



**UNIVERSITAS INDONESIA**  
**FACULTY OF ECONOMICS AND BUSINESS**  
**Regular and International Undergraduate Program**

**MID EXAM**  
**Odd Semester 2019/2020**  
**PENGANTAR EKONOMI 1 / INTRODUCTORY MICROECONOMICS**  
**ECEU600103 (3 CREDITS)**  
**Duration: 3 hours (180 minutes)**

**Answers all the problem questions below. No calculator. Manage your time effectively.**

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**PROBLEM 1 (20 POINTS)**

Describe your understanding on the concepts below clearly:

- Scarcity, choice, tradeoff and opportunity cost. Explain the interrelationship among these concepts and give example (s) each. [5]
- Positive economics and normative economics. Give example (s). [3]
- Production Possibility Frontier (PPF). Give example(s) and show it in the graph. [4]
- Economics, Microeconomics, and Macroeconomics. [3]
- Explain briefly the 4 properties of the indifference curve. [5]

**PROBLEM 2 (16 POINTS)**

The development of digital technology has affected the competition between hard-copy books, which are sold off-line through books stores, and e-books, which are sold on-line through internets.

- List the determinants of both the demand and the supply and describe them briefly. [4]

Explain the impact of the event b, c, and d below on the market of e-books and illustrate them graphically by showing (i) the initial equilibrium and the new equilibrium, and (ii) its impact on the price and quantity equilibrium.

- The decrease in the price of hard-copy books [4]
- The decrease in the royalty of every e-book sold following the successful price renegotiation between e-book sellers and authors. [4]
- Event b and c occur simultaneously. [4]

### **PROBLEM 3 (20 POINTS)**

Studies indicate that the 10 percent increase in the price of cigarettes is estimated to decrease the cigarette consumption by 3 percent. If the current price of a pack of cigarettes is Rp 20.000:

- a. Calculate the price elasticity of demand for cigarette. [4]
- b. If the government wants to decrease the cigarette consumption by 60 percent, calculate the suggested price of cigarette. [6]
- c. Give your opinion whether teenagers have an elastic or inelastic price elasticity of demand. Explain your answer. [5]
- d. The Indonesian Commission for Child Protection (KPAI) is one of the proponents for the cigarette price increase, arguing that it will help protecting teenagers from the dangerous impacts of smoking. Do you think the argument is plausible? Explain your answer. [5]

### **PROBLEM 4 (23 POINTS)**

Jeihan, who recently graduated from the Faculty of Economics and Business at Universitas Indonesia, currently works for one of the top economic and business consulting firms in Jakarta. As a fresh graduate, Jeihan receives a starting monthly salary of Rp 6,000,000. Suppose that Jeihan's current consumption bundles consist of 2 items, i.e. drinks, which cost him Rp 20,000 per bottle, and food, which costs him Rp 30,000 per portion. Consider that food and drinks are normal goods for Jeihan.

- a. Write the equation of Jeihan's budget constraint. Find the slope of the budget constraint. Illustrate Jeihan's budget constraint in the graph, place food on the x axis. [5]
- b. Let say that Jeihan has reached his consumer equilibrium when consuming 100 portions of food and 150 bottles of drinks. Draw the equilibrium in the graph and label it as A. Use the theory of consumer equilibrium to explain why A is an optimal point for Jeihan. [5]
- c. The long drought has incited the increase in the price of food to Rp 40,000 per portion. Write the equation of Jeihan's new budget constraint. Find out the slope of the new budget constraint and illustrate it in the graph. [5]
- d. Draw Jeihan's new consumer equilibrium and label it as B [hint: since the exact point of the new equilibrium is not given, determine and calculate your own version of Jeihan's new consumption of food and drinks bundle that can be used as a new equilibrium point]. Show and explain its substitution and income effect. Use point A and B to derive Jeihan's demand curve for food. Explain your answer. [8]

### **PROBLEM 5 (21 POINTS)**

After finishing his study at a fashion design school, Raina starts her business by selling clothes on-line using her own brand INA. Raina then uses her father's car garage as her working station. Soon after Raina's clothes has received very positive response from millennials. Many have become fond of her design. To produce her own designed clothes, Raina uses a sewing machine and employs workers as her assistants. She pays one assistant Rp 100,000 daily and her daily fixed cost is Rp 200,000. Below is the weekly output of Raina's production.

Workers	Sewing Machine	Output	Marginal Product	Total Cost (Rp)	Average Total Cost (Rp)	Marginal Cost (Rp)
0	1	0				
1	1	20				
2	1	50				
3	1	90				
4	1	120				
5	1	140				
6	1	150				
7	1	155				

- Based on the information, fill in the blank columns in the table above. What patterns can you tell from the data on the table. Explain your findings. [6]
- Calculate the Average Product of Labour. What pattern do you get? Explain. [6]
- Based on the information on the table above:
  - Draw the Total Product curve dan the Marginal Product of Labor curve in one graph. Explain the relationship between the two curves. [3]
  - Draw the Marginal Cost curve and the Average Total Cost curve in one graph. Explain the relationship between the two curves. [3]
  - Explain the relationship between the Marginal Product dan the Marginal Cost. [3]

**Kanopi FEBUI**  
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\*\*\* Happy working alone \*\*\*