; insurance companies have found that offering such insurance at a 'reasonable' price (that is, a price that is close to the amount of damage that the typical home can be expected to sustain in a storm) is unprofitable because the damage sustained by insured homes tends to be greater than the damage sustained by uninsured homes. They have also found that nobody buys the insurance if they charge a high price. For many years the government has provided some beachfront homeowners with government insurance. Discuss whether this is an example of appropriate government intervention to correct a market failure, and if so describe the nature of the market failure.

