



## AP<sup>®</sup> Microeconomics 2002 Free-Response Questions Form B

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# 2002 AP<sup>®</sup> MICROECONOMICS FREE-RESPONSE QUESTIONS (Form B)

## MICROECONOMICS

### Section II

Planning time—10 minutes

Writing time—50 minutes

**Directions:** You have fifty 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.

1. Assume that two firms are operating with identical cost schedules, but one firm is in a perfectly competitive industry, and the other is in a monopolistically competitive industry.
  - (a) Using two correctly labeled graphs, show the long-run equilibrium price and output levels for each of these two firms.
  - (b) Compare the long-run equilibrium price and output levels for these two firms.
  - (c) What level of economic profit will each firm earn in the long run? Why do these results occur?
  - (d) For each of the two firms at the equilibrium quantity, indicate whether the firm's demand curve is perfectly elastic, elastic, unit elastic, inelastic or perfectly inelastic. How can you tell?

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2. The government has decided to take action to reduce the pollution caused by the chemical industry. This industry is composed of profit-maximizing, perfectly competitive firms.
- (a) Identify one policy that the government could implement to reduce pollution.
  - (b) Explain the effect the policy you identified in part (a) would have on each of the following for the firms in the chemical industry.
    - (i) Marginal cost
    - (ii) Output
    - (iii) Price
  - (c) Explain the effect of the policy you identified in part (a) on the efficiency of the allocation of society's resources.
3. The labor market in the town of Bazra is perfectly competitive, and 10 percent of the labor force is employed in the clothing industry.
- (a) Assume that the clothing manufacturers close their plants in Bazra. Using a correctly labeled supply and demand graph, predict the impact that closing these plants will have on each of the following.
    - (i) The wage rate and number of workers employed in Bazra
    - (ii) The number of workers in Bazra looking for work who cannot find employment at the wage rate you identified in (i)
  - (b) After the clothing manufacturers closed their plants in Bazra, the town passes a law that establishes an effective minimum wage. What impact will this minimum wage have on each of the following?
    - (i) The wage rate and number of workers employed in Bazra
    - (ii) The number of workers in Bazra looking for work who cannot find employment
  - (c) Assume that the minimum wage remains in effect and there is an increase in the demand for goods produced in Bazra. What happens to employment in Bazra? Explain why.

**END OF EXAMINATION**