UNIVERSITAS INDONESIA
FACULTY OF ECONOMICS AND BUSINESS

Universitas Indonesia
Faculty of Economics and Business

MID EXAM (ODD SEMESTER 2017-2018)

SUBJECT : Introductory Economics 1 / Introductory Microeconomics (ECEU 600103)
DATE : 16 October 2017
DURATION : 3 hours (180 minutes)
MECHANISM: closed book, no-pencil, non-programmable calculator

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NOTE:

- Your answers should be systematic, concise, but clearly demonstrate your understanding of the subject
- Allocate your time wisely and carefully

COMPULSORY: PROBLEM 1 TO PROBLEM 6

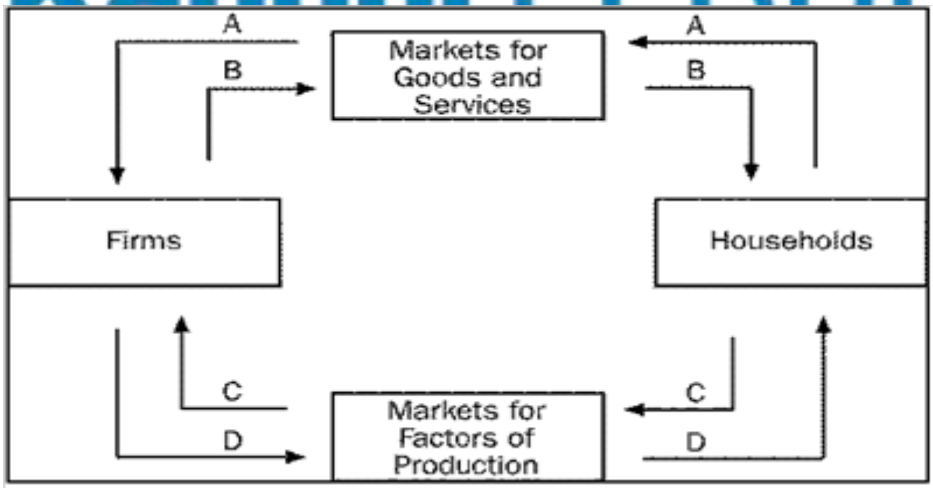
Problem 1 (15 Points)

Describe your understanding on the terms/concepts below.

a. Scarcity, choice, trade-off and opportunity cost. Explain the interrelationship among those concepts and give examples. **[5 points]**
b. Positive economics and normative economics. Illustrate with examples. **[3 points]**
c. Production Possibility Frontier (PPF). Give example and show it in the graph. **[4 points]**
d. Economics, Macroeconomics, and Microeconomics. **[3 points]**

Problem 2 (15 Points)

Examine the *circular flow* diagram below:



a. Referring to the diagram above, Explain A, B, C, and D.**[7 points]**

b. Show in which market firms give payments to households as an exchange for the use of their productive resources. Explain your answer briefly. **[4 points]**

c. Show in which market households give payments to firms as an exchange for the purchase of goods and services produced by firms. **[4 points]**

Problem 3 (12 Points)

Since climate has a significant impact on the productivity of agricultural lands, the price of agricultural lands in the areas of more conducive climate is more expensive than those of less conducive one. Over time people, however, has been finding various technological advancements that continuously raise land productivity, regardless of its location. Despite such phenomenon, the price of agricultural lands, unlike other lands, falls

a. Explain the concept of elasticity. **[3 points]**

b. What are the determinants of the price elasticity of demand? Explain. **[3 points]**

c. Using the elasticity concept, explain why the price of agricultural lands has a negative correlation with land productivity. **[3 points]**

d. Explain why, over time the price of lands has a negative correlation with land productivity. **[3 points]**

Problem 4 (16 Points)

a. Explain the concept of the law of diminishing marginal utility. Use graph to support your explanation.**[4 points]**

Suppose that the price of a cake is Rp 5.000 while the price of gasoline is Rp 20.000 per litter. It is also known that the Joe's monthly income is Rp 1.000.000, which he may use to buy cakes and gasoline.

b. Based on the information above, draw a Joe's budget constraint. If it is further assumed that he will allocate his income equally between buying cakes and gasoline. Calculate the amount of cakes and gasoline that Joe will be able to purchase each month. Draw consumer's equilibrium! (hints : *use indifference curve*) **[4 points]**

c. Suppose his income has increased to Rp. 2.000.000. Draw the new budget constraint and explain how it changes. **[4 points]**

d. Given the new budget constraint of Rp 2.000.000, if there is a decrease in the price of gasoline to Rp. 10.000 per litter, calculate the amount of cakes and gasoline that Joe will be able to purchase each month. Explain and draw new consumer's equilibrium! (*hints : use indifference curve*) **[4 points]**

Problem5 (10 Points)

According to news, the international price of coffee has increased, despite the fact that there is no change in the quantity sold. Asked by their lecturer to explain such phenomenon, 5 FEB UI students have come to different interpretations.

