## Economics 01 Practice Final Exam Fall 2012 Professor K.C. Fung

Multiple Choice: Choose the best answer given.

- 1. De Beers, the world's main supplier of diamonds, is an example of a monopoly. Compared with a perfectly competitive industry, a monopolist:
- a) Produces a larger output
- b) Charges a higher price
- c) incurs no deadweight loss
- d) None of the above
- 2. An example for network externality is computer operating systems like Microsoft Windows. When a good is subject to a network externality:
  - a) It exhibits positive feedback
  - b) If large numbers of people buy it, other people become more likely to buy it too
  - c) The product with the largest network will eventually dominate the market
  - d) All of the above
- 3. According to Krugman and Wells,  $3^{rd}$  edition, second-hand smoke is clearly an example of a negative externality because:
- a) Smoking is cool even though according to the Surgeon General's warning," Smoking causes lung cancer, heart disease, emphysema, and may complicate pregnancy."
- b) Smoking imposes external costs on family members, particularly family members who live with smokers
- c) Smoking by pregnant women negatively affects their unborn children's future health
- d) (b) and (c)
- 4. Brazilian aircraft company Embraer is known for its high-quality mediumsized planes. Suppose economists say Brazil has a comparative advantage in producing medium-sized aircrafts, this means:

- a) The opportunity cost of producing a medium-sized aircraft is higher for Brazil than for other countries
- b) The opportunity cost of producing a medium-sized aircrafts is lower for Brazil than for other countries
- c) Consumers in Brazil like medium-sized aircrafts better than other consumers in other countries
- d) None of the above
- 5. Individuals can internalize externalities:
- a) Only with government interventions
- b) Among themselves privately even with costly delays in bargaining
- c) Among themselves privately if transaction costs are sufficiently low
- d) only with government taxes
- 6. Fast food providers like McDonald's, Burger King and Wendy's belong to a monopolistically competitive industry. A monopolistically competitive firm:
- a) faces a perfectly elastic demand curve
- b) makes economic losses in the long run
- c) produces standardized products
- d) None of the above
- 7. The demand for a good is income-elastic if:
- a) the income elasticity of demand for that good is less than one
- b) the income elasticity of demand for that good is greater than one
- c) the good is an inferior good
- d) an increase of income will shift the demand curve to the left
- 8. The Coase theorem shows that:
- a) to reduce pollution to the socially optimal level always requires government policies
- b) The legal rights of different parties will stop an efficient outcome from being attained in the face of externalities
- c) A policy of using tradable emission permit is as efficient as imposing an environmental standard
- d) None of the above

- 9. Suppose the "Big 4" accounting firms PricewaterhouseCoopers, Deloitte, Ernst & Young and KPMG belong to an oligopolistic accounting industry. In oligopolistic industries,
- a) Strategic interdependence is an important feature
- b) There are only a few producers
- c) How competitive the industry is can be measured by the Herfindhal-Hirshmann index
- d) All of the above
- 10. Sources of comparative advantage include:
- a) Differences in climate
- b) Differences in technology
- c) Differences in factor endowment
- d) All of the above
- 11. A strategy of tit for tat:
- a) involves playing cooperatively at first, then following the other player's move
- b) rewards good behavior and punishes bad behavior
- c) can lead to a successful tacit collusion if all firms choose this same strategy
- d) All of the above
- 12. When demand is unit-elastic,
- a) A one percent change in price leads to less than one percent change in quantity demanded
- b) Changes in price have no effect on total revenue
- c) A one percent change in price leads to less than one percent change in quantity supplied
- d) A rise in price decreases total revenue
- 13. The characteristics of a monopolistically competitive industry includes:
- a) Free entry and exit in the long run
- b) Firms produce differentiated products
- c) There are many producers
- d) All of the above

