CollegeBoard
Advanced Placement
Program

AP® Microeconomics
2008 Free-Response Questions

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MICROECONOMICS
Section II
Planning time—10 minutes
Writing time—50 minutes

Directions: You have 50 minutes to answer all three of the following questions. It is suggested that you spend approximately half your time on the first question and divide the remaining time equally between the next two questions. In answering the questions, you should emphasize the line of reasoning that generated your results; it is not enough to list the results of your analysis. Include correctly labeled diagrams, if useful or required, in explaining your answers. A correctly labeled diagram must have all axes and curves clearly labeled and must show directional changes. Use a pen with black or dark blue ink.

1. Callahan's Orchard grows apples and operates in a constant-cost, perfectly competitive apple industry. Callahan's Orchard is currently in long-run equilibrium.

   (a) Draw correctly labeled side-by-side graphs for the apple market and Callahan's Orchard, and show each of the following.

      (i) Market output and price, labeled as "Q_M" and "P_M", respectively

      (ii) Callahan's output and price, labeled as "Q_F" and "P_F", respectively

   (b) Now assume that the government provides farm support to apple growers by granting an annual lump-sum subsidy to all apple growers. Indicate the effect the subsidy would have on each of the following in the short run.

      (i) Callahan's quantity of output. Explain.

      (ii) Callahan's profit

      (iii) The number of firms in the industry

   (c) Indicate how each of the following will change in the long run as a result of the lump-sum subsidy.

      (i) The number of firms in the industry. Explain.

      (ii) Price

      (iii) Industry output

GO ON TO THE NEXT PAGE.

2. Utility and price elasticity of demand are important concepts in explaining consumer behavior.

   (a) Define marginal utility.

   (b) The table below shows the quantities, prices, and marginal utilities of two goods, fudge and coffee, which Mandy purchases.

	Fudge	Coffee
Quantity of purchase	10 pounds	7 pounds
Price per pound	$2	$4
Marginal utility of last pound	12	20

   Mandy spends all her money and buys only these two goods. In order to maximize her utility, should Mandy purchase more fudge and less coffee, purchase more coffee and less fudge, or maintain her current consumption? Explain.

   (c) Assume that consumers always buy 20 units of good R each month regardless of its price.

   (i) What is the numerical value of the price elasticity of demand for good R?

      (ii) If the government implements a per-unit tax of $2 on good R, how much of the tax will the seller pay?

GO ON TO THE NEXT PAGE.

3. Social efficiency is affected by government policy and the structure of markets.

   (a) For a competitive market for which there is a binding (effective) price ceiling, draw a correctly labeled graph and label the price ceiling "P_C", the quantity sold "Q_A", and the socially efficient output "Q_B".

   (b) The graph below shows a natural monopoly.
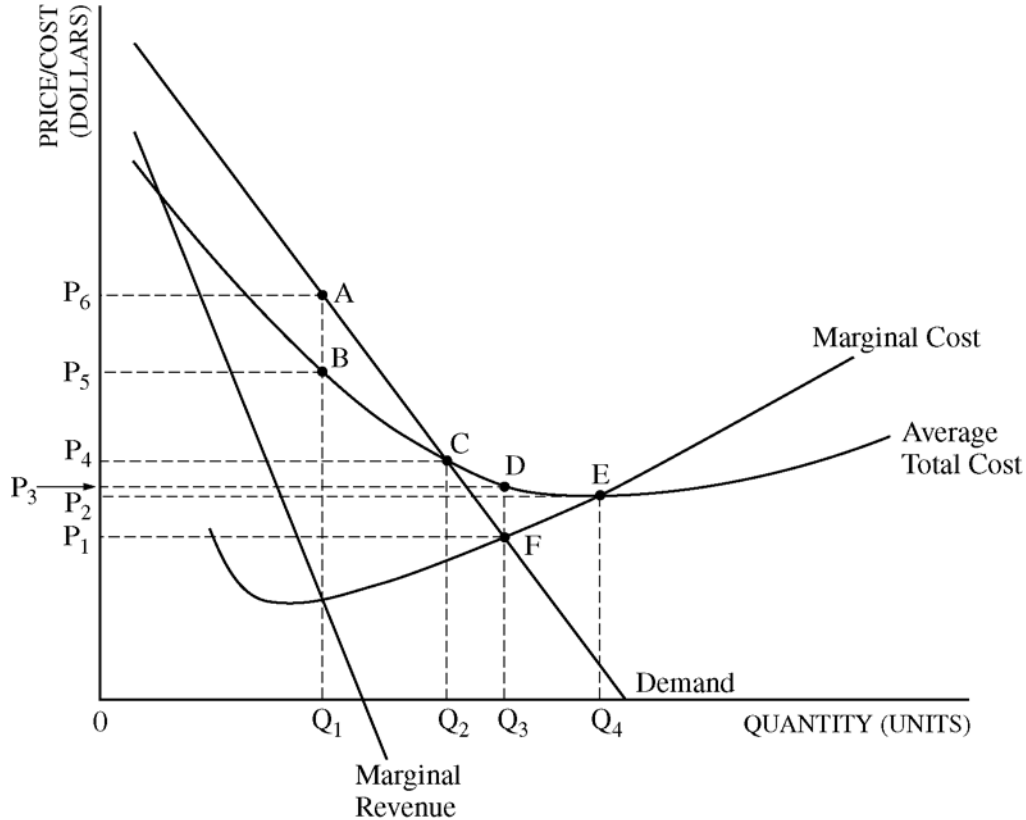
   (i) Using the labeling in the graph, identify each of the following.

      (1) The profit-maximizing output

      (2) The socially efficient output

   (ii) At the socially efficient output, is the monopoly making a profit or incurring a loss? Using the labeling on the graph, identify the area of profit or loss.

STOP

END OF EXAM