Sample Exam Questions/Chapter 16

1. Suppose an emissions tax is imposed on all dairy farms in Wisconsin. This tax would have the effect of:
   A) encouraging the dairy farmers to lower prices.
   B) increasing the level of emissions.
   C) reducing the supply of milk in Wisconsin.
   D) increasing the supply of milk in Wisconsin.

Use the following to answer question 2:

**Figure: Correcting for Market Failure**

2. (Figure: Correcting for Market Failure) Assume that there is an external cost involved in the market illustrated in the figure Correcting for Market Failure. If the government intervenes to correct for the external cost, the new ________ will now reflect ________.
   A) supply curve $S_1$; private and external costs
   B) supply curve $S_2$; private but not external costs
   C) supply curve $S_2$; private and external costs
   D) demand curve (not shown); external but not private costs
3. (Figure: Positive Externalities and the Production of Semiconductor Chips) Look at the figure Positive Externalities and the Production of Semiconductor Chips. If the marginal external benefit of producing a chip is $10, then the socially optimal quantity of chips is ______ and the socially optimal price is ________.

A) 200; $20
B) 300; $25
C) 500; $35
D) 600; $20

4. (Figure: Positive Externalities and the Production of Semiconductor Chips) Look at the figure Positive Externalities and the Production of Semiconductor Chips. If the socially optimal production of chips is 500, the government could achieve the socially optimal level of production by granting a Pigouvian subsidy of:

A) $5.
B) $10.
C) $15.
D) $20.
5. If government officials set an emissions tax too low:
   A) there will be too little pollution.
   B) there will be too much pollution.
   C) the marginal social cost of pollution will be less than the marginal social benefit of pollution.
   D) there could be either too much or too little pollution.

6. If the marginal benefit received from pollution is less than its marginal cost, then:
   A) society's well-being can be improved if the quantity of pollution increases.
   B) society's well-being can be improved if the quantity of pollution decreases.
   C) society has achieved its socially optimal level of pollution.
   D) the market is producing too little pollution.

7. A Pigouvian subsidy is:
   A) designed to discourage activities generating externalities.
   B) designed to encourage activities generating external benefits.
   C) appropriate when the marginal social cost curve is above the marginal cost of production curve.
   D) appropriate when the marginal social cost curve and the marginal social benefit curve intersect at an inefficient level.

8. If external costs exist, the competitive free market:
   A) allocates resources inefficiently.
   B) allocates resources efficiently.
   C) automatically corrects an overallocation of resources.
   D) automatically corrects an underallocation of resources.
9. (Figure: Marginal Private Benefits and Marginal Social Benefits) Look at the figure Marginal Private Benefits and Marginal Social Benefits. Without government intervention, this market will produce ________ units at a price of ________.
   A) $Q_0; P_0$
   B) $Q_1; P_0$
   C) $Q_1; P_2$
   D) $Q_2; P_1$

10. Suppose the production of roses generates a positive externality in that travelers enjoy the scenic rural vistas. Then the market price of roses:
   A) is less than the marginal social benefit of roses.
   B) is more than the marginal social benefit of roses.
   C) equals the marginal social benefit of roses.
   D) may be more than, less than, or equal to the marginal social benefit of roses.

11. The marginal external cost of a good or activity equals the amount:
   A) by which the marginal social benefit curve is higher than the demand curve.
   B) by which the marginal social cost curve is lower than the supply curve.
   C) by which the marginal social cost curve is higher than the supply curve.
   D) at which the marginal social benefit curve intersects the demand curve.
Use the following to answer question 12:

**Figure: Model of a Competitive Market**

12. (Figure: Model of a Competitive Market) Given the figure Model of a Competitive Market, if there are external costs, a tax imposed on sellers will:
   A) decrease the equilibrium quantity.
   B) increase the equilibrium quantity.
   C) have no effect on the equilibrium price.
   D) decrease the equilibrium price.

13. An external benefit is a(n):
   A) example of a negative externality.
   B) benefit that accrues to domestic firms due to the actions of foreign (external) firms.
   C) benefit that accrues to foreign (external) firms due to the actions of domestic firms.
   D) benefit that individuals or firms confer on others without receiving compensation.
Use the following to answer question 14:

**Figure: Negative Externalities and Production of Pigs**

14. (Figure: Negative Externalities and Production of Pigs) If the marginal external cost of producing a pig is $200, then the socially optimal quantity of pigs is ________ and the socially optimal price is ________.
   A) 150; $900
   B) 200; $800
   C) 250; $700
   D) 300; $800

15. Pigouvian taxes are taxes designed to reduce:
   A) the marginal cost of production.
   B) the marginal benefit of consumption.
   C) external costs.
   D) external benefits.
16. Which of the following is an example of a positive externality?
   A) Sam dug a pond so he could go fishing, but the pond has contributed to an explosion of mosquitoes in your neighborhood.
   B) Sam has dozens of cats and they come into your yard to hunt the birds that come to your bird bath.
   C) Sam buys a dilapidated house, renovates it, and increases the property values of all houses in the neighborhood.
   D) Liquid waste from Sam's chicken farm flows into a neighbor's well water.

17. Suppose each person in a community had to pay for his or her own education from kindergarten through high school. One would expect that:
   A) less education would be acquired since society has not considered the positive external benefits of education.
   B) more education would be acquired since society has not considered the positive external benefits of education.
   C) the optimal amount of education would be acquired by community members since they each paid for the amount of education they wanted.
   D) a Pigouvian tax would ensure the optimal amount of education.
Answer Key

1. C
2. C
3. C
4. B
5. B
6. B
7. B
8. A
9. C
10. A
11. C
12. A
13. D
14. C
15. C
16. C
17. A