- 14. If we have two goods that are perfect complements, then
- a) the indifference curves are L-shaped
- b) the indifference curves are horizontal
- c) the indifference curves are vertical
- d) there is no optimal consumption bundle since the goods are complements that are perfect
- 15. There are some disagreements on whether monopolistically competitive industries are economically efficient or economically inefficient. Features that make these industries either efficient or inefficient include:
- a) in long run equilibrium, there is excess capacity
- b) there is product differentiation and consumers generally like varieties
- c) there is no deadweight loss
- *e*) (*a*) and (*b*)
  - 16. According to Krugman and Wells 3<sup>rd</sup> edition, reasons for poverty in America include:
    - a) lack of education
    - b) lack of proficiency in English
    - c) good luck
    - *d*) (*a*) and (*b*)
  - 17. According to Krugman and Wells 3<sup>rd</sup> edition, over the course of the past century, the United States has gone through the following trends in income inequality:
    - a) An era of rising inequality over the past 30 years
    - b) An era of stable inequality for about 35 years after World War II
    - c) An era of falling inequality during the 1930s and 1940s
    - d) All of the above
  - 18. The United States spends more on health care than other wealthy countries. According to Krugman and Wells, 3<sup>rd</sup> edition, some of the disparity in spending can be the result of:
    - a) lower doctor salaries in the United States

- b) The U.S. system suffers from serious inefficiencies that other countries manage to avoid
- c) Private insurance companies expend resources on such activities such as marketing and trying to identify and weed out high-risk patients
- *d*) (*b*) and (*c*)
- 19. According to Krugman and Wells 3<sup>rd</sup> edition, in 2010, the major non means-tested welfare state programs include:
  - a) Food stamps
  - b) Social Security
  - c) Medicare
  - *d*) (*b*) and (*c*)
- 20. In 2010, Congress passed the comprehensive health care reform legislation known as the Patient Protection and Affordable Care Act or ACA for short. According to Krugman and Wells 3<sup>rd</sup> edition, ACA has the following major components:
  - a) It requires the insurance companies to offer the same policies to everyone, regardless of medical history
  - b) It requires that everyone purchase health insurance
  - c) Government subsidies make the required insurance affordable for lower- and lower-middle income families
  - d) All of the above

## Short Answer Questions

1. In the 2016 Democratic Primary, Candidate Hilary Clinton and Candidate Joe Biden can be analyzed as duopolists. They have two strategies: to cooperate with each other (smear Republican candidate Bobby Jindal but not each other) or to fight each other (smear each other). Suppose this is a one-shot game and the players' payoff matrix is similar to one of prisoner dilemma. Illustrate the Clinton-Biden game below. Write down a hypothetical payoff matrix. Which equilibrium will

the two candidates choose? Why? Is there a dominant strategy? What is the Nash equilibrium?

- 2.a) Draw and label a graph showing a monopolistically competitive firm making economic profits in the short run. What is the price chosen by the monopolistically competitive firm? How big are the economic profits? Indicate in your graph.
- b) Draw and label a graph showing a monopolistically competitive firm in long run equilibrium. What is the profit-maximizing price? How big are the profits? Why do monopolistically competitive firms exhibit excess capacity in the long run?
- 3. Suppose the production of pollution generates external costs. Draw and label a graph showing how without government intervention, the private market produces the quantity of pollution that is higher than the socially optimal quantity. Show in your graph what the optimal Pigouvian tax should be.
- 4.Draw and label a graph showing the total surplus with a perfectly competitive industry. Assume that the marginal cost is constant and there are no fixed costs. In a separate graph, show the total surplus under a monopoly. Assume that the marginal cost is the same as in the perfectly competitive case. Compare the total surplus in your graph under perfect competition and the graph under a monopoly, which one has a higher amount of total surplus? Show in your graph the deadweight loss. Why do economists view monopoly unfavorably?
- 5) There are three types of externalities: positive externalities, negative externalities and network externalities. Answer the following questions.
- a) Explain these three externalities
- b) Without government interventions, will these three externalities all lead to economic inefficiencies? Explain.
- c) For the case of a positive externality, show how a Pigouvian subsidy can lead to a socially optimal quantity

6. Suppose there are two plants that are emitting sulphur dioxide into the air and polluting the environment. One plant has a higher marginal benefit curve than the other. Draw and label a graph illustrating the impact of imposing a uniform environmental standard on the two plants. In a separate graph, show the effects of imposing an emission tax on the two plants. Which policy is more economically efficient and why? Explain how a cap and trade program can lead to a socially optimal outcome.

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