Rara : The demand has increased. The supply is, however, perfectly inelastic.

Andi : The demand has increased and it is perfectly inelastic.

Dini : The demand has increased at the same time with the decrease in the supply.

Teguh : The supply has decreased. The demand is, however, unit elastic.

Wawan: The supply has decreased. The demand is, however, perfectly inelastic.

Whom do you think has the right answer? Explain and use graphs to support your argument.

Problem6 (12 Points)

Jason is considering building his own on-line business. In order to reach his objective, Jason needs to install a set of multimedia computer and its internet connection. A computer with the appropriate specs is estimated to cost him Rp 20 million. Jason also estimates that the monthly cost of subscribing for internet connection is Rp 1 million. In addition, he also estimates that he needs to allocate Rp 1 million each month for electricity charges. Jason also considers to run his business from his own kiosk that he formerly leases it and, thus, gives him an annual rental income of Rp 10 million. Since this is a new business venture that needs total devotion, Jason thinks of quitting from his current job that pays him a monthly salary of Rp 20 million. Jason estimates that the new business venture will enable him to sell 2,000 pieces of his merchandise per month with a price of Rp 10 thousand per piece.

a. Calculate Jason's accounting profit and economic profit. Also, explain the difference between the two concepts. **[6 points]**

b. What decision should Jason take? Remaining in his current job or starting his own business? Explain. **[6 points]**

ELECTIVE: CHOOSE BETWEEN PROBLEM 7 AND PROBLEM 8

Problem 7 (20 Points)

Bob has just recently opened his own cake shop. Suppose that he utilizes 2 inputs, i.e. labor and oven. The table below shows the number of workers and cake production in a week.

Worker	Cake Production	Marginal Product	Average Product
0	0	….	….
1	3	….	….
2	8	….	….
3	14	….	….
4	19	….	….
5	23	….	….
6	26	….	….
7	28	….	….
8	29	….	….
9	28	….	….
10	26	….	….

a. Fill in the blanks under each corresponding column of marginal product and average product in the table above. Explain the relationship between marginal product and average product. Show it the graph. **[6 points]**

Suppose that every day Bob produces cakes with costs as shown in the table below

Cake Production	Variable Cost	Fixed Cost	Total Cost	Average Variable Cost	Average Fixed Cost	Average Total Cost	Marginal Cost
0	0	….	….	….	….	….	….
1	30	….	….	….	….	….	….
2	50	….	….	….	….	….	….
3	60	….	….	….	….	….	….
4	70	….	….	….	….	….	….
5	90	….	….	….	….	….	….
6	120	….	….	….	….	….	….
7	160	….	….	….	….	….	….
8	220	….	….	….	….	….	….
9	300	….	….	….	….	….	….
10	400	….	….	….	….	….	….

b. If fixed cost is Rp 50 thousand, fill in the blanks under each corresponding column above. **[8 points]**

c. Draw average variable cost curve, average fixed cost curve, average total cost curve, and marginal cost curve in one graph. Explain the relationships among those cost curves. **[6 points]**

Problem 8 (20 Points)

The demand and supply schedules for potato chips are given as follows:

PRICE (RUPIAH PER BAG)	QUANTITY DEMANDED (MILLIONS OF BAGS/WEEK)	QUANTITY SUPPLIED (MILLIONS OF BAGS/WEEK)
5000	170	130
6000	160	140
7000	150	150
8000	140	160
9000	130	170
10000	120	180

a. Draw a graph of the potato chip market. What is the equilibrium price and quantity of potato chips? **[2 points]**

b. If the price of potato chips per bag is Rp 6,000, will there be any shortage or surplus? Explain. **[3 points]**

c. If a new dip increases the quantity of potato chips that people want to buy by 40 million bags per week at each price, how will the demand for chips change? **[3 points]**

d. Suppose a virulent virus destroys potato crops and, as a result, cut the quantity of potato chips produced by 20 million bags a week at each price, how does the supply of chips change? **[3 points]**

e. If the two events (a new dip increases the quantity of potato chips that people want to buy by 40 million bags per week and a virulent virus cuts the quantity of chips produced by 20 million bags per week, both at each price) occur at the same time, how does the price and quantity of chips change? **[3 points]**

f. Do you agree or disagree with each of the following statements? Briefly explain your answers.

   i. An increase in the demand for potato chips causes its price to rise. Higher price of potato chips will cause the demand for potato chips to fall and, therefore, will cause its price to fall back to its original level. **[3 points]**

   ii. If both the demand for and the supply of potato chips increase at the same time, the price of potato chips will surely rise. **[3 points]**

* * * Enjoy Working Alone * * *