



## FINAL EXAM (ODD SEMESTER 2016-2017)

**SUBJECT** : Introductory Microeconomics / Introductory Economics 1 (ECEU 600100)

**DATE** : 20 December 2016

**DURATION** : 165 minutes

**MECHANISM**: closed book, no-pencil, non-programmable calculator

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### INSTRUCTIONS:

- Elective: choose Problem 1 or Problem 2!
- Compulsory: Problem 3 until Problem 7
- Your answers should be systematic, concise, but clearly demonstrate your understanding of the subject
- Allocate your time wisely and carefully

### ELECTIVE: CHOOSE PROBLEM 1 OR PROBLEM 2

#### PROBLEM 1 (24 POINTS)

- Explain whether you AGREE or DISAGREE with the statements below.
  - If all firms in an industry successfully engage in collusion, the resulting profit-maximizing price and output would be the same as if the industry was a perfect competitive market. [4 points]*
  - Cartel agreements are difficult to maintain, and finally both firms will make zero economic profit. [4 points]*
- Kartika and Amanda, two firms producing bread in Bandung, have been competing for the market. Both firms choose to avoid collusive action, as it is against the Competition Law. To create an appropriate marketing strategy, both firms have conducted market research, which shows that their profit will be bigger if each firm chooses to advertise in the media. Each firm is currently considering the effectiveness of using television or radio for its marketing campaign. Both firms have come to the conclusion that should each chooses to use television as the marketing media, each would be able to gain a daily profit of Rp 5 million. If, however, they choose to advertise through the radio, each would be able to gain a daily profit of Rp 10 million. The research outcome has also shown that, should each chooses different marketing media, the one that opts for using television is estimated to gain a daily profit of Rp 12 million, while the one that uses radio would gain a daily profit of Rp 2 million.
  - Using the information above, construct a *payoff matrix* for Kartika and Amanda. [4 points]
  - Is there any dominant strategy for Kartika and Amanda? Explain your answer. [4 points]

- (iii) Find the optimal strategy that both firms should choose. Explain how you arrive at your answer. [4 points]
- (iv) How much profit that each will gain? [4 points]

**PROBLEM 2 (24 POINTS)**

- a. Explain the term *deadweight loss* in the monopoly market. [4 points]
- b. Suppose that a monopolist faces a demand curve of  $P = 1500 - 2Q$ , where  $P$  = price and  $Q$  = quantity of the goods produced. It is also known that the monopolist faces a constant *marginal cost* (MC) of 500.
  - (i) Based on the equation above, construct the monopolist's *total revenue* (TR) and *marginal revenue* (MR) equations. [4 points]
  - (ii) Find the equilibrium price and quantity that will optimize the monopolist's profit. [3 points]
  - (iii) If it is assumed that there is no *fixed cost* ( $FC = 0$ ), use the information above to derive the monopolist's *variable cost* (VC). Also, find the monopolist's *operating profit* ( $TR - VC$ ). [3 points]
  - (iv) Show your answers using the relevant graph. [3 points]
  - (v) Use the above information to fill in the table below. [4 points]

ASPECTS (1)	MONOPOLY (2)	PERFECT COMPETITION (3)
Quantity	.....	.....
Price	.....	.....
Consumer Surplus	.....	.....
Producer Surplus	.....	.....
Deadweight Loss	.....	

- (vi) What conclusion can you derive from the table above? Explain. [3 points]

**COMPULSORY:**

**PROBLEM 3 (18 POINTS)**

- a. Explain your comparison on the characteristics of monopolistic competition, perfect competition, and monopoly. [6 points]
- b. Explain why *mark-up* occurs in the monopolistic competition and how it leads to economic inefficiency. Use graphs to support your answer. [6 points]
- c. Explain the arguments for and against the use of advertising in the monopolistic competition. [6 points]

**PROBLEM 4 (12 POINTS)**

*Compare the difference in outcomes between perfect competition and monopolies in output markets with the differences between perfect competition and monopsony in labor markets!*

**PROBLEM 5 (18 POINTS)**

- a. “The demand for factors of production (such as labor) is a derived demand”. Explain the statement. [5 points]
- b. Explain the role (impact) of labor union in the labor market. Do you think the existence of labor union will lead to welfare improvement for workers? Will it also bring about welfare improvement for medical doctors? Explain. [5 points]
- c. Explain the phenomenon of *backward bending labor supply curve* using both the substitution effect and the income effect. [8 points]

**PROBLEM 6 (18 POINTS)**

- a. Draw the graph and explain the optimal production of a goods that exhibits negative externality (e.g. pollution), if the firm takes into account the social cost of production. Compare it with production level that takes into account the private cost of production only. [9 points]
- b. In your opinion, what are the policies that the government should take to reduce the production of goods that exhibits negative externalities? On the other hand, what should the government do to push the production of goods that exhibits positive externalities upward? Explain. [9 points]

**PROBLEM 7 (10 POINTS)**

Explain the concepts below in a clear but concise manner.

- a. Public Goods. [2 points]
- b. Consumer Surplus. [2 points]
- c. Price Discrimination. [2 points]
- d. Prisoner’s Dilemma. [2 points]
- e. Market Failure. [2 points]

\*\*\* PLEASE ENJOY WORKING ALONE \*\*\*

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Unity in Development