

AP[®] MICROECONOMICS
2006 SCORING GUIDELINES

Question 3

6 points (2 + 2 + 2)

(a) 2 points:

- One point is earned for showing a rightward shift of the demand curve.
- One point is earned for showing that equilibrium price increases and quantity increases.

(b) 2 points:

- One point is earned for showing a rightward shift of the supply curve.
- One point is earned for showing that equilibrium price decreases and quantity increases.

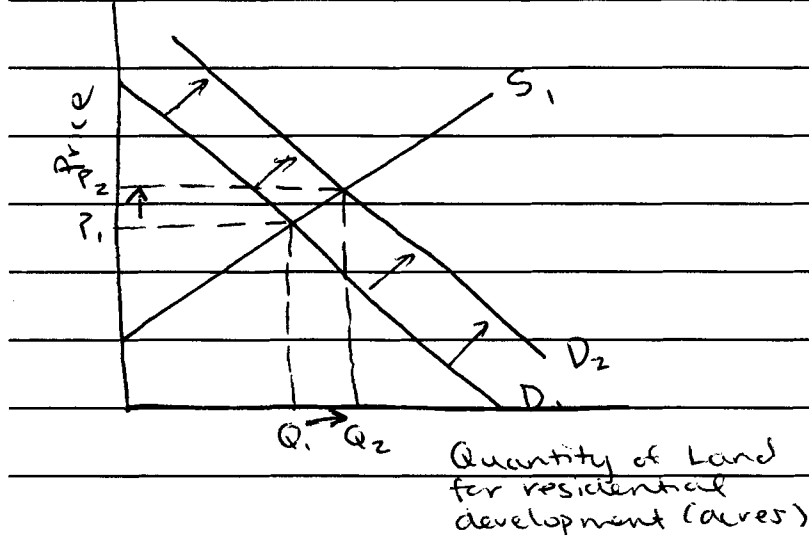
(c) 2 points:

- One point is earned for indicating that MSC is greater than MPC .
- One point is earned for stating that the conversion of land to residential development is not socially optimum because $MSC > MSB (P)$.

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

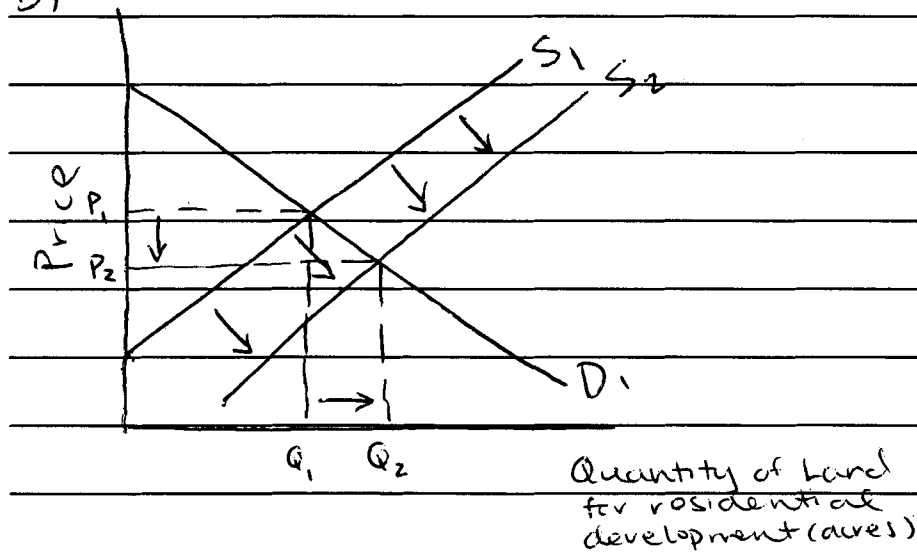
3 3A₁

a)



\uparrow income \Rightarrow \uparrow disposable income \Rightarrow \uparrow demand for land (shift outward of D curve) \Rightarrow \uparrow equilibrium price from P_1 to P_2 , \uparrow equilibrium quantity from Q_1 to Q_2

b)



decrease in gov. per-unit subsidies to farmers \Rightarrow \uparrow supply of farmland to be converted to residential development (outward/right shift in supply curve) \Rightarrow \downarrow equilibrium

3

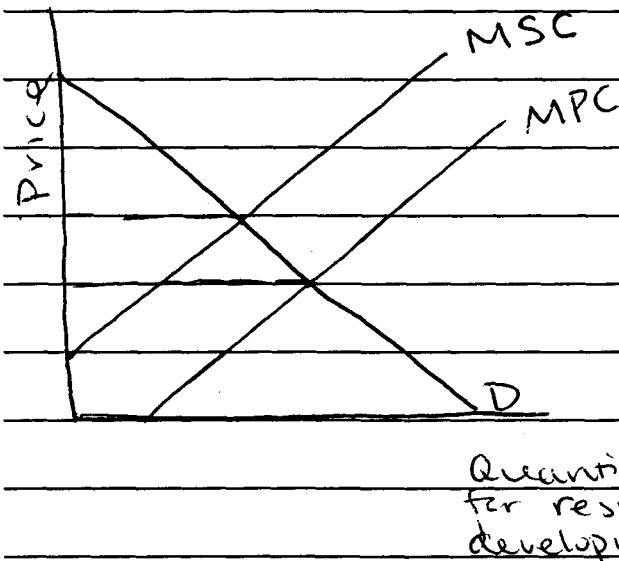
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3A₂

price from P_1 to P_2 . Increase in equilibrium quantity from Q_1 to Q_2 .

