



## AP<sup>®</sup> Microeconomics 2002 Sample Student Responses Form B

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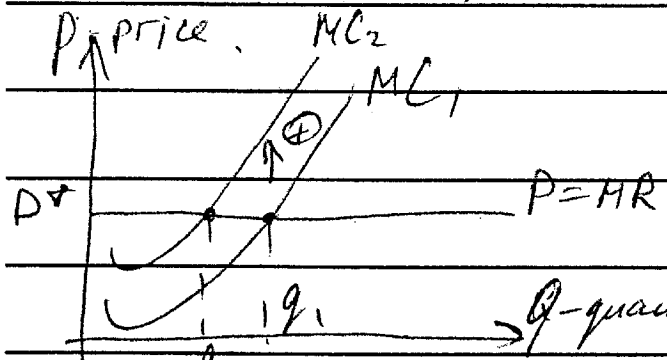
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N2 a, b.

Write in the box the number of the question you are answering on this page as it is designated in the examination.

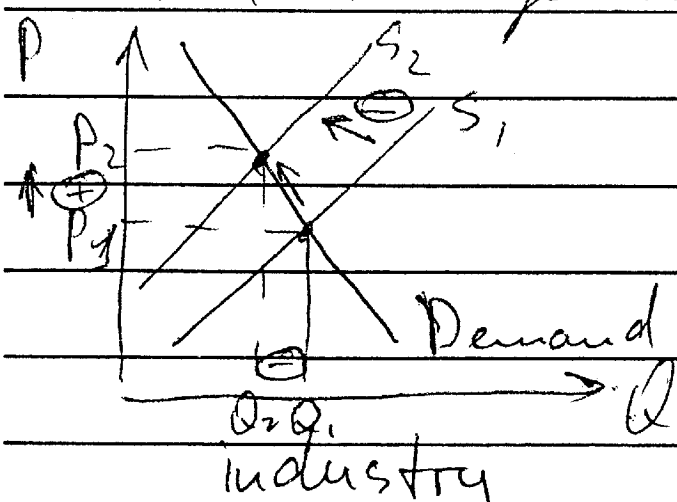
a) As government want to reduce pollution, it should impose taxes on those who pollutes. This makes unefficient for firm to pollute environment. The taxes should be ~~specific~~ per-unit, ~~or~~ ~~for~~ ~~inner~~ because they should increase firm's marginal costs, if they pollute.

b) i) If the policy is effective the marginal cost for firms will increase. As a result



(from  $MC_1$  to  $MC_2$  on the graph) ii) As a result the quantity sold for firms will decrease, because they are profit-maximizing firms and produce where  $MC=MR$ .

iii) If all firms are polluters the supply curve of the whole industry will shift to the left and as a result the price will rise and the quantity ~~will~~ will fall.



(on the graph from  $P_1$  to  $P_2$  and from  $Q_1$  to  $Q_2$  correspondingly).

Write in the box the number of the question you are answering on this page as it is designated in the examination.

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N2. C

e) The allocative efficiency is determined as the marginal benefit equal to marginal cost for society as a whole. So, when the polluters are not taxed,  $MB < MC$  for the society. And after taxation MC increases, and as a result may become equal to MB.

a) The government could reduce this negative externality by imposing a tax on the amount the firm pollutes.

b) i) Marginal cost will rise, as the firm will be taxed for each extra unit of chemicals it produces.

ii) Output will decrease, as the cost of production has increased since the tax has been imposed.

iii) Price will increase, as the marginal cost of production has increased and output has decreased. The resulting decrease in <sup>the</sup> supply of chemicals will lead to higher prices.

c) Society's resources will be more efficiently allocated, as ~~spill-over~~ spillover costs will be cut down. ~~There will be~~ Taxes will also result in ~~cutting~~ cutting down the over-allocation of resources.