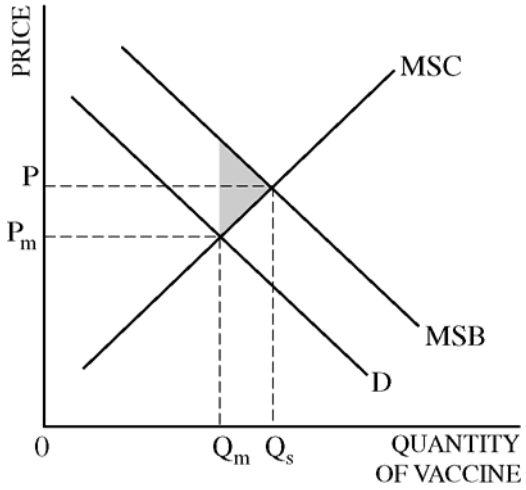
# AP® MICROECONOMICS
# 2008 SCORING GUIDELINES (Form B)

## Question 2

**6 points** (3 + 1 + 2)




(a) 3 points:
- One point is earned for the correctly labeled graph with $Q_m$ and $P_m$ correctly identified.
- One point is earned for correctly identifying $Q_S$.
- One point is earned for shading the area of the deadweight loss.

(b) 1 point:
- One point is earned for stating that the MSC is less than the marginal social benefit.

(c) 2 points:
- One point is earned for stating that the tax will increase the deadweight loss.
- One point is earned for the explanation that the tax raises the cost and causes output of vaccine to fall.

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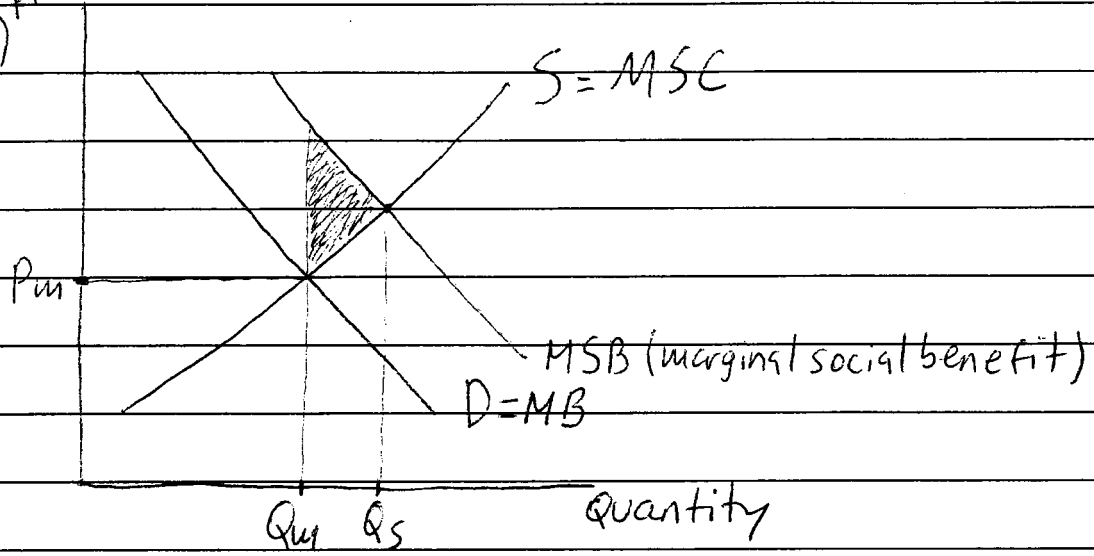
Write in the box the number of the question you are answering on this page as it is designated in the exam.

| 2 |
|---|

2A

(a)




(b) At the market output, the marginal social cost is less than the marginal social benefit. That is the reason why the socially optimal level of output exceeds the market output.

(c) A tax on producers of the vaccines will increase the deadweight loss. The market output will decrease, increasing the gap between the socially optimal level of output and the market output.

Producers should be subsidized, not taxed, so as to bring the market output closer to the socially optimal level of output.

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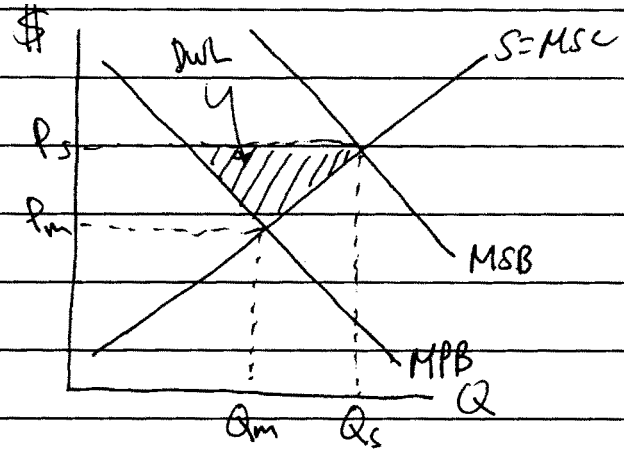
2

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

2a)




b) ~~MSC < MSB because vaccinations are a positive externality.~~

c) Taxes will increase the amount of deadweight loss because although they generate revenue, they are inefficient.

b) MSC < MSB because unregulated markets will produce at $Q_m$ where MSC = MPB. Even though vaccinations are a positive externality, there is no incentive for producers to produce at a socially beneficial quantity until the government steps in.

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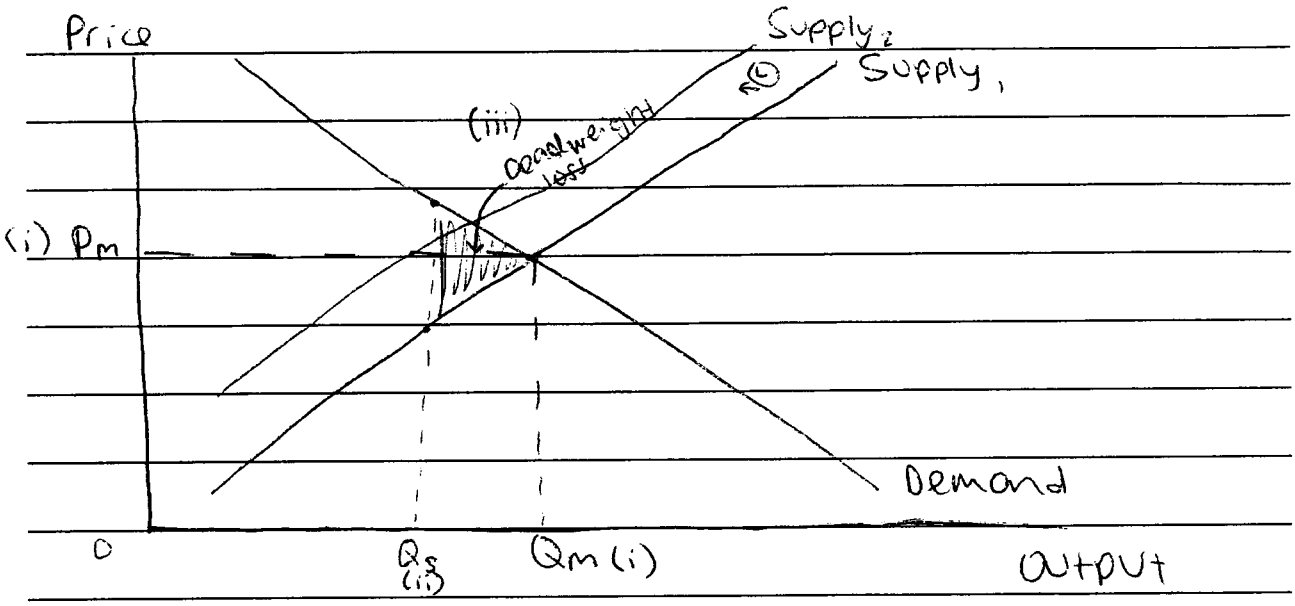
2C

2.

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

(a)




b) The marginal social cost is equal to marginal social benefit at the market output because the market is in a state of equilibrium here.

c) A tax on producers will shift the supply curve to the left, because government action (in this case, tax) is a non-price determinant of supply. This will create a much smaller deadweight loss or possibly erase it altogether because in cutting back stocks through the fall of supply, this cuts back on any deadweight loss (waste) to society.

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# AP® MICROECONOMICS
# 2008 SCORING COMMENTARY (Form B)

## Question 2

**Sample: 2A**
**Score: 6**

The student earned all points in this question.

**Sample: 2B**
**Score: 4**

The student lost 1 point in part (a) for an incorrectly identified area of deadweight loss. The student earned the point in part (b). The student lost 1 point in part (c) for an insufficient explanation of how the tax would increase the deadweight loss.

**Sample: 2C**
**Score: 1**

In part (a) the student earned a point for a correctly labeled graph with $P_m$ and $Q_m$ at the intersection of supply and demand but lost 2 points because the graph appears to be for a negative externality with $Q_s$ to the left of $Q_m$. The area of deadweight loss does not correspond to the location of the supply curve at $Q_s$. The point in part (b) was not earned because the student states that the MSB is equal to the MSC. The student did not earn the points in part (c) because of the statement that deadweight loss will fall.

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