(c) (i) The marginal social cost of converting land is greater than the marginal private cost of converting land because there is a negative externality (loss of scenic vistas) from converting land.

(ii) The private market quantity of land converted into residential development is not ~~so~~ socially optimal. Specifically, the quantity of land converted is too much.



The fact that MSC curve lies above MPC indicates that MSC is greater than MPC at every point along the D curve. Producing where $MPC = D$ creates too high of an output

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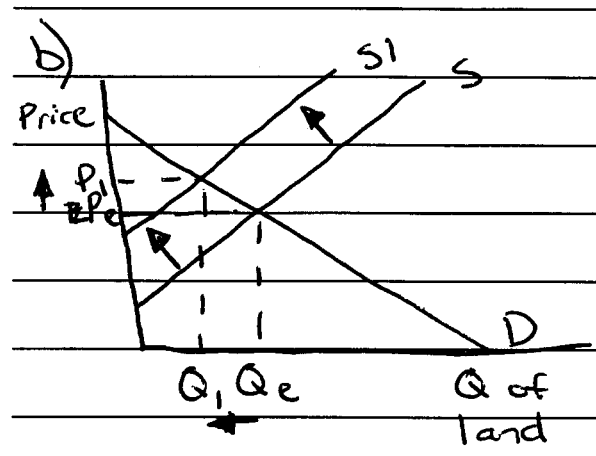
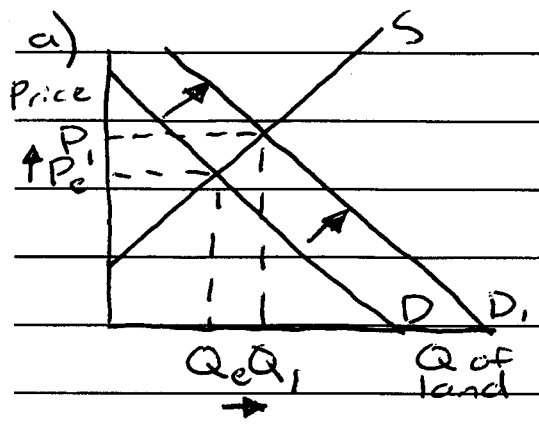
3A₃

to be socially optimal. The socially optimal level of output occurs where the D curve intersects the MSC curve, at a smaller output.

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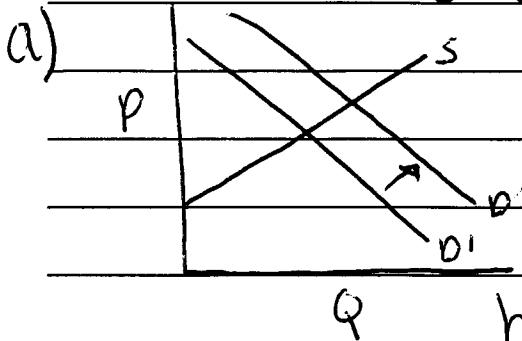
3

3B

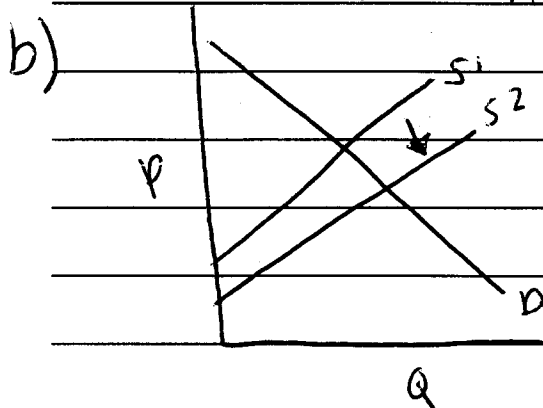


c) $MC = \text{marginal social cost} > \text{marginal private cost}$
 $MC = H$ is socially optimal because it provides a scarce resource, in this case it's land, for the building of residential homes. Since the population is increasing, places to live are becoming scarce, so this would provide more supply of homes which benefits society.

Question #3



It will cause an outward shift in the demand curve because people have more \$ to spend



farmers will now supply more at a lower price because it is costing them less also

c) i - It is equal to that of marginal private cost. Although these people may not have such beautiful scenery, they now have better places to live and work

ii - Yes the private market quantity of land converted into residential development is socially optimal. Even though there is a few disadvantages and opportunity costs, everybody benefits.

**AP[®] MICROECONOMICS
2006 SCORING COMMENTARY**

Question 3

Overview

The purpose of the question was to test students' understanding of supply and demand and the effect of an external cost on allocative efficiency (a socially optimal outcome).

Sample: 3A

Score: 6

The student received full credit.

Sample: 3B

Score: 4

The student earned both points in part (a). The student earned 1 point in part (b) for showing the change to the equilibrium price and quantity that is consistent with the incorrect shift of the supply curve. One point was awarded in part (c) for correctly stating that $MSC > MPC$.

Sample: 3C

Score: 2

The student earned 1 point in part (a) for correctly shifting the demand curve, and 1 point in part (b) for correctly shifting the supply